

ACADEMIC INTERNAL MEDICINE INSIGHT

AAIM IN ACTION

AAIM Board Chair Update

Chair of the AAIM Board of Directors Michael S. Bronze, MD, highlights some AAIM's key work in fiscal year 2014, including the efforts to build the AAIM Innovations Center, the AAIM Survey Center, and AAIM Consensus Conference on Physician-Scientists. In its first year as a fully integrated organization, AAIM has record membership numbers and plans for mission and vision.

MILESTONES

Development and Implementation of a Milestone-Based Handoff Assessment: The Nebraska Experience

The handoff of patient care between providers is a vulnerable time for patient safety. ACGME requires that all programs ensure residents are competent in handoff communication prior to entering unsupervised practice. Assessment of handoffs can be facilitated by utilizing the concept of entrustable professional activities (EPAs), which can require the integration of skills across multiple competency domains, including patient care, interpersonal and communication skills, and practice-based learning and improvement.

PHYSICAL DIAGNOSIS SKILLS

Beyond "Show and Tell": Promoting Physical Examination Skills as Essential Habits of Reflective Practice

Physical diagnosis is an essential clinical skill for practicing physicians, yet this skill is declining among residents and faculty. The three-prong educational approach used at Brigham and Women's Hospital emphasizes the value and relevance of PDx in direct patient care and can be easily adapted to institution-specific curricula.

ACADEMIC PROMOTION

The Road to Successful Promotion— A Development Plan for Junior Faculty

Effective mentoring is essential for learners and faculty to succeed. The Department of Medicine at University of Washington School of Medicine provides substantial orientation to subspecialty fellows and new faculty about the critical milestones that must be achieved to obtain an initial faculty appointment and subsequent promotion.

HISTORY AND PHYSICAL

Can the Written History and Physical Have Value in the Medicine Clerkship?

H&P is the cornerstone of diagnostic medicine. However, evaluations of student-written H&Ps are infrequently incorporated in student grades despite evidence that indicates student-written H&Ps may be better evaluated than observed H&Ps. So, why aren't written H&Ps more valued?

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By the Numbers

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Number of times per year that
"Communicating Professionalism"
workshops were presented to
residents
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8,266

Number of AAIM members as of
April 1, 2014
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Clinical problems covered in the
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AAIM Board Chair Update



I hope that the new year finds you well and that this academic year has been successful for you and your organization. Fiscal year 2014 has been very successful for AAIM. As you know, the financial integration of all the founding members of AAIM was completed June 30, 2013. On July 1, 2013, AAIM became a completely integrated organization both financially and strategically. AAIM

now represents nearly 9,000 members in academic internal medicine. During this year, we have focused on a number of pressing issues, including governance and general operating principles, implementation of our strategic initiatives, education redesign, member services, research initiatives and the physician scholar, and an AAIM external support policy.

Under the leadership of Jennifer Kogan, MD, the governance task force completed its work last summer. This group made significant recommendations concerning bylaws revision, committee structure, and the interactions between the founding member councils and the AAIM Board of Directors. The board has also worked closely with AAIM President D. Craig Brater, MD, and AAIM Executive Vice President Bergitta E. Smith to develop operational procedures that further define how AAIM will be governed and how operations will occur. All of this change is designed to maintain the vibrancy of each of the councils and to ensure that the organization meets the needs of our members. The task force also began to discuss how AAIM could reduce its cost of governance, ensuring additional revenues for member services and implementation of the strategic initiatives. The board of directors will deliberate later this calendar year on both a mission and a vision statement.

Lee Berkowitz, MD, members of the AAIM Education Redesign Committee, and senior leaders of ASP continue their outstanding efforts to align resident and fellow education and competency-based training with the Accreditation Council for Graduate Medical Education (ACGME) Milestones Project. Since 2008, it has been a strategic goal of AAIM to enhance its national-level profile and voice on issues that affect the education of our residents and fellows. Through the efforts of the Education Redesign Committee AAIM has taken the lead nationally on this project; the task force, working with the American Board of Internal Medicine (ABIM) and ACGME, has been instrumental in the development of milestones and entrustable professional activities uniquely suited to internal medicine. Similarly, ASP has taken the lead on creating milestones relevant to fellowship training. ASP members have been distinctively

AAIM has committed to cultivate an innovation center that reflects our membership's roles in education and research.

positioned to represent the interests of AAIM and their respective specialty societies in this important project. A series of subspecialty milestone faculty development seminars have been planned for late spring 2014.

Implementing strategic initiatives has also been a major priority for this fiscal year. In 2013, the AAIM Board of Directors agreed to three major strategic goals: development of an innovation center, investment in a robust survey center, and engagement of members. AAIM members and others have taken the lead in determining the infrastructure needs of the survey center; CDIM and APDIM will continue to provide outstanding leadership in survey content areas. I hope that the survey center will expand our ability to provide robust data to our membership—in fact, a survey evaluating administrator salaries has already been issued. In support of the strategic initiative in member engagement, we will soon submit a survey aimed to address member needs and help guide our course. A survey vendor has been chosen, and council leaders will have input into survey questions. The data will inform AAIM on how to best support our members.

AAIM has committed to cultivate an innovation center that reflects our membership's roles in education and research. In this area, several initiatives were recommended to the AAIM Board of Directors, including a center for evidence-based education and a seed grant program for curricular innovation as well as facilitating high value cost-conscious care, quality and patient safety research, innovative learning communities, and support for education-based research, among others. Of these ideas, the board has chosen to focus on high value cost-conscious care as a cross-cutting initiative for AAIM in partnership with ABIM and the American College of Physicians (ACP). APM President Wendy Levinson, MD, chairs the High Value Care Advisory Board with members from AAIM, ABIM, and ACP that addresses this issue for internal medicine at a more "national level." Lia Logio, MD, and Valerie Lang, MD, lead the AAIM High Value Care Workgroup that looks at potential ways AAIM might influence this issue in departments of internal medicine. This group will focus on establishing a curriculum for students

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AAIM is a consortium of five academically focused specialty organizations representing departments of internal medicine at medical schools and teaching hospitals in the United States and Canada. AAIM consists of the Association of Professors of Medicine (APM), the Association of Program Directors in Internal Medicine (APDIM), the Association of Specialty Professors (ASP), the Clerkship Directors in Internal Medicine (CDIM), and the Administrators of Internal Medicine (AIM). Through these organizations, AAIM represents department chairs and chiefs; clerkship, residency, and fellowship program directors; division chiefs; and academic and business administrators as well as other faculty and staff in departments of internal medicine.


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and residents, creating faculty development opportunities, developing a “culture” of high value care within departments of internal medicine, and creating recommendations about promotion of faculty engaged in this area as well as in patient safety and quality of care. Currently, the Innovation Center Oversight Committee, chaired by Lisa Bellini, MD, is studying the center’s infrastructural needs and will make recommendations to the board of directors later this year.

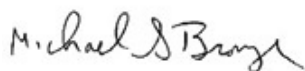
APM President-Elect Robert F. Todd, III, MD, PhD, has skillfully led the AAIM Research Committee, setting an agenda for the future. The committee has developed subcommittees that will continue to focus on the physician-investigator workforce, potential research areas in high value care, and the support of ASP’s long-standing efforts to integrate geriatrics research into internal medicine subspecialties—an effort ably led by Kevin High, MD. The committee is planning a consensus conference of thought leaders on ways to augment the pipeline of physician scientists.

The board has successfully developed an external support policy with the input from the five councils, recognizing the controversial nature of accepting financial support from the pharmaceutical and device industry. Led by Victor Schuster, MD, the task force came up with a series of potential strategies to raise financial support from external groups. The policy is based on the Council of Medical Specialty Societies Code for Interactions with Companies. Oversight will be provided by the AAIM Compliance Committee and the AAIM Board of Directors. With the policy, we can now determine the availability and viability of requests for unrestricted educational grants from industry.

Last, I wanted to update you on several metrics of the organization—namely, membership and finances. As of April 1, 2014, the total number of individual members in all of the AAIM associations was 8,266, with the largest number of members associated with APDIM and ASP. Also as of this date, AAIM has received 96% of the budgeted membership dues. Financially, AAIM remains strong with excellent reserves, and we are ahead of budget year to date. Working closely with the finance committee and the board of directors, AAIM leadership has completed several key personnel hires that will support our activities and initiatives. Executive leadership is also working with the board on future-leadership succession planning.

It has been my pleasure to serve as chair of the AAIM Board of Directors. AAIM has an outstanding leadership team, staff, and dedicated volunteer leaders. Together, we have charted a future direction for the organization, will demonstrate success relative to strategic initiatives, and will provide outstanding value to our members. 

Sincerely,



Michael S. Bronze, MD

Chair, AAIM Board of Directors

Development and Implementation of a Milestone-Based Handoff Assessment: The Nebraska Experience

The handoff of patient care between providers is a vulnerable time for patient safety (1–3) and the frequency of handoffs has increased with the introduction of more restrictive resident duty hour regulations (4,5). The Accreditation Council on Graduate Medical Education (ACGME) requires that all programs ensure residents are competent in handoff communication prior to entering unsupervised practice (6) as demonstrated by outcomes-based reporting via the Next Accreditation System (NAS) educational milestones (7). Assessment of handoffs can be facilitated by utilizing the concept of entrustable professional activities (EPAs). EPAs are routine work-based activities that collectively define a profession or discipline. They are integrative and provide the necessary context through which meaningful assessment can be performed. For example, performing an effective and safe patient care handoff is an EPA that requires the integration of skills across multiple ACGME competency domains, including patient care, interpersonal and communication skills, and practice-based learning and improvement (8). This article describes the development and implementation of a milestones-based assessment of resident handoff performance using an EPA framework at University of Nebraska Medical Center (UNMC).

Methods

The UNMC Handoff System

Our handoff system includes monthly education of residents on the inpatient ward teams based on published research and best practice guidelines. Written handoff communication is standardized using a handoff template within the electronic health record (EHR). Handoff is attended by interns, supervising residents, and the overnight staff hospitalist in a dedicated room at a predetermined time to minimize distractions. Verbal handoff is supplemented with direct access to written handoff information within the EHR, allowing for real-time editing by the handoff receiver. Residents are directly observed by faculty and assessed using a form modeled after a validated nursing handoff tool (9).

Redesigning the Handoff Assessment

To more effectively integrate the educational milestones into the residency program, our handoff assessment form was revised in accordance with the AAIM three-step process for assessing end-of-training EPAs (10). Faculty regularly involved in the direct observation and assessment

of resident handoffs reviewed best practice guidelines, developed a shared mental model of expected performance, and revised the assessment tool to reflect these expectations. The final assessment tool included evaluation of both verbal and written communication skills for the handoff giver and receiver. Behaviorally based anchors were informed by curricular milestones across multiple ACGME competency domains, with assessment of overall competence rated on a five-tier scale reflecting progressive levels of entrustment (critical deficiencies, direct supervision, indirect supervision, unsupervised practice, and aspirational practice) (**Figure 1**). The assessment form was pilot tested and evaluated via faculty and resident surveys to ensure usability, facilitation of feedback, and capacity to enhance performance.

Results

Surveyed faculty (n = 6) reported that completing the assessment tool for the handoff giver and receiver took two to three minutes. Faculty felt that this amount of time was appropriate for completing the assessment. All faculty members reported that the form was easy to use, enhanced their ability to give meaningful feedback to residents, and was a valuable educational tool. One hundred percent of residents (n = 15) felt reviewing the form with faculty provided meaningful feedback, 93% felt reviewing the form improved their handoff skills, and 86% found the form easy to understand. Representative comments include: "It's efficient and provides specific feedback regarding areas for improvement" and "I think it is a useful tool to help us become better and more effective at handoff. The direct feedback following handoff is useful and appreciated."

Measurement of overall competence was analyzed for face validity by comparing scores between experienced interns (June) and novice interns (July to September). As illustrated in **Figure 2**, novice interns were generally entrusted at the level of indirect supervision, whereas experienced interns were typically entrusted at the level of unsupervised practice (median score 4 v. 3, p = 0.03).

Discussion

Graduate medical education is in the midst of a sea change toward outcomes-based training, which will necessitate a redesign of resident assessment and evaluation methods. This article describes how EPAs can be used to help integrate pre-existing assessment tools into a milestone

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FIGURE 1. UNMC Handoff Assessment Form for Handoff Giver

Resident Handoff Evaluation Form									
Resident evaluated: _____					Evaluator: _____				
Date: _____					Number of patient handoffs observed: _____				
Rate the performance of the resident giving handoff in the following categories.									
Organization/efficiency									
Written handoff:									
Disorganized, excessive detail	1	2	3	4	5	Standardized format, concise			
Verbal handoff:									
Rambling, disorganized	1	2	3	4	5	Standardized format, concise			
Content									
Written handoff:									
Information omitted or irrelevant,	1	2	3	4	5	All essential info included,			
Tasks lack action plans,						Tasks with clear plan,			
Outdated information						Updated information			
Verbal handoff:									
Information omitted or irrelevant,	1	2	3	4	5	All essential info included,			
Tasks lack action plans,						Tasks with clear plan,			
Code status omitted						Code status included			
Clinical Judgement									
No recognition of sick patients,	1	2	3	4	5	Sickest patients prioritized,			
Central clinical problems omitted,						Central clinical problems defined,			
Anticipatory guidance omitted						Anticipatory guidance w/clear plan			
Communication skills									
Understanding not confirmed,	1	2	3	4	5	Confirms understanding,			
No time for questions,						Elicits questions,			
Confusing or vague language						Clear, concise language			
Professionalism									
Inattentive, interruptive, disrespectful	1	2	3	4	5	Attentive, focused, respectful			
Overall Competence (Mark the one best description)									
___ Does not effectively communicate information (written and verbal) vital to patient safety									
___ Communicates basic information, but is inefficient or needs frequent guidance in the areas outlined above									
___ Communicates key information efficiently, but needs occasional prompting in the categories outlined above									
___ Communicates all key information in an efficient, prioritized manner using standardized language with explicit anticipatory planning									
___ As prior with ability to provide meaningful suggestions and feedback to colleagues									
Explanation of ratings, suggestions for improvement, or other comments:									

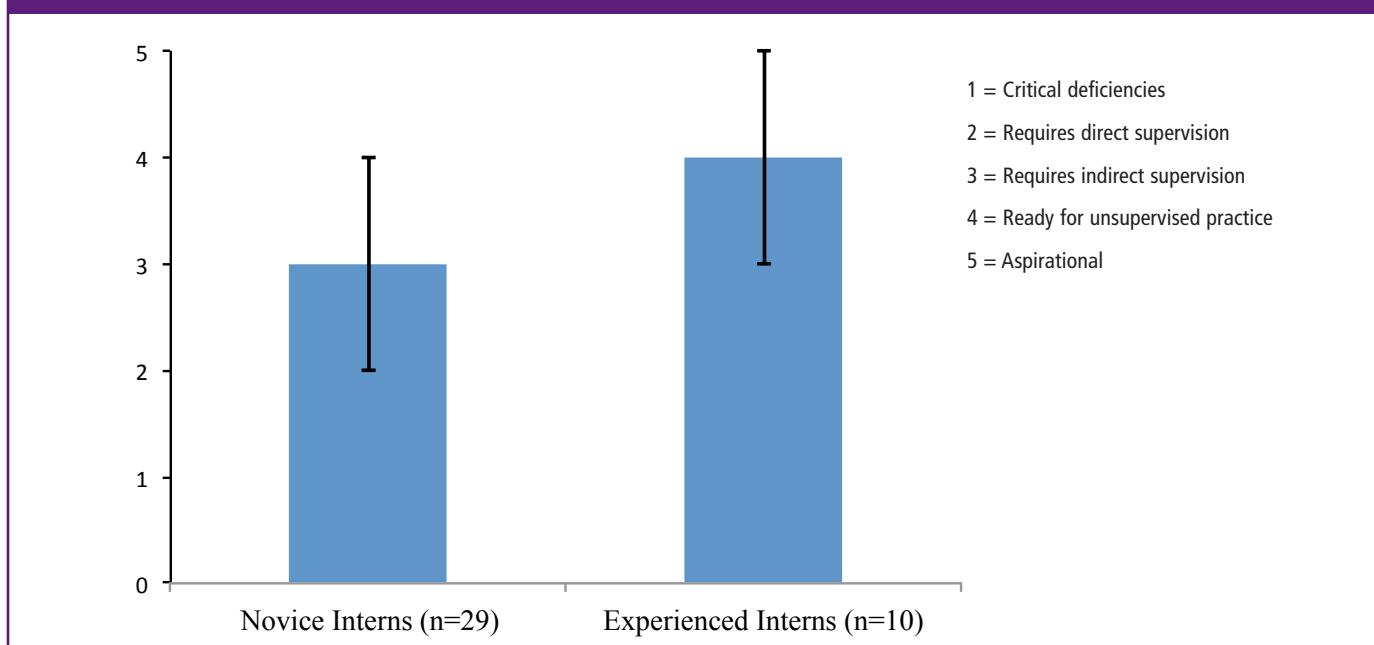
TOP HALF

- Behaviorally based anchors
- Associated milestones in multiple competency domains
- Provides granular detail to "see" competence
- Guides formative feedback

BOTTOM HALF

- Maps to subcompetencies
- Synthesis of observed behaviors
- Entrustment decision

FIGURE 2. Rating of Overall Competence in Handoff Performance*




*Box plots illustrate minimum and maximum rating.

Performing an effective and safe patient care handoff is an EPA that requires the integration of skills across multiple ACGME competency domains, including patient care, interpersonal and communication skills, and practice-based learning and improvement.

framework to allow for both meaningful formative learner feedback and summative evaluation of overall competence.

One key aspect to developing our tool was the purposeful choice to combine discrete, observable behaviors (top half) along with overall entrustment (bottom half) into a single, one-page tool (**Figure 1**). Specifically, the top half of the tool deconstructs the handoff activity into several fundamental components, which relate to multiple curricular milestones across multiple competency domains. This delineation serves several purposes. First, it provides granular detail, allowing the assessor to “see” competence (11). It is particularly important should the tool be used by faculty without handoff expertise, as it prompts them to consider the behaviors necessary to effectively perform this EPA. In this way, the top half of the assessment serves as *de facto* faculty development. Second, this detailed assessment instructs formative learner feedback. Providing specific feedback based on observed behaviors allows faculty to correct errors and encourage what was done well. Finally, the synthesis of information from the top half informs assessment of overall competence on the bottom half.

The bottom half of the form consists of one question intended to capture the faculty synthesis of the prior observed behavior as a level of specific entrustment for this EPA. This summative evaluation can be mapped to applicable subcompetencies for ACGME reporting. For example, handoff assessment most directly relates to subcompetency SBP4 (“transitions patients effectively within and across health delivery systems”), but also PC2 (“develops and achieves comprehensive management plan for each patient”), PROF1 (“has professional and respectful interactions with patients, caregivers and members of the inter-professional team”), ICS2 (“communicates effectively in inter-professional teams”), and several others. Assessment of a single EPA provides a window into the resident’s performance across multiple reporting milestones. 

Conclusion

We created a milestone-based assessment for handoff performance that allowed for both meaningful formative feedback and summative evaluation of competence. Framing the handoff activity as a work-based EPA allowed for assessment of multiple educational milestones, which can inform reporting to ACGME. Faculty and learners found the assessment tool valuable for providing feedback and improving performance. The process by which this assessment tool was created and implemented can be applied to other EPAs and other methods of assessment.

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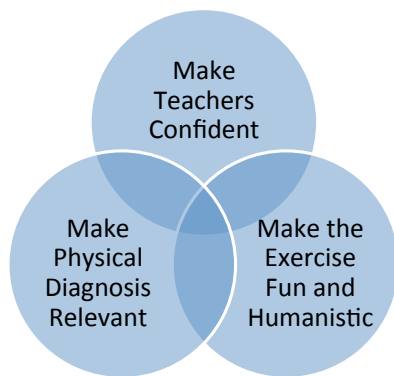
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Beyond “Show and Tell”: Promoting Physical Examination Skills as Essential Habits of Reflective Practice

Physical diagnosis (PDx) is considered an essential clinical skill for practicing physicians, yet this skill is declining among residents and faculty (1–4). PDx teaching is often treated as “show and tell” rather than a hypothesis-driven exercise applicable to patient care. Our three-prong educational approach, which emphasizes the value and relevance of PDx in direct patient care (Figure 1), can be easily adapted to institution-specific curricula. We hope to inspire other clinician-educators to use similar creative strategies to improve PDx skills among students, residents, and faculty at their own institutions.

FIGURE 1. Three-Prong Educational Approach



Make Teachers Confident: Skills Development Faculty Development

To teach PDx skills and clinical reasoning effectively, faculty members must feel confident in their own skills. However, faculty themselves may feel inadequately trained (5). We use three methods to help faculty improve their physical exam (PEx) skills and confidence in bedside teaching.

Peer Observation

Observing colleagues teaching at the bedside exposes clinical faculty to new teaching techniques (6). Witnessing a successful bedside teaching moment will inspire the observer to “borrow” new strategies for his or her own bedside instruction. Peer observation should be collaborative, not evaluative, and designed as a forum to exchange ideas.

Faculty Interest Group

Faculty members who want to improve their PEx skills can meet regularly and teach each other. All members of the

group should take turns teaching, covering a PEx chapter, summarizing a *JAMA* rational clinical examination series paper (7), or going to the bedside and examining patients together. Learning from each other can raise confidence levels.

Master Clinician Sessions

Homegrown “master clinicians” teach faculty a specific part of the PEx, ideally bringing their own patients. Identifying and inviting master clinicians acknowledges the importance of PEx at the institution and it becomes part of the hidden curriculum. At these sessions, it is critical that faculty members have a safe space to practice and ask questions without learners present. Giving faculty permission “not to know” will encourage a creative and positive learning environment, which they can bring to their students.

Residents as Teachers

Residents play an important role in teaching PEx to medical students and residents. Obstacles to teaching PEx include low confidence in one’s own examination skills and the belief that technology trumps clinical skills—especially when imaging is so easily obtained (8).

These obstacles can be overcome by rotations that give residents an opportunity to properly learn and teach the PEx; the rotations must emphasize evidence-based PEx (7) in addition to “the art of the PEx.”

- Teaching resident rotation: Two-to-four-week rotations for junior or senior residents can focus on PEx teaching on the medicine service with an emphasis on evidence-based physical exam.
- Rounds with a master clinician: Residents participate in weekly PDx rounds with students and a master clinician. Earlier sessions should emphasize observation of the master clinician leading rounds; later sessions should have resident-led bedside rounds with direct observation and feedback by the faculty mentor.
- PEx morning reports: Residents and a faculty discussant go to the bedside to examine a patient or bring the patient to the conference room during morning report, especially in cases where PEx is the key contributor to clinical diagnosis.

Make It Relevant: Reflective Clinical Examination

Despite availability and abundance of technology, clinical skills remain relevant to patient care. Between 56% and 88%

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of correct diagnoses are made from history alone, and 73% to 100% of the correct diagnoses are established by the end of the history and examination (9). Most medical schools teach students PEx techniques with little direct link to clinical reasoning (10). A mechanistic, head-to-toe exam promotes decontextualized rote learning and perpetuates the belief that PEx is an anachronism in medicine (11–13). A hypothesis-driven, or reflective, PEx with integration of diagnostic reasoning includes five key steps:

1. Anticipation and selection of relevant PEx maneuvers based on history-driven diagnostic hypotheses.
2. Correct execution of relevant examination maneuvers.
3. Identification of abnormal findings.
4. Accurate interpretation of findings, leading to a prioritized differential diagnosis.
5. Justification of the working diagnoses through appropriate and parsimonious ordering of investigations.

Questions from teachers can stimulate a hypothesis-driven PEx in real time:

- What is your diagnostic hypothesis based on history?
- How will you confirm (or refute) your hypothesis on PEx?
- How would you correlate basic science concepts with PEx findings (for example, anatomy and neurologic localization, pathophysiology of a systolic murmur)?
- How will you choose a strategy for further investigation, and can the history and PEx help predict the results?

Make It Fun and Humanistic: Using Art to Teach PDx

The first, and ideally simplest, aspect of PDx—observation—turns out to be among the most vexing to teach. Students may not trust their own ability to make unique and important observations; they may skip the observation phase and jump right to the stethoscope or reflex hammer. They miss important opportunities to make diagnoses and better communicate with their patients. We have found it helpful to take students to an art museum (or airport, mall, etc.) to practice observation skills (14, 15). The following questions, adopted from Visual Thinking Strategies methodology, can help students hone their observational acumen:


- What do you notice in this image (or about this patient)?
- What evidence can you find that supports that observation?
- What else can you find?

Our students use this method to explore figurative or abstract artworks; they are encouraged to look and listen carefully and to build on each other's observations.

Such a venue distances inhibitions, flips hierarchy, and relieves anxiety. Also, figurative paintings can be used to define relevant anatomical relationships. We then return to the bedside, where the leader repeats the same series of questions with a patient (informed in advance). This method is ideally suited to conditions with many visible and conflicting clues, such as edema, cellulitis, venous stasis, or bruising.

This type of questioning allows each viewer to operate within his or her comfort zone, avoid the bias imposed by high expectations, and practice sharing and building on colleague contributions. Using this approach, students can sharpen their observation skills and gain confidence in describing normal and abnormal findings that may relate to health and disease.

Conclusion

Discussions during the workshop and participant evaluations indicate that many medical educators believe in the value of PDx in this modern era of health care. Increasing work demands and resultant time constraints as well as advancement in technology necessitate modifications in teaching PDx. Emphasizing its relevance in diagnosis and management of patients could convince residents that performing skilled and focused examinations is important. A shift from teaching unfocused head-to-toe physical exams to reflective PDx teaching can stimulate critical thinking. Faculty development to improve a teacher's PDx skills is bound to increase confidence in teaching residents. Finally, examining the precision and accuracy of examination findings can help clinician-educators focus on techniques and findings that meaningfully impact patient management and discard time-honored examination techniques that do not (8). 

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The Road to Successful Promotion— A Development Plan for Junior Faculty

Effective mentoring is essential for learners and faculty to succeed as researchers, clinicians, and teachers in academic careers (1–3). Although funded research projects, publications, and highly rated teaching skills are universally acknowledged as central to advancement in academic medicine, medical schools and departments of internal medicine have additional expectations that are often less evident to junior faculty.

The Department of Medicine at University of Washington (UW) School of Medicine provides substantial orientation to subspecialty fellows and new faculty about the critical milestones that must be achieved to obtain an initial faculty appointment and subsequent promotion.

A team of administrators from the divisions and the department collaborated to create a systematic approach to guide division chiefs and administrators in providing new faculty with an overview of the departmental criteria used to evaluate progress. Resource materials, such as discussion and content guides, were developed for use by division chiefs and administrators. New assistant professors designate a pathway as either physician–scientist, clinician–teacher, or research faculty (without clinical responsibilities). Criteria specific to each pathway are presented by the division chief for review and discussion during the interview process. The same criteria are cited in and attached to all offer letters for new faculty. The administrator (or designee) meets with the new faculty member at the time of his or her appointment to review a career progression timeline that includes the expected dates of review meetings and deadlines for submission of materials. They also discuss expectations about who is responsible for each requirement—for example, faculty member or division/department staff—and identify how division staff can assist with gathering and collating evaluation data and other materials valuable for future reappointment and promotion review sessions. This “toolkit,” used as a guide during annual career-development meetings with division chiefs and other mentors, is also the basis for annual merit review sessions.

Ordinarily, the academic timeline for an assistant professor at UW is limited to six years: an initial three-year appointment with a second three-year reappointment for faculty considered on track for promotion. In the department of medicine, all assistant professors are reviewed for promotion consideration at three years in rank and may be proposed for promotion any year thereafter until the mandatory six-year mark. Faculty members who are on approved leave for six months or more (family leave, etc.) may request to reset their academic clock, depending on the length of their leave (typically one year per child birth). Infrequently, a faculty member may request a one-year postponement of the decision on their mandatory promotion if they submit a reasonable, detailed

plan for how the additional year would enable him or her to meet promotional requirements. If the postponement is not approved by the Appointment and Promotions Committee of the department, then the faculty member is granted a terminal year.

Due to this relatively compressed timeline, the department recognized the importance of establishing a framework to ensure appropriate mentoring and successful promotion of junior faculty. Annual promotional statistics are tracked by the department’s appointment and promotion committee (Figures 1 and 2) and are provided to division leadership to augment

FIGURE 1. Mandatory Promotions by Year

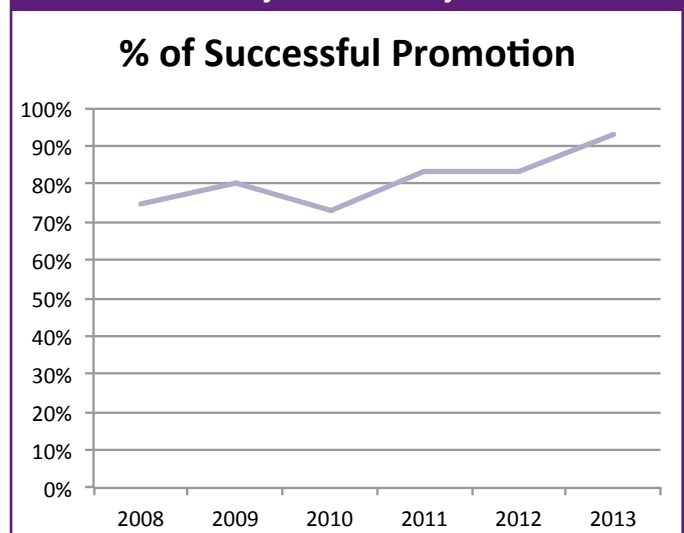
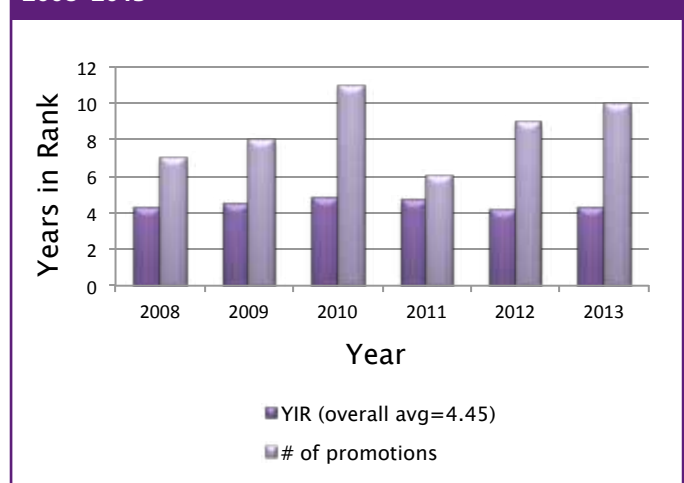


FIGURE 2. Years in Rank (YIR) Prior to Promotion, 2008–2013



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formal criteria discussions at the time of appointment, annually during the individual faculty conferences with division chiefs (or their designees), and as part of an intensive review (including bedside, classroom, lab, peer, and student teaching evaluations) at the three-year reappointment benchmark.

In most cases, an individual mentorship program is established at the divisional level. Primary mentors are identified, although some divisions employ a team approach that includes two to three secondary mentors. Frequency of meetings and follow-up are established by both the mentor(s) and the mentees, with a suggestion that they happen no less than twice annually. Discussions include identification of timelines, including the department average presented in **Figure 2** and benchmarks for reappointment and promotion; three- to five-year vision and goals; and criteria/metrics for promotion. Because this information is also valuable for fellows, the department includes appointment and promotion presentations in its annual "Introduction to the Research Years" symposium. Many division training programs have also elected to incorporate discussions of appointment and promotion expectations into training materials, presentations, and mentoring sessions.

At each meeting, significant accomplishments are highlighted and documented. Curriculum vitae are reviewed, updated, and submitted to the division/department along with peer and student evaluations on an annual basis. Key presentations for the upcoming year are noted, and the faculty member is provided support to solicit evaluations at or following the event.


Each division develops an approach that best fits its faculty activity profile. Some hold regular "works in progress" sessions for faculty and fellows, while others host breakfasts, brown bag lunches, or other informal sessions designed for interaction with fellows and junior faculty. If a faculty member is interested in submitting a career-development grant proposal, then the division chief meets regularly with him or her to discuss the proposal and offer guidance.

The department is responsible for ensuring that division chiefs and administrators are updated on changes to toolkit components as well as changes to processes or timelines as mandated by the school of medicine, provost, or the university's faculty code. Additionally, departmental academic personnel staff members meet with administrators and staff of each division, individually or in annual presentations, to review specifics of the guidelines, provide suggestions for implementing the guidelines, and give updated documents or forms for dissemination to the faculty. These sessions are also used to identify and address common process challenges and strategies for data retention. Department and division staff work jointly to ensure that systems are in place to capture all

components of the documentation and metrics required for the school of medicine and university review processes.

Since expanding opportunities to inform new faculty about career-development expectations in 2011, we have witnessed a number of benefits. Most importantly, data shown in **Figure 1** suggest a 10% improvement in the success rate of promotions after instituting intensified mentoring. Additionally, clear expectations are established and acknowledged early in an individual's career. Division chiefs and administrators indicate that information is disseminated earlier and more frequently, resulting in junior faculty who are better informed and prepared at time of review. Division administrative staff have clear expectations and processes to reference, which enables them to support faculty more effectively during the promotion process. This systematic approach to accruing and retaining data helps to ensure that assistant professors maintain up-to-date and comprehensive promotion dossiers for review during annual career development meetings and review sessions.

To provide ongoing evaluation and input, a departmental mentoring committee was very recently founded to assess best practices and to strengthen mentorship at all levels throughout the department.

Junior faculty members are the most vital resource of any department. In the current, highly competitive environment, effective mentoring is more crucial than ever to ensure their success. This systematic approach has been well received by junior and senior faculty and appears to be having a valuable effect. 

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I Have to Do What! Shared Strategies to Enhance Evaluation and to Optimize the Performance of the Clinical Competency Committee

Since the announcement of the Next Accreditation System (NAS) (1), residency program directors have been trying to understand the new requirements and develop processes to ensure compliance. Although information about NAS is available via the Accreditation Council for Graduate Medical Education website and webinars, program directors also need practical tips and real-world examples of how to best prepare for NAS. With grant funding support from APDIM (2), four internal medicine residency programs created a one-day, multi-institutional faculty development workshop with to share information, ideas, and best practices for NAS.

Twenty attendees from Morehouse School of Medicine, Emory University School of Medicine, Medical University of South Carolina (MUSC), and University of Alabama at Birmingham School of Medicine (UAB) met for an overview of NAS, presentations of best practices, and small group breakout sessions. Innovations and best practices from each program were later shared at a workshop at Academic Internal Medicine Week 2013.

Revise Current Assessments to Better Inform Milestones

At UAB, the first priority was to revise the end-of-rotation assessment forms, guided by the internal medicine milestones.

1. Using the narrative descriptions of the subcompetencies, we identified which specific observable behaviors were amenable to assessment by attendings, nurses, peers, and patients. For example, the ward attending can assess PC1 (accurate history and physical) for a resident on wards; the clinic attending can assess PBLI2 (improve care for panel of patients) from the clinic quality-improvement project. Each type of evaluator has a unique assessment form, with questions relevant to the role.
2. We selected the range of subcompetencies expected for each milestone for each postgraduate year (PGY) level. If each column is given a 1–9 value, for PC1 we expect the average PGY-1 to perform in the 4–6 range and a PGY-3 in the 6–8 range. The assessment questions were worded with these developmental stages in mind.
3. Finally, we selected an assessment scale with descriptors, not numerical anchors. Descriptors are based on achievement for PGY level (i.e., needing more attention, appropriate for this time of year for a PGY-1, ready for PGY-2, ready for independent practice).

We limited the forms to 20 questions we felt assessed accurate observations. The assessment forms do not use

exact milestone wording nor include all 22 milestones; other experiences inform milestones not captured in these assessments. We are in the process of creating rotations-specific assessments, with additional unique questions for specific rotations (such as appropriate care in the intensive care unit, PC3).

Map Assessments and Rotations to the Milestones

Emory created a five-step approach to integrate the curricular milestones into residency training programs.

1. Subcategorize the 142 internal medicine curricular milestones. For example, using the subcategory of “History Taking,” one can identify curricular milestones PC-A1, PC-A2, PC-A3, and PC-A4 as aligning under this domain.
2. Map existing resident assessments with the curricular milestones (**Figure 1**). Using the internal medicine three-year rotation schedule across the top of the spreadsheet as column headers, and having the first column for the 22 reporting milestones and the second column for the six core competencies, subcategories, and the 142 internal medicine curricular milestones, programs mapped curricular milestones to PGY level and rotation as well as documented all the integrated educational curriculum (e.g., objective structured clinical examination, EKG tests) achieved at a particular time in residency. As depicted in **Figure 1**, “x” represents a curricular milestone already integrated into an inpatient rotation resident assessment form, “Amb” denotes a curricular milestone found on the ambulatory rotation resident assessment form, and “CC” represents a curricular milestone integrated into the semiannual resident continuity clinic assessment.
3. Identify your assessment gaps. Step 2 allows you to easily find gaps.
4. Residency leadership should critically analyze the map from Step 2 and update and develop new resident assessment instruments.
5. Connect the reporting milestones (22 subcompetencies) with the six core competencies and the 142 curricular milestones.

Once completed, the spreadsheet serves as a visual map of the possible assessment data available to the residency program’s clinical competency committee (CCC) for assessing residents against the NAS internal medicine reporting milestones every six months.

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FIGURE 1. Milestones Mapping**REPORTING MILESTONES**

PGY-Level	PGY-1											
Rotations	Gen Wards	Cards	Gen Wards	Gen Wards	Amb	Endo/ Rheu	Gen Wards	GI	Gen Wards	Gen Wards	Amb	MICU
Integrated Curriculum	EKG Skills		EBM/ LS		ITE			Megacode		OSCE H/P/C		Proc & Modules
Core Competency												
Patient Care	Integration into the Program (rotations, layered, and integrated curriculum)											

CURRICULAR MILESTONES

PC1	History Taking											
	a. Acquire accurate and relevant history from the patient in an efficiently customized, prioritized, and hypothesis driven fashion [PC-A1]	X		X	X	Amb	CC	X		X	X	Amb CC
	b. Seek and obtain appropriate, verified, and prioritized data from secondary sources (e.g., family, records, pharmacy) [PC-A2]	X		X	X			X		X	X	

Develop Opportunities for More Direct Observation

One of the challenges of NAS is identifying how residents are progressing with the milestones. This information cannot be gleaned; it must be observed. In his seminal article, Jack Ende quotes a colleague: "We are training a group of physicians who have never been observed" (3). Thirty years later, NAS refocuses us on this important issue of direct observation of our learners. Some important opportunities for direct observation include transitions in care/sign-outs, counseling patients on lifestyle modifications, and interprofessional team leadership. Further, we must find opportunities to observe basic interactions, such as residents introducing themselves to the patient and setting the tone for a clinical encounter or family meeting. We find the best way to incorporate more direct observation is to provide faculty with the necessary time and tools. The final challenge is to train faculty members to observe without disrupting the clinical encounter and to give feedback on the observation.

Morehouse has incorporated several opportunities for observation.

1. Mini-CEX – Faculty have the opportunity to observe a resident doing a portion of or the complete examination.

2. Milestones Checklists (for diverse clinical situations) – These checklists identify directly observable activities and allow the faculty to denote when they were observed and to provide written feedback to the resident.
3. Comprehensive Clinical Skills Examination – Faculty observe complete history and physical examination for all residents in the first 60 days of their training.
4. Training of CCC (including the chief resident) members in the skills of resident assessment and feedback so that observing the clinical activity is a starting point, not an end point.

Remaining challenges include fully implementing these processes, adjusting resident expectations, and sustaining opportunities for direct observation throughout the resident training.

Plan Your CCC Meetings


Internal medicine residencies have utilized a committee structure for resident evaluation for some time; however, the function of CCC in NAS presents a number of challenges. Current assessments do not consistently align with the subcompetencies and reporting milestones, which can make the biannual assessment and reporting functions of CCC cumbersome and time consuming. Additionally, the new

nomenclature can be confusing and requires significant faculty development.

To address some of these challenges, MUSC identified multiple strategies.

1. CCC members have been given specific faculty development about assessment and reporting in NAS.
2. Each member subsequently affirmed their commitment to serve as a member of this group. Instead of a few lengthy meetings per year, the CCC meets monthly for one hour and reviews 15 to 20 residents, allowing us to review each resident twice per year but distributing the work more evenly.
3. To streamline meetings, the associate program directors and the program director pre-review each resident and make an initial effort to complete the 22 subcompetency forms. The CCC then reviews this initial assessment and discusses each resident's trajectory, using the reporting milestones. These reviews help the CCC faculty members understand the process and reinforce the faculty development. Our vision is that each CCC member will be assigned several pre-reviews per month.
4. "Problem" residents, or residents undergoing remediation, are discussed monthly to assess progress. CCC members are given educational value unit credit to help compensate the time they devote to this effort (4).

Conclusions

Although NAS poses many challenges for internal medicine training programs, it also creates opportunities to collaborate and share best practices to establish new processes and assessment methods of training physicians. With grant support, four programs in the Southeast demonstrated how an initial brainstorming workshop for 20 participants could successfully lead to a national platform capitalizing on opportunities to use collective wisdom and experience to benefit learners, programs, and ultimately, patients. 

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Standardizing the Subinternship: One Program's Experience

The medicine subinternship, or acting internship, had traditionally been a rotation with experiential learning and with little formal curriculum or lectures. This model contrasts heavily with the third-year medicine clerkship, which is very structured. Given the lack of structure in the subinternship and recent changes limiting resident duty hours, we feared that residents would have less time to spend with medical students. We wondered if there was a curriculum for fourth-year medical students that could make teaching more deliberate and effective during the subinternship rotation.

In 1998, APDIM published a paper that made specific recommendations on increasing medical knowledge, refining physical examination skills, and improving communication and managerial skills for fourth-year students (1). The paper also recommended that subinterns have a curriculum with learning objectives and their own conference time, assume intern duties and participate in cross coverage, and undergo an evaluation process just as rigorous as that of third-year medicine clerkship students.

To design a subinternship curriculum, Robert Sidlow et al surveyed program directors, clerkship directors, and interns to rate skills and competencies that should be learned during this rotation (2). The survey examined skills in three areas. The first category was integrative skills, which consisted of communication and information management skills routinely used by hospital-based housestaff. The second category was "clinical scenarios," clinical problems and emergencies often encountered by housestaff during ward and cross-coverage duties. The third category was procedural skills.

Survey results showed that the skills that were deemed most important were case presentation, longitudinal tracking of patient data, coordination of care with other health care workers, prioritization of scut/sign-out lists, identification of adverse drug reactions, ethics of informed consent, and use of electronic databases. The most important clinical problems that interns should be able to handle were respiratory distress, chest pain, altered mental status, gastrointestinal bleed, fever, acute pulmonary edema, hypokalemia/hyperkalemia, abdominal pain, severe hypertension, shock, inpatient glycemic control, acute renal failure, arrhythmias, anaphylaxis, alcohol withdrawal, and seizure. The only procedural skills that received a high-priority rating were venipuncture and arterial blood gas sampling.

Following publication of this article, the CDIM Subinternship Task Force created a model curriculum focusing on communication, coordination of care, information management, procedures, and treatment of 17 common

The paper recommended that subinterns have a curriculum with learning objectives and their own conference time, assume intern duties and participate in cross coverage, and undergo an evaluation process just as rigorous as that of third-year medicine clerkship students.

clinical problems or emergencies housestaff are likely to encounter (3). The *CDIM Subinternship Curriculum* is based on these clinical problems/emergencies and lists specific learning objectives for medical knowledge, clinical skills, and attitudes and professional behaviors. The *CDIM Subinternship Primer* covers such topics as how to call consults, triage cross-cover, negotiate conflict, deliver bad news, obtain advanced directives, write transfer notes, plan discharge, counsel discharge, complete discharge summaries, achieve work-life balance, and document procedures. Individual subinternships are encouraged to use the primer and to tailor it to their own needs; electronic versions are available online (3). Also available online are 17 training problems that cover the clinical problems/emergencies. Each case is based on the *CDIM Subinternship Curriculum* and has a student version and instructor version. The student version contains the case and associated questions; the instructor's version has the answers to the case. Despite the availability of this curriculum, few programs are using it. A 2005 CDIM survey focusing on subinternship curriculum found that 37% of subinternships had a formal curriculum, 35% used the CDIM curricular guidelines for the subinternship, and 18% used the training cases developed by CDIM (4).

What Our Program Does

Since reviewing the literature on the internal medicine subinternship, we have tried to standardize the subinternship


at one of our clinical sites. All medicine subinterns are given a formal orientation to the service and are instructed to read the *CDIM Subinternship Primer* during the first week of their rotation. Subinterns complete patient logs to identify which of the 17 clinical scenarios they are seeing. Data from the patient log were used to determine which cases were underrepresented among students; those cases were chosen as topics for the subinternship conference series. The corresponding CDIM training problems were used during the conference series. Because the cases are already written and the answers provided, minimal faculty preparation is required to facilitate a conference.

Our program uses an evaluation passport to encourage students to get feedback from their residents and attendings. These passports have evaluation forms for the history and physical examination, direct observation, and discharge summaries.

We recently introduced a simulation case of an upper gastrointestinal bleed with hypovolemic shock that students manage in pairs. In the simulation setting, subinterns are permitted to give orders independently, without cosignature or approval by a supervising physician. The simulation case has been well received by the students and lets them safely manage an unstable patient independently as they prepare for internship.

In the upcoming academic year, we hope to expand use of the CDIM tools and our evaluation passport to other subinternship sites in the program. Additionally, we hope to develop more simulation cases for students and to provide them with more robust feedback from nurse and patient perspectives for each case.

Where Are We Heading?

The AAIM Medical School to Residency Transition Committee, a joint venture between CDIM and APDIM, is looking to update not only the subinternship but also our approach to the fourth year of medical school, since it would be difficult to teach what should be taught during the fourth year in a subinternship. The subinternship work group is formulating a position paper that will introduce new recommendations for the subinternship. The work group focusing on the fourth year of medical school will publish a three-part paper. Part one will describe the current state of the fourth year, part two will discuss survey data from CDIM from residency programs and interns about the fourth year, and part three will make recommendations for the fourth year. Programs will need to reevaluate subinterns' education once these new recommendations are published. 

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PGY-4 Chief Resident Position

Position available June 2014 for a PGY-4 chief resident position at MedStar Franklin Square Medical Center. The MedStar Franklin Square Medical Center Chief Resident works with the Program Director and the Chair of Medicine in the Internal Medicine Residency Program, which consists of 30 categorical and seven preliminary residents. The Chief Resident serves as a junior faculty attending with ample daily teaching opportunities and attends on both inpatient and outpatient services. The MedStar Franklin Square Medical Center has an academic affiliation with the University of Maryland School of Medicine. Supervision of daily morning report and noon conference, as well as regular medical student teaching are additional expectations. This 12-month position fosters growth and development of leadership, administrative and practice skills and may be ideal for an Internal Medicine Residency graduate considering academics, practice or fellowship. The applicant should be a graduate of a three-year Internal Medicine Residency program prior to July 2014 and eligible for the ABIM certifying exam. The applicant should also be eligible for unrestricted licensure to practice medicine as an independent practitioner in the State of Maryland, as well as certified in CPR and ACLS. This position is not eligible for Visa sponsorship.

We offer an attractive salary/benefits package that includes medical, dental, vision, life, STD/LTD, pre-tax retirement savings plan, tuition reimbursement and more. For consideration, please forward a letter of intent and CV to Philip F. Panzarella, M.D., M.P.H., Chair, Department of Medicine, 9000 Franklin Square Drive, Baltimore, MD 21237; or email: Phil.Panzarella@medstar.net.

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Helping Residents Keep Their Cool During Challenging Patient Encounters: Incorporating the Medical Charter on Professionalism into an Internal Medicine Residency Professionalism Curriculum

Professionalism is a foundational competency of medicine, as emphasized by regulatory bodies for medical training and practicing physicians (1, 2). The Charter on Medical Professionalism (2) was first published in 2002 as a joint statement by the American Board of Internal Medicine Foundation, American College of Physicians (ACP)–American Society of Internal Medicine Foundation, and the European Federation of Internal Medicine to help guide physician professional responsibility to both patients and the collective public. Despite the publication of the charter more than a decade ago, many physicians-in-training and practicing physicians are not aware of its existence or importance. Its preamble states, “Professionalism is the basis of medicine’s contract with society.” There are three fundamental principles and 10 professional responsibilities that all physicians should strive to achieve during patient encounters and with the public at large (Figure 1).

FIGURE 1. The Charter on Medical Professionalism	
Preamble: Professionalism is the basis of medicine’s contract with society.	
Fundamental Principles	A Set of Professional Responsibilities
<ol style="list-style-type: none"> 1. Primacy of patient welfare. 2. Patient autonomy. 3. Social justice. 	<ol style="list-style-type: none"> 1. Professional competence. 2. Honesty with patients. 3. Patient confidentiality. 4. Maintaining appropriate relations with patients. 5. Improving quality of care. 6. Improving access to care. 7. Just distribution of finite resources. 8. Scientific knowledge. 9. Maintaining trust by managing conflicts of interest. 10. Professional responsibilities.

Although at first glance, the charter may appear modest, many providers struggle to assume the principles and responsibilities and to consistently implement them in their day-to-day practice. Physicians profess to be competent, yet medical errors are common (3) and often due to communication failures (4); quality of care is a responsibility

under this charter, yet there is clear evidence of wide variations in quality of care (5, 6). Just distribution of finite resources is subject to intense and heated debate (7). In addition, nearly one in six outpatient encounters is considered “difficult” by clinicians, which challenges professionalism even more (8, 9). In response to a call from the ABIM Foundation, on behalf of the Society of General Internal Medicine (SGIM), a series of workshops was designed to more concretely put the charter into practice by teaching participants a set of communication skills. These workshops, “Communicating Professionalism: Putting the Charter into Practice,” were originally presented for faculty at national and regional meetings of SGIM, ACP, and the Association of American Medical Colleges (AAMC).

While values underlie the principles and responsibilities of the charter, communication is the medium through which physicians demonstrate professionalism to their patients, colleagues, and society. Although internal medicine residents interview numerous patients over the course of their training, communication challenges are commonplace, and little information in the literature exists on how best to teach this topic to residents. Henry and colleagues have made some recent suggestions focused on evidence-based core communication competencies for graduate medical education. These competencies vary in complexity and the ease with which educators are able to implement them (10). Little research demonstrates how providers confront communication tasks that challenge them to maintain their professionalism. Data from medical students attests that when they confront professionalism challenges, their decisions can be influenced not only by principles found in the charter but also by factors that do not show up in regulatory documents (“unavowed” principles such as obedience to attendings or allegiance to team) or that contradict the charter (“disavowed” principles such as not telling the truth out of fear of getting a bad grade or harming the attending’s reputation) (11). Training residents to successfully negotiate situations that challenge their communication skills and professionalism is needed and mandated. To address this need, we created a series of three one-hour workshops based on the Charter on Medical Professionalism. To our knowledge, no other residency programs are using a similar exercise.

Curriculum Description

Over a three-year period, one-hour “Communicating Professionalism” workshops were held each month as part of

FIGURE 2. Communicating Professionalism Three-Year Curriculum Role Plays

Year 1: Challenging/Angry Patients (2010–2011)	
Combined with Geriatric Didactic Sessions on Cognitive Assessment, Hospice/Palliative Care	
Case Study	Charter Principle
New onset low back pain, patient wants MRI	Just Distribution of Resources, Conflicts of Interest
Pregnant patient refuses to disclose HIV status to partner	Confidentiality
Medical error (Missed +FOBT)	Medical Error and Honesty
End-of-life discussion with family after sudden MVA	End of Life, Patient Autonomy
Elderly patient with early dementia and concerns about confidentiality with family members	Confidentiality
Year 2: Motivating Non-Adherent Patients (2011–2012)	
Combined with Didactic Sessions on Diabetes, Hyperlipidemia, Motivational Interviewing	
Case Study	Charter Principle
48-year-old male with diabetes, hypertension, obesity, and smoking	Patient Autonomy
55-year-old male with hypertension who stopped his meds	
Year 3: Drug-Seeking Patients (2012–2013)	
Combined with Didactic Sessions on Chronic Non-Cancer Pain Management, Illicit Drugs	
Case Study	Charter Principle
L5-S1 disc herniation in patient with prior substance abuse, in remission >10 years	Patient Autonomy, Professional Competence, Maintaining Appropriate Relations
38-year-old female with acute knee pain with negative testing; question of abuse vs. “pseudoaddiction”	
Managing chronic pain in fibromyalgia	
Chronic pancreatitis patient on chronic pain meds with newly diagnosed septic joint	

the annual required four-week ambulatory care block. During this block, residents attend four continuity clinic sessions per week, various medical/surgical specialty clinic experiences, and four to eight hours of weekly didactic sessions that cover primary care, geriatric, and quality improvement topics. Each Communicating Professionalism workshop was conducted 10 times per year, and all categorical residents participated in all three workshops over the course of their three-year residencies. The workshops were run by the same faculty for the entire three-year period. Small groups (seven to 10 residents per group) were used to guarantee that each categorical resident actively participated in all three workshops during their residencies. At the onset of each session, residents were introduced to or reminded of the principles and commitments of the charter and

to communication skills and techniques for dealing with challenging patients (12). To reinforce these skills, residents participated both as providers and as patients in carefully designed role-play situations. Cases were crafted to ensure the "medicine" in each case was clear so that learners could focus solely on their communication skills. Other didactic sessions given during the block frequently complemented the workshops. Year 1 (2010–2011) focused on a diverse set of patient scenarios that presented challenges to charter principles, including just distribution, honesty, confidentiality, and patient autonomy. Year 2 (2011–2012) focused on motivating non-adherent patients who have chronic diseases. Year 3 (2013–2014) focused on drug-seeking patients. **Figure 2** describes cases for each workshop along with the charter principle or responsibility it challenges.

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Evaluation

At the end of their block, all residents were asked to complete an online evaluation of all block didactic and clinical sessions (Figures 3 and 4). Residents agreed or strongly agreed that the Communicating Professionalism workshops were useful in their education and that the workshop format was effective for teaching this subject. A large percentage of residents used the communication skills learned during their current four-week ambulatory block, and even more planned on using the learned

FIGURE 3. Resident Evaluation of Activity Content and Format for Each Communicating Professionalism Workshop Type

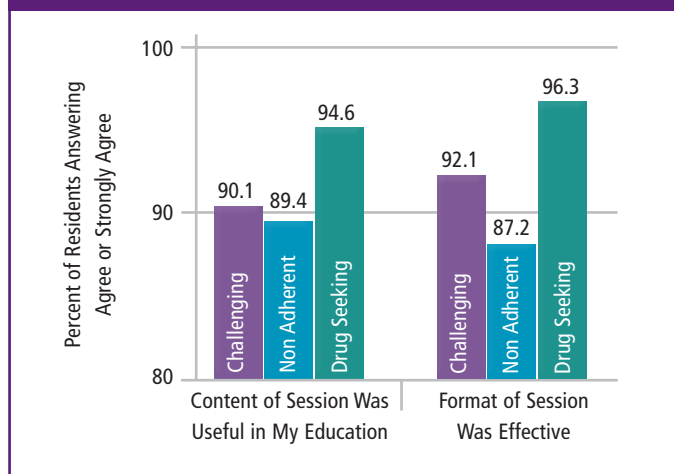
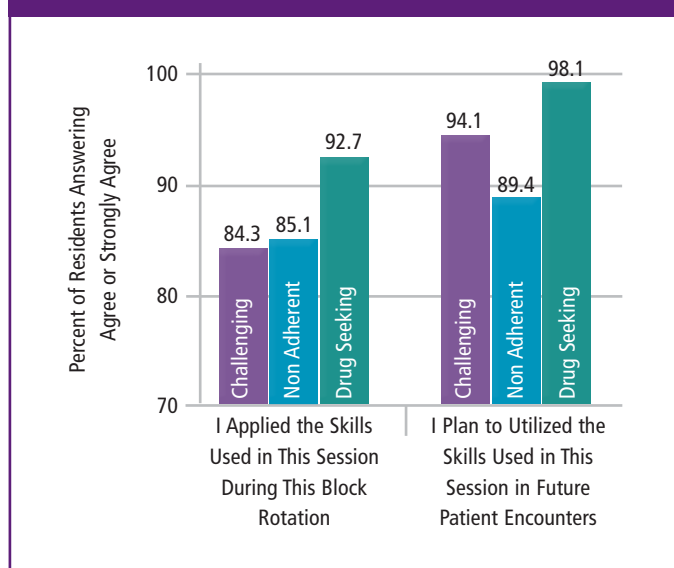


FIGURE 4. Resident Utilization of Skills Learned for Each Communicating Professionalism Workshop Type



communication skills in future patient encounters. (Workshops were delivered in the beginning of week three of a four-week block, so there was not a lot of time to use skills during the block.) The drug seeking patient workshop was consistently the most highly rated of the three. The motivating non-adherent patients workshop was rated lowest.

Discussion

With a simple role-play workshop intervention, residents can be taught communication skills to be used during difficult patient encounters. Residents evaluated these workshops highly and planned to implement these newly acquired skills in their practice. Limitations of this work include that resident ratings are subjective and measures of their intention to incorporate new behaviors into challenging patient encounters are not actual measures of change. Previous studies have indicated that physicians who indicate an intention to change are more likely to make practice changes, such that a commitment to change may be a marker for actual change in practice (13). Our series of workshops could easily be adapted at other institutions and helps residents achieve the core competencies of patient care, interpersonal and communication skills, professionalism, and system-based practice, as well as Next Accreditation System (NAS) milestones. It also helps institutions in meeting their Clinical Learning Environment Review (CLER) professionalism requirement (Figure 5). Going forward, we are repeating the three-year curriculum with a new set of residents and hope to enhance each workshop based on previous experience and learner feedback. We also hope to survey residents at six weeks and three months after each workshop to determine sustainability of our educational impact. 🌀

FIGURE 5. ACGME Competencies and Milestones

Patient Care (PC)

- Gathers and synthesizes essential and accurate information to define each patient's clinical problem. (PC1)
- Develops and achieves comprehensive management plan for each patient. (PC2)

Interpersonal and Communication Skills (ICS)

- Communicates effectively with patients and caregivers. (ICS1)

Professionalism (PRO)

- Has professional and respectful interactions with patients, caregivers, and members of the interprofessional team. (PRO1)
- Responds to each patient's unique characteristics and needs. (PRO3)
- Exhibits integrity and ethical behavior in professional conduct. (PRO4)

System-Based Practice (SBP)

- Works effectively within an interprofessional team. (SBP1)
- Identifies forces that impact the cost of health care. (SBP3)

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Approaches and Challenges to Assessment and Grading

Delivering timely, specific, and constructive feedback is an important teaching and learning tool for students entering the medical profession. Students typically receive feedback throughout their medicine clerkship; it is important to provide this feedback as a critical component of their final evaluation, which includes not only an assigned final grade but also free text response with recommendations and commendations for the student.

Using an online survey tool (SurveyMonkey), this study collected data about approaches to assessment from seven CDIM member institutions. The data showed that multiple software platforms (**Figure 1**) are used by clerkship program administrators to deliver feedback to medical students in a timely and effective manner. The survey data indicate that the initial response to the different platforms has been positive to date.

FIGURE 1. Software Platforms

- CMC (Clerkship Management System)—developed by the Virginia Commonwealth University Medical College of Virginia
- Advanced Informatics/E-value—used by Medical University of South Carolina
- MyEvaluations.com—used by Rosalind Franklin University
- CoursEval—used by Georgetown University School of Medicine
- OASIS—used by Medical College of Wisconsin and University of Madison School of Medicine and Public Health
- MEDHUB—used by University of Oklahoma School of Community Medicine

Additional tools in use include:

- Mid-clerkship feedback sessions.
- “Chat with the clerkship administrator” group sessions held at the midpoint of the rotation.
- An end-of-rotation group grading session.

A primary challenge shared among clerkship program administrators is the collection of timely student feedback from multiple preceptors who are housed in different geographic areas.

Even though electronic feedback methods—versus the distribution of paper evaluation forms—increase efficiency and timeliness, preceptors must be constantly reminded to

A primary challenge shared among clerkship program administrators is the collection of timely student feedback from multiple preceptors who are housed in different geographic areas.

complete student evaluations within an acceptable time frame. Timely completion of student evaluations allows clerkships to release overall student grades within the Liaison Committee on Medical Education mandated time frame; final grades must be submitted within six weeks after the end of the clerkship rotation.

Some of the tools clerkship administrators use to remind preceptors are:

- System-generated reminder emails.
- Emails sent directly to the preceptor from the clerkship administrator.
- Reminders by phone call.
- Reminders sent to the preceptor’s pager.

The conclusion reached after reviewing the survey data is that clerkship program administrators play an integral role in ensuring timely distribution and collection of student evaluation data. In addition, clerkship administrators help facilitate effective communication between learners and educators as well as are effective advocates for students. Collecting feedback is important because the rotation grade and comments extend beyond an individual rotation into a student’s overall evaluation and the Medical Student Performance Evaluation, which is used by residency program directors to make their decisions. 🔄

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Can the Written History and Physical Have Value in the Medicine Clerkship?

The history and physical (H&P) is the cornerstone of diagnostic medicine. Evidence shows that diagnosis can be made approximately 80% of the time with the history and exam alone (1, 2). Medical students are almost universally required to submit written H&Ps during internal medicine clerkships. However, evaluations of student-written H&Ps are infrequently incorporated in student grades (3) despite evidence that indicates student-written H&Ps may be better evaluated than observed H&Ps (4) and 95% of clerkship directors in 2010 believed the written H&P can demonstrate student clinical skills (3).

So, why aren't written H&Ps more valued? The most likely reason is the time to perform a detailed review of the average 10 H&Ps required per clerkship (3). With an average H&P running five to 10 pages and 30 to 40 students per block, the minimum number of pages to read is 1,500. Molenaar (5) was able to demonstrate consistency of a small number of reviewers using predetermined criteria, but correlation with final grade was weak (Spearman coefficient = 0.25). This analysis is opposed to the current status quo: student H&Ps are reviewed by multiple preceptors without standardized criteria (3).

At Albany Medical College, the written H&P is weighted into the final grade (15%) along with other standard components (observed structured clinical examinations [OSCE], clinical evaluations, observed H&P, and small group preceptor evaluation). When choosing the grading rubric, we applied Miller's Pyramid of Clinical Assessment. Initially, students were required to hand in 12 H&Ps for the 12-week clerkship. Several iterations later, we reduced it to two write-ups. Students are instructed to write an admission H&P on any patient assigned to them. They are trained to provide a summary statement, prioritized problem list or differential diagnosis, and discussion of the differentials using the patient information they provide in the H&P. Because this assignment is completed at home—free from immediate input of residents and attendings—it was felt these written H&Ps, submitted for grading, corresponded to the highest level of assessment [Does] (6). Because we valued the written H&P highly, we decided to see if it correlated well with student final grades for the clerkship.

Methods

The clerkship director and associate clerkship director (ACD) met several times to review and determine criteria for grading the written H&Ps. In the development process, we discovered McLeod's 10 criteria for case report assessment (7) (Figure 1). Because they correlated very well with our list, we adopted them. To grade the written H&Ps, a simple scoring rubric was developed. The scoring rubric consisted of 13 components for the H&P and scored as "Below Expectations" (1 point), "Meets Expectations" (3 points), and "Above

FIGURE 1. Evaluation Criteria for Written H&P Assessment (6).

1	Apparent accuracy of details
2	Clarity of characterization of signs and symptoms
3	Succinctness of expression
4	Completeness of information without major omissions
5	Focus of discussion appropriately related to patient examined
6	Demonstrated understanding of disease pathophysiology
7	Demonstrated understanding of problem priorities
8	Appropriateness of planned management
9	Readability and appropriate use of language
10	Format of information sequence layout

Expectations" (5 points). The scoring rubric was kept simple to improve reliability (8). A sample scoring rubric form is available online at www.im.org/Publications/Insight.

Students were randomly assigned by the clerkship administrator in a 3:1 ratio (clerkship director to ACD) in accordance to time allotted for clerkship responsibilities. All H&Ps were scored and included as 15% of the student grade. Individual and summary H&P scores were compared to final grades: honors, excellent, good, and marginal using a two-tailed t-test. To confirm that both faculty members scored similar students, Pearson's chi-square, Fisher's exact, and t-test were used to compare the distribution of student final scores from the two faculty members.

Results

From 2009 to 2011, 265 students submitted a total of 530 written H&Ps. Students were randomly assigned in a 3:1 ratio in accordance to time allotted for clerkship responsibilities. All H&Ps were scored and included as part of the student grades.

The individual and combined scores of the two written H&Ps had a strong correlation to final grade (Figures 2 and 3). Scores for H&P No.1 compared to final performance (Figure 4) were significant across all comparisons: honors v. good ($p = 0.0015$); excellent v. good ($p < 0.0001$); and good v. marginal ($p < 0.0001$), except honors v. excellent ($p = 0.42$). Scores for H&P No. 2 compared to final performance (Figure 4) were significant across all comparisons ($p < 0.0001$) except honors v. excellent ($P = 0.92$). Sum score for both written histories and physicals (Figure 4) also strongly correlated with final performance ($p < 0.0001$), except honors v. excellent ($p = 0.59$). There was no statistical difference between readers' scores and final grades (Figure 5). Interrater reliability was good (Pearson coefficient = 0.787; Fisher's = 0.799).

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FIGURE 2. Comparison of Individual Written H&P Scores to Final Grade

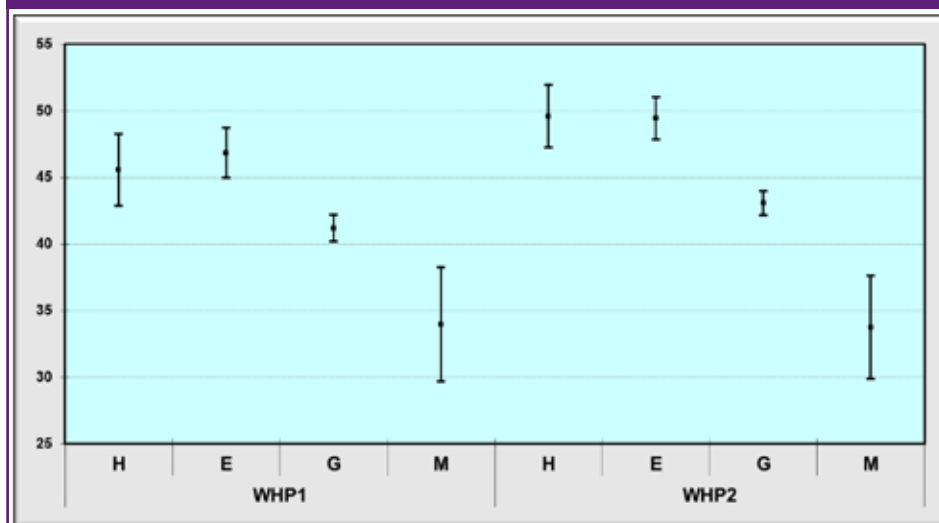


FIGURE 3 Comparison of Summary Written H&P Scores to Final Grade

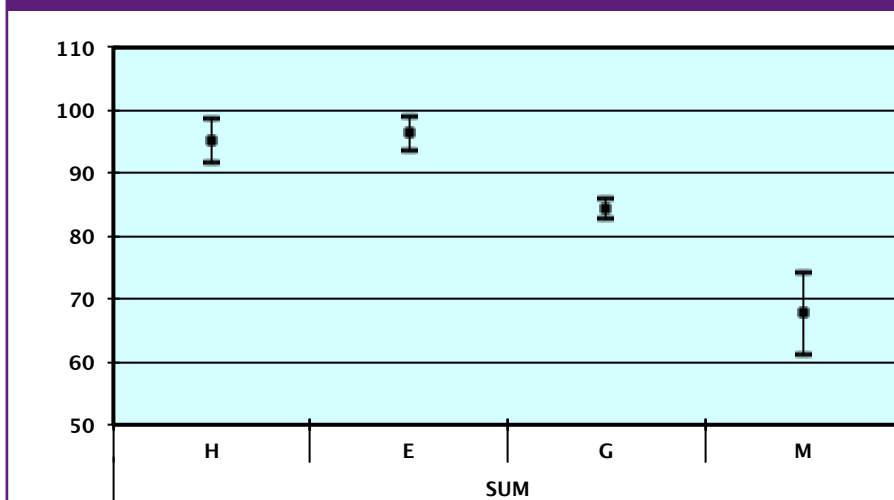


FIGURE 4. Comparison of Written H&P Scores by Final Grade

WHP 1	G v H	G v E	G v M	E v M	E v H	H v M
n	217	222	198	48	67	43
p-value	p = 0.0015	p < 0.0001	p = 0.0006	p < 0.0001	p = NS	p < 0.0001
WHP 2						
n	217	222	198	48	67	43
p-value	p < 0.0001	p < 0.0001	p < 0.0001	p < 0.0001	p = NS	p < 0.0001
SUM						
n	217	222	198	48	67	43
p-value	p < 0.0001	p < 0.0001	p < 0.0001	p < 0.0001	p = NS	p < 0.0001

Discussion

Grading and assessing student performance/competence in clinical clerkships are complex tasks (9,10) and require repeated measures of multiple components (11), such as clinical evaluations, direct observation, OSCEs, written examinations, oral examinations, and review of written notes (9). Many of these activities are time and labor intensive (e.g., OSCE, observed H&P, reading written H&Ps), and evaluator ratings can vary considerably (4, 12). Having reliable and valid components in the assessment of student competence is critical.

A universal instrument in medicine, the H&P is thought to be the most important diagnostic tool (1, 2). It is also a required component of internal medicine clerkships, but it is not often incorporated into grading. Our retrospective analysis shows that the student-written H&P can be a very useful tool in assessing student performance and competence. In considering the RIME (Reporter, Interpreter, Manager, Educator) framework (13), the written H&P can be considered the ultimate reporting tool. Some critics may argue that oral presentation is more important; however, oral case presentations appear to require different expectations of learners (14, 15). Even though students may have knowledge about the patient acquired on rounds, doing the write-up at home requires the students to correctly organize, present (write), and synthesize the information on their own. We did not consider the impact of electronic documentation because students did not have access to the electronic health record.

Although our findings are from a single institution, we believe they are generalizable for several reasons. First, the format of the written H&P is almost universal with little, if any, variation (16). Second, the criteria used for review (Figure 2), although global, arguably cover the critical elements needed to appropriately assess a written H&P. Third, others (5) have

FIGURE 5. Interrater Reliability—Final Score Distribution by Reader and Year

	H (%)	E (%)	G (%)	M (%)	Pearson's P	Fisher's P
Year 1 (n)						
Reader 1 (98)	12.2	16.3	61.2	10.2	0.632	0.653
Reader 2 (32)	6.3	12.5	65.6	15.6		
Year 2						
Reader 1 (100)	11.0	15.0	64.0	10.0	0.913	0.886
Reader 2 (35)	14.3	11.4	62.9	11.4		
Sum						
Reader 1 (198)	11.6	15.7	62.6	10.1	0.787	0.799
Reader 2 (67)	10.4	11.9	64.2	13.4		

demonstrated that using fewer faculty is better for consistent assessment, possibly making large-scale faculty development unnecessary. Fourth, the simple scoring rubric minimizes the number of specific items and categories of evaluation, thereby enhancing reliability (8). Last, with the with the upcoming development of “entrustable student activities” (ESA; 17–19), the written H&P could be a high-value ESA, based on our findings and on its high level of assessment.

In conclusion, our data indicate that the written H&P can be a highly valuable tool in the grading and assessment of student performance or competence with minimal faculty development. Determining whether only two H&Ps are sufficient for accurate assessment will require further study. So although the written H&P is alive but not well (3), perhaps it can be resuscitated and achieve a full recovery. 🔄

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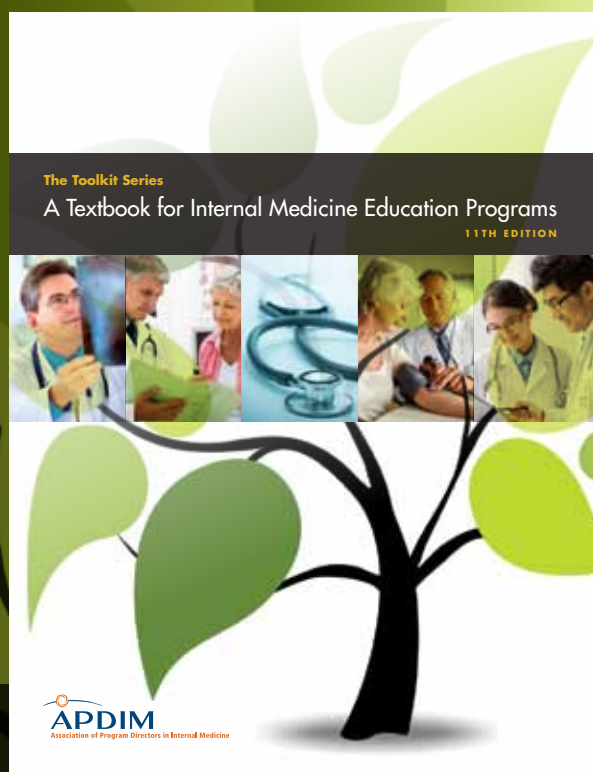
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