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ACADEMIC INTERNAL MEDICINE INSIGHT

By the Numbers

5%

Outpatient diagnoses that involve diagnostic error

Page 4

$6.5 billion

Medicare's indirect medical education funding for residency programs

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39%

American adults who have a budget and track spending

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Also in This Issue

Insight in Evolution

Academic Internal Medicine Insight has enjoyed a long history as a valued publication to medical educators, administrators, and leaders in internal medicine and its subspecialties. As its role has become better defined, new and growing needs for information have prompted a number of changes to better serve AAIM members. I am honored to serve as the first member editor of *Insight*, working with AAIM staff to best facilitate these changes.

First, each member organization will now have an associate editor and an assistant editor, with primary responsibility for the content and review of one topic area that we hope to have represented in each issue. These areas include administration, finance and regulatory issues (AIM); undergraduate medical education (CDIM); residency education (APDIM); subspecialty education (ASP); and faculty development (APM). We will continue the popular leadership interviews; I thank Paul Aronowitz for these thoughtful pieces. Other new areas will include opinion and commentary (with point/counterpoint discussions); quality, safety, and high-value care; and book reviews. One or more highlight articles will be included in each issue to ensure that important information not technically covered by the designated sections finds a home in Insight. Finally, each organization will be represented by an editorial board member-at-large who will provide final review and approval (in collaboration with the editors) of each quarterly edition. The new members of the Insight Editorial Board are in **Figure 1**.

Insight fills a unique niche among professional publications available to the academic internist. Many of the challenges we face in education, educational administration, and departmental administration do not lend easily to traditional controlled, hypothesis-testing research when they do, the cost and time involved in performing such trials is often prohibitive. Also, new and often daunting requirements of regulatory organizations typically provide insufficient lead time for institutions to compare a group of approaches to determine which will work best at their school/program. Finally, the imbalance between increasing demands across academic missions and diminishing resources available to support such efforts becomes more challenging every year. Although individual experiences that have successfully addressed these challenges can be conveyed through blogs and social media, *Insight* provides a platform for their dissemination to a wide readership of academic internists, with articles selected by an experienced editorial board representing all our member organizations. Planned new sections also will provide opportunities for opinions and discussions from academic leaders on timely topics that have yet to reach "headline" status but nonetheless require decisions as to whether to change traditional operations in academic departments or to maintain proven policies and procedures.

FIGURE 1. The New *Academic Internal Medicine Insight* Editorial Board

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I ask that you please consider submitting your manuscripts to *Insight* on any area related to academic internal medicine, be it education, administration, novel approaches to meeting new regulatory requirements, educational research, advocacy, assessment metrics, financing, faculty development, promotion and tenure, interspecialty and interdisciplinary initiatives, quality and safety, curricular development and implementation, or any other issue you, as an AAIM member, consider significant. Single and multicenter experiences in successfully addressing critical needs or solving complex problems can be invaluable to our colleagues facing similar challenges. The thoughts and opinions of leaders with decades of experience in academic internal medicine can likewise serve as a rich source of ideas for necessary changes and innovative program development.

Each member organization will now have an associate editor and an assistant editor, with primary responsibility for the content and review of one topic area that we hope to have represented in each issue. These areas include administration, finance and regulatory issues (AIM); undergraduate medical education (CDIM); residency education (APDIM); subspecialty education (ASP); and faculty development (APM).

Insight is YOUR publication, intended to fill the informational needs of academic internists not met by other publications and resources. I welcome any suggestions or ideas to make *Insight* more valuable, and will appreciate your comments on its quality and usefulness as we move forward with these and other innovations.

Sincerely,

Stephen A. Geraci, MD
Editor, *Academic Internal Medicine Insight*

AAIM
Alliance for Academic Internal Medicine

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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.

Talking about Diagnostic Error in Medical Education

Diagnostic Error Affects Patients—And Learners, Too

A total of 10% to 15% of inpatient diagnoses (1) and 5% of outpatient encounters (2) involve diagnostic error, which is defined as a missed, delayed, or incorrect diagnosis. Diagnostic error is finally gaining national attention on par with other patient safety concerns, and it is starting to be more standardly addressed in patient safety initiatives. Diagnostic error is an opportunity to analyze and teach clinical reasoning. One common theme in both patient safety and clinical reasoning curricula that address diagnostic error is the importance of effective feedback about the diagnostic process. Providing this feedback requires particular care due to the sensitive nature of this topic. In internal medicine, the diagnostic process is at the core of what we and our learners do all day, every day. Considering the possibility that the diagnostic process can be flawed may be threatening to faculty and learners. However, it is crucial that we address diagnostic errors when they occur to understand where the diagnostic process failed and to try to avoid future errors. In addition, learners may experience negative emotions as a result of their involvement, and an outlet for these emotions is fundamental.

Encourage High-Quality, Effective Feedback about the Diagnostic Process

A number of potential impediments to good communication about the diagnostic process makes effective feedback challenging. First, the perceived threatening nature of critical feedback may make some providers defensive. Most physicians pride themselves in being "good diagnosticians," and there is a culture of reluctance to criticize and to be critiqued. Second, physicians may be reticent to report their mistakes for fear of litigation. Last, health care is often fragmented, and the final diagnosis may be made in a different setting and at a different time than when an individual physician is involved in a patient's care. This fragmentation eliminates the natural, experiential feedback of witnessing the true diagnosis come to light. Further, physicians may not have any natural contact with the provider who makes the correct diagnosis, meaning that one provider must actively seek out the other to receive or give feedback. Despite these barriers, effective feedback about error can be incorporated into medical education.

Start a Dialogue

High-quality communication is the conduit of the feedback process. It starts with informal conversations among team members about the diagnostic process, especially when a diagnostic error occurs. Faculty should model eagerness and willingness to receive critiques on their own diagnostic reasoning and learners should be encouraged to regularly ask their superiors how they have come to a diagnostic conclusion to promote transparency of the diagnostic process.

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Integrate Feedback into Morbidity and Mortality Conferences

Morbidity and mortality (M&M) conferences have been an integral component of residency education for nearly a century. M&M conferences have increasingly focused on physician reflections on how care was delivered, sometimes in a pejorative environment that focuses on "who did what incorrectly" and "who missed what." This type of setting offers limited potential for authentic discussions about diagnostic reasoning and error and can lead to negative emotions among providers involved in the case being discussed. However, the established M&M conference can be reworked to focus on the systematic analysis of adverse events and to provide tools to mitigate cognitive- and system-related errors rather than assigning individual blame. A systems-focused M&M conference can achieve success in promoting multidisciplinary participation while dialoguing about error in a nonpunitive manner (3).

Create a Closed-Loop System

The modern diagnostic process is an open-loop system. Typically, physicians learn about their diagnostic successes and failures in nonsystematic ways, such as finding out from a colleague in the hallway that a patient he or she has cared for has been readmitted or discovering an error during an official peer review inquiry. Physicians lack systematic methods for calibrating future diagnostic decisions based on knowledge of the outcomes resulting from their previous ones. Health care organizations typically do not have a standard way to track and follow up on actual and potential diagnostic errors that are made each day—information that could allow systems

to both improve overall performance and better hear the voices of the patients living with the outcomes that result from diagnostic error (4). A closed-loop system for feedback about the diagnostic process and diagnostic error can be developed in multiple ways, including routinely having teams give feedback to other teams after assuming a patient's care, following "mystery cases" after leaving a service or transferring a patient, and systematically encouraging the obtaining of autopsies when patients expire.

Mitigate the "Second Victim" Effect

The impact of diagnostic errors on learners needs to be addressed to avoid future errors, provide support, and develop healthy coping strategies. The term "second victim" was coined by Albert Wu to describe the negative effect that medical errors have on health care providers (5). Until recently, acknowledgment of the fallibility of the diagnostic process in medicine, both in lay and medical circles, has been limited. The pressure to perform and diagnose accurately has created self-expectations for near perfection from physicians. When an error (sometimes with patient harm) occurs, physicians—especially learners—can experience guilt, a sense of failure, and shame. A culture of avoidance about talking about these events may develop. However, learners desire open discussions about medical errors to feel supported and work through strong personal emotions resulting from error. A 2006 study that assessed the frequency of self-perceived medical errors and the subsequent effect on residents confirmed that self-perceived medical errors were associated with a significant decrease in quality of life, worsening burnout, increased positive screening for depression, emotional exhaustion, and lower personal accomplishment (6).

Multiple techniques may be employed to encourage open and honest discussions about the diagnostic process while also working to mitigate the second victim effect. Such techniques include establishing peer groups with supportive listening environments (7), normalizing feedback processes so that all providers discuss their diagnostic processes rather than just those involved in cases of error, and training faculty and learners about giving safe and effective feedback that is nonjudgmental and productive.

Conclusion

Diagnostic reasoning and diagnostic error are critical to address in medical education, especially in internal medicine. Effective interventions (both educational programs and patient safety interventions) must encourage high-quality, effective feedback about the diagnostic process and diagnostic error and actively seek to avoid the second victim effect. Many barriers exist to effective feedback about diagnostic decision-making. However, with increasing national attention on diagnostic error and the upcoming Institute of Medicine report about diagnostic error, we must move from a culture of silence to a culture of safety by encouraging authentic and robust discussions about error. All clinicians should be encouraged to seek frequent feedback about their decision making and to help create a culture that is open to these types of discussions.

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Integrating Technology into Clinical Teaching

Challenge to Clinical Teaching

Teaching at the bedside has been the core of clinical medical education since Sir William Osler began the practice in the late 1890s. He was an innovator and disrupter in medical education by teaching scientific inquiry at the patient's bedside rather than solely in the lecture hall. The concepts and frameworks he established still exist; however, the learning environment and the learners have changed dramatically.

The learning environment once took the shape of long hours that permitted time to ponder in detail the intricacies and causalities of the patient's condition. Since 2003, time restraints imposed by duty hours restrictions and increasing pressure from hospital administrations for shorter patient stays have forced attendings to sacrifice how much time and effort can be placed on education.

Lessons must be brief and focused. Questions from learners and patients are unpredictable. The teaching moments that arise from such questions are fleeting. If left unanswered or unaddressed, then the opportunity for impact is lost. Often an explanation or answer would benefit from a picture, a diagram, or an algorithm, so we reach for a pen and scrap paper or sometimes the paper towels in the patient rooms.

The learners have also changed. The new generation is learning in a world of constant connectedness to vast bodies of knowledge available via the Internet. The education system from K-12 to undergraduate medical education has adapted to meet these needs by incorporating instructional technologies in the classroom. The added benefit of integrating technology into education is the educator's ability to adapt to learners who have multiple learning preferences (1). In our analysis of incoming internal medicine residents, more than one-half had a multimodal preference; in other words, teaching activities that invoke some combination of visual, auditory, read/write, and kinesthetic methods yield the highest effectiveness (2). Secondary and higher education institutions have adapted and evolved to address the needs of these multimodal learners. Solutions to these new challenges should focus on training faculty with new strategies and skills.

Embracing Technology as a Solution

A technological solution is ideal for the evolving clinical learning environment. Mobile devices offer connectivity and applications that can address the attending's needs. Digital whiteboard apps offer numerous unique features that can empower attendings and more effectively engage learners. BaiBoard and ShowMe on the iOS platform offer excellent image-importing and content-sharing features. MightyMeeting offers similar functionality for Android devices. Most institutions offer hospital-wide wireless Internet, which allows easy access to materials stored online and the ability to quickly share content with learners via messaging or email from within these apps. Common scenarios illustrate how digital whiteboard apps can be integrated into attending rounds at an inpatient ward service.

Lessons must be brief and focused. Questions from learners and patients are unpredictable. The teaching moments that arise from such questions are fleeting. If left unanswered or unaddressed, then the opportunity for impact is lost.

Scenario 1: Images

During a discussion of subacute infectious endocarditis at the bedside, the residents don't recall what Osler's nodes look like. The attending opens a digital whiteboard app and uses the Google image search feature from within this app. The results yield an image that can then be downloaded instantly onto the whiteboard and the attending is able to annotate and manipulate the image.

Scenario 2: Teaching Aids

A discussion is centered on the recommended approach to hypertension management. To help explain the concepts, the attending accesses a copy of the Eighth Joint National Committee's report on hypertension stored as a PDF file in her Dropbox cloud server account. The whiteboard app offers embedded connectivity to cloud storage systems, allowing for easy access along with annotating and maneuvering ability through the numerous pages. To further annotate and highlight concepts, the attending may also import a PowerPoint presentation on the relevant subject to the whiteboard.

Scenario 3: Sharing

At the end of rounds, the learners ask for a copy of the teaching boards that were created. The digital boards, including the accompanying imported pictures and articles, are easily disseminated to learners via email or instantly shared onto their devices. Highlighting this feature at the start of rounds allows the learners to focus on the material being taught rather than hurriedly trying to keep up with note

taking. It also provides a reference source for them to revisit in the future.

Preparation: Leveraging Technology to the Next Level

Every clinical rotation has curricular requirements. Attendings can reliably predict core topics that will recur frequently. Intuitively, clinical educators have created "teaching scripts" or mini-lectures that have been refined through numerous iterations and memorized (3). The best way to conduct teaching rounds is to prepare in advance by reviewing patient clinical histories and identifying topics that meet learner and curricular needs (4). Attendings who employ such strategies are implementing a cardinal rule of education that emphasizes preparation as the key to maximizing learning outcomes.

What can technology offer in this regard? In clinical settings, teaching resources are limited. Inpatient wards are especially challenging as teams navigate the hallways from patient to patient. Digital whiteboard apps offer robust features for preparation. With the benefit of unlimited screen space, an attending can create interactive multimedia teaching scripts with visual impact. Figures, diagrams, and tables depicting pathophysiology, decision trees, and workflows can add clarity to abstract and complicated concepts. Explain Everything is an example of an app with robust content creation tools; it is available on iOS and Android. The structure of the mini-lectures is limited only by the educator's imagination.

Scenario 4: Preparation

The team is about to see a patient with cirrhosis. Prior to entering the room, the attending leads a discussion of expected exam findings by using a curated collection of pictorial physical exam findings along with brief videos demonstrating bedside exam maneuvers on the digital whiteboard. In addition, the attending reviews cirrhosis classification systems through a series of tables and preselected diagrams.

Scenario 5: Recall

A resident needs to perform a paracentesis and asks for a review. The attending accesses a whiteboard mini-lecture with an embedded instructional video on the procedure. The app's annotation tools allow the attending to mark landmarks and point out salient aspects while the video plays.

Where Do We Go from Here?

Technology use in our daily work lives will only increase with time. By embracing technology, we create an opportunity to enhance the clinical learning experience. The building and sharing of teaching content through digital whiteboard apps is an essential step in aiding the adoption of this tool. We must keep in mind that the tools offered by technology should not define the tasks. Instead, the curricular goals should direct the choice of tools for the process. The digital whiteboard apps are a canvas for employing any teaching methodology from the Socratic method to case-based teaching. Mobile devices with digital whiteboard apps offer great promise to effectively engage learners of the next generation in the time-limited learning environment.

Digital whiteboard apps offer robust features for preparation. With the benefit of unlimited screen space, an attending can create interactive multimedia teaching scripts with visual impact. Figures, diagrams, and tables depicting pathophysiology, decision trees, and workflows can add clarity to abstract and complicated concepts.

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Financing and GME: Estimating and Communicating the Cost of Running a Residency Program

GME Funding and the Institute of Medicine Report

Graduate medical education (GME) funding is rooted in the establishment of Medicare in 1965. The federal government funds GME positions through two mechanisms: direct graduate medical education (DME) funding that compensates the cost of medical education and indirect medical education (IME) that compensates for the higher patient care costs associated with teaching programs. Over the years, these budgets have risen considerably, with Medicare paying for approximately 100,000 positions and DME and IME costing $3 billion and $6.5 billion, respectively, per year.

Attempts to rein in the federal deficit have made GME funding a target. In a 2010 report, the Medicare Payment Advisory Commission (MedPAC) wrote that "Medicare's IME adjustments significantly exceed the actual added patient care costs these hospitals incur." MedPAC also wrote that approximately 50% of IME is not "empirically justified"; it suggested redirecting one-half of IME ($3.5 billion) to incentive payments. As part of the 2013 budget, the Obama administration proposed reducing IME by $9.7 billion over 10 years starting in 2014 and asked the Secretary of the Department of Health and Human Services to assess GME program outcomes.

In this context, the Institute of Medicine (IOM) Committee on the Financing and Governance of GME was formed to address costs, improve funding transparency and accountability, and improve the physician workforce to reflect the nation's needs. The general recommendations include using Medicare GME to influence the health care system workforce and care delivery; transitioning from a GME finance system based on cost to one focused on performance-based outcomes; improving transparency, accountability, and fairness; and encouraging innovation.

Many GME leaders are concerned about how potential cuts to GME funding could affect residency programs. A survey of designated institutional officers (DIOs) asked how decreases in GME dollars would affect their institutional programs and positions (1). A theoretical 50% reduction would lead to 35.9% of core programs closing and 24.5% of core positions being lost.

In preparation for potential cuts to GME funding, this article provides a framework to estimate the cost of running a residency program and recommendations on how to communicate a program's value to institutional officers.

Attempts to rein in the federal deficit have made GME funding a target. In a 2010 report, the Medicare Payment Advisory Commission (MedPAC) wrote that "Medicare's IME adjustments significantly exceed the actual added patient care costs these hospitals incur."

Estimating the Service Needs and Costs of Running a Residency Program

Many departments face questions from hospital administrators regarding the cost-effectiveness of housestaff and whether alternative staffing models provide better value. The first step is to conduct a needs assessment of the number of housestaff necessary to provide services on each unit. The second step is to conduct a financial analysis of a department's resources, which may provide a program director with the evidence that not only are housestaff a cost-conscious choice, but that more housestaff are needed.

This article uses an example from an internal medicine residency training program. Located in the northeastern corridor, the program is composed of 99 core housestaff with full-time equivalent (FTE) support allocated among three sites (FTE support in parentheses): Hospital X (52), Hospital Y (36), and Hospital Z (11).

Needs Analysis

Figure 1 uses Hospital X as an example.

Adding up column 6 provides the total required staffing hours on an annual basis; at Hospital X, the value is 211,293 hours. To determine how many FTEs are needed to provide this work, determine the average number of hours worked per year per house officer. Accounting for vacation time (which is four weeks at the program), the Hospital X house officer averages 2,976 hours. Dividing 211,293 by 2,976 provides the number of FTEs required; at Hospital X, 71 FTEs are required. Thus, while Hospital X supports 52 FTEs, it is getting 71 FTEs' worth of work.

FIGURE 1. Housestaff Needs Analysis

Hospital X	Number of Housestaff	Days	Hours	Allocation %	Required Staffing Hours
Chief Resident	1	365	24	100	8,760
Floors-Days	15	313	11	100	51,645
CCU-Days	1	365	12	100	4,380
ICU-Days	5	365	12	100	21,900
Med Consult	1	365	24	100	8,760
ER	1	260	9	100	2,340
Night Service (Admitters, Night Float, ICU)	6	356	12	100	25,656
Admitters	2	365	12	100	8,760
Continuity Clinic	21	260	5	100	27,300
Subspecialty Clinic	21	260	5	74	20,202
Cardiology Consult	1	260	10	50	1,300
Dermatology Consult	2	156	5	100	1,560
Endocrine Consult	1	260	10	60	1,560
GI Consult	1	260	10	75	1,950
Geriatrics Consult	1	260	10	100	2,600
Palliative Care	1	260	10	100	2,600
ID Consult	1	260	10	100	1,600
Nephrology Consult	1	260	10	50	1,300
Pulmonary Consult	1	260	10	50	1,300
Rheumatology Consult	1	260	10	70	1,820
Neurology Consult	1	260	10	100	2,600
Elective/Scholarship	3	260	10	100	7,800
Quality Service	1	260	10	100	2,600

Hospital X: The hospital and the services provided.
Number of Housestaff: The number of housestaff needed to support each service daily.
Days: The number of days housestaff support each service.
Hours: The number of hours per day to support each service (either in-house or at-home call).
Allocation Percentage: If services cross sites, the percent allocated to the current site.
Required Staffing Hours: The product of multiplying columns 2-5 provides the "housestaff manpower hours" to support each service.

Financial Analysis

With potential cuts to GME, hospital administrators are pondering whether it is more cost-effective to replace housestaff with mid-level providers or attendings. To address this question, repeat the needs analysis by replacing housestaff with an alternative provider. At Hospital X, housestaff and mid-levels work on average 62 and 50 hours per week, respectively, which correlates to 1.1 mid-level FTEs for every one housestaff FTE. A more accurate analysis requires looking at the costs associated with employing house officers versus alternative providers. These costs include salary plus benefits for each provider type in addition to including the additional costs of employing a house officer (these "hidden" costs are summarized in **Figure 2** for the training program). When including costs in the FTE calculations at Hospital X, replacing mid-level providers with housestaff would save $2.25 million annually.

Additional factors, such as length of stay, readmission rates, and patient satisfaction, can also be measured when comparing housestaff to other providers. An analysis at the same program of length of stay and direct patient care costs comparing hospitalist-resident versus hospitalist-mid-level provider teams showed a potential savings of $16 million over a three-year period had mid-levels been replaced by housestaff (2).

Estimating and Communicating the Costs of a Residency Program with Hospital Leaders

In considering how to best communicate the results of an analysis, first evaluate the reasons for conducting the

FIGURE 2. Training Program's Annual Additional (or "Hidden") Costs

Annual Core Program Expenses	Totals	Per Housestaff
Salary support for Program Director and APDs	$220,000.00	$2,315.79
Salary support for administrative staff	$208,000.00	$2,189.47
Academic-related travel (housestaff and faculty)	$145,000.00	$1,526.32
Food (at didactic and administrative sessions)	$114,800.00	$1,208.42
Recruitment costs (food, materials, etc.)	$40,800.00	$429.47
Online signout/handoff system	$32,000.00	$336.84
Educational/book fund	$28,500.00	$300.00
Graduation expenses (celebration, awards, etc.)	$17,100.00	$180.00
Simulation/standardized activities	$14,900.00	$156.84
Social events	$12,000.00	$126.32
Alliance for Academic Internal Medicine annual fees	$10,000.00	$105.26
In-training exam	$8,000.00	$84.21
White coats	2,900.00	$30.53
Online education	$2,800.00	$29.47
Total	**$856,800.00**	**$9,018.95**

exercise. As hospital reimbursements decline and the future of public support of GME is questioned, many teaching hospitals are examining the financial standing of their training programs. Additionally, academic institutions are increasingly becoming part of ever-larger health systems with variable experience, and perhaps even interest, in medical education. There is substantial risk that such analyses by an institution will not fully consider the impact of closing or downsizing a program. A proactive establishment of an initial position provides a standard to which subsequent analyses will be compared. Being forewarned is being forearmed: it allows us to better defend programs and perhaps make changes to better strategically position ourselves, especially if evaluation shows a cost advantage of downsizing or eliminating a program.

The ideal situation is to develop a good, collaborative working relationship with your hospital or department finance leaders. Often, they will welcome your interest and can be a valuable partner in designing analysis and obtaining necessary data. Your final results should be reviewed.

It is important to understand the priorities of the hospital/system leadership with respect to the direct and indirect impact of the teaching programs. Does the institution value your contributions to research? Care of the underserved? Physician recruitment and supply? Quality and clinical productivity? What is the beneficial impact on specific service lines, outside affiliations, or community physician engagement? This information will help you emphasize the most effective components of a program. Showing a cost advantage of downsizing or eliminating a program is particularly important in the analysis since it can often justify the expense.

With whom at your institution should you communicate your findings? It is generally best to proceed up the chain of command. Eventually you want to engage your senior leadership, such as the chief medical officer, chief financial officer, and chief executive officer of your hospital, but first you need to garner the support of individuals between you and the C-suite. Starting with individuals who are likely to be supportive of the teaching programs is helpful, but at some point you will have to engage people who are more skeptical of the value of medical education.

Be prepared to defend your analysis (assumptions and methodology) and address follow-up questions. Some important issues to consider include the impact of reductions in GME funding (look at different levels of reductions, but especially the loss of 10% and 50% of IME because those changes have been proposed nationally). If your institution is over its cap, you may want to consider the financial ramifications of various levels of downsizing. Another potential aspect of analysis is the "efficiency" of your training program. What is the per-resident cost and how does it compare with benchmark data? There is a paucity of data, but a 2011 analysis yielded an estimated cost of $130,000 per resident inclusive of salary (3) and an updated study published in 2014 showed a range of $180,000 to $220,000 per resident (4). Can GME help further reduce costs or improve quality? DIOs may want to consider the differential cost of programs. Smaller programs and more outpatient-intensive programs tend to cost more per resident (4,5). A financial argument may exist to target such programs for reductions.

Ultimately, this exercise is about effectively engaging institutional decision makers about the value of a teaching

program(s) to your hospital and community and advocating for GME overall.

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Scheduled Telephone Visits: A Novel Innovation to Improve Resident Efficiency and Satisfaction

The percentage of internal medicine residents entering into general internal medicine (GIM) is not keeping up with demand. Multiple reasons have been identified including salary, patient population, schedules, and work-life balance. Looking at the field in general, practicing physicians have indicated dissatisfaction in caring for complex patients in the ambulatory setting, in part due to the large volume of unreimbursed telephone care. The coordination of care provided by internists between office visits has been estimated to be as much as 20% to 25% of their patient interactions (1). Other studies have shown that internal medicine resident satisfaction with continuity clinic experience may influence career choice (2). In particular, residents who expressed higher satisfaction with their educational experience, patient diversity, clinic operations, and patient continuity were more interested in a GIM career (3,4).

With this concept in mind, our program has tried multiple strategies to improve the resident experience in continuity clinic in regard to maintaining the continuity experience and efficiency. We regard resident attempts to contact patients to review results and manage care as an inefficient use of limited continuity clinic time. Limited literature on improving efficiency in resident clinics was available, so we developed a novel method for providing protected time to efficiently complete these activities as well as increase opportunities to directly observe telephone skills.

Innovation

Our internal medicine outpatient practice includes 65 categorical and 16 combined internal medicine-pediatrics residents supervised by eight faculty physicians. During the study period, the resident appointment schedules were modified to include four 15-minute telephone visits as part of their four-hour continuity clinic session. These telephone appointments could be requested by the resident during a regular office visit, by a nurse to follow up a triage question, or by front desk staff in response to routine matters. Patients were asked to identify a telephone number where they could be reached during the appointment time. This scheduled time allowed patients to be prepared to step away from work or other activities to complete their telephone visit. Unscheduled telephone appointment times were used by the residents to manage unplanned test result notifications, population management activities, medication refills, or other tasks. Two 15-minute telephone appointment time blocks could also be combined to allow an additional face-to-face continuity visit at the resident's discretion. Our residents documented all phone calls in the electronic health record and completed a survey about the care given. The faculty developed telephone visit direct observation forms to improve specific faculty feedback on telephone care (**Figure 1**).

FIGURE 1. Telephone Visit Direct Observation Form

Telephone Visit

Lab Results Triage Chronic Disease F/U Medication Refill Other: _____

Resident:

Evaluator:

Date:

Begins call with identifying self, verifying that has correct patient (HIPAA), utilizes appropriate interpreter (when applicable) and reason for call (sets agenda) in professional manner (courteous, respectful, empathetic) and confirms that calling at a convenient/appropriate time	NA	Y	N
Demonstrate medical knowledge by asking appropriate questions related to the test result, triage, medication request, or situation. (#7-MK2)	NA	Y	N
Effectively communicates by avoiding jargon, checking for patient's understanding. Engages patient in shared decision making. (#20-ICS1)	NA	Y	N
Arranges for appropriate follow up/communicates next steps	NA	Y	N
Documents interaction and plan of care completely and accurately in medical record	NA	Y	N
Utilizes other members of interdisciplinary team when necessary (#8-SBP1)	NA	Y	N
Before end of call, asks if there are any other questions	NA	Y	N
Comments:			

Results

Over the study period, 260 telephone visits surveys were documented by 53 residents. A total of 82.7% of patients answered their phones at the designated time (show rate). These telephone discussions often covered multiple issues, including test result review (55.3%); chronic condition management (31.2%, e.g., diabetes, hypertension, and asthma); answering medical questions (7.9%); verifying information (9.8%); and other information (27%). Average resident satisfaction was 4.61 on a five-point scale on which five is "Very Satisfied." Patient satisfaction averaged 4.65 on

this same scale. Residents indicated that they were able to complete the call and document it in less than 15 minutes in 80% of telephone encounters. The total number of scheduled office visits was not adversely impacted by this change. During this time period, 14 observations of resident telephone skills were documented (**Figure 2**).

FIGURE 2. Telephone Visit Direct Observation Results

Results: AY 2013-2014
53 Residents participated 260 Telephone visit surveys documented 82.7% Patient answered phone (show rate)
Telephone Discussions: • 55.3% Test result review • 31.2% Chronic condition management (DM,HTN) • 7.9% Answering patient's medical questions • 9.8% Verifying information • 27% Other information
Resident Satisfaction: average 4.61 **Patient Satisfaction:** average 4.65 Scale: 1=Very Dissatisfied to 5=Very Satisfied
80% completed and documented within 15 minutes
Total number of resident compensated office visits for the year was still greater than previous year.
14 documented observations of resident telephone skills during this time period

Lessons Learned

Since this study was completed, we continue to include scheduled telephone visits in the resident schedules. We found that providing two 15-minutes telephone appointment times provides adequate time for these activities and allows an additional 30-minute same-day appointment to be added. Telephone visits can also be used by incoming first-year residents to introduce themselves to patients who are transitioning into their patient panel. The telephone direct observations continue to provide formative feedback during continuity clinics and as part of the ambulatory rotations.

The office staff calls patients to remind them of their telephone visit times, resulting in continued excellent show rates. Although overall patient satisfaction remains high, we learned that the residents were not always as diligent in keeping to the appointment schedule, resulting in more staff time needed to respond to patient calls that were not kept on time. Based on this feedback, we reinforced resident timeliness and changed protocols to indicate that the telephone visit call will be made within a 30-minute window. We are also modifying the scheduled times to occur at the beginning or end of the clinic session.

Telephone visits can also be used by incoming first-year residents to introduce themselves to patients who are transitioning into their patient panel. The telephone direct observations continue to provide formative feedback during continuity clinics and as part of the ambulatory rotations.

Conclusions

Scheduled telephone visits are an efficient, organized way to provide time for residents to manage continuity care needs. They are well received by both residents and patients without decreasing the face-to-face compensated office visits. These visits provide better continuity of care, allowing residents time to communicate directly with their patients between traditional visits. Faculty direct observation and feedback on telephone skills have improved. The 17% no-show rate and unscheduled appointments allowed residents to handle unscheduled patient issues and paperwork that continue to be a necessary part of caring for patients with a wide array of complicated chronic diseases. Although telephone visits are still not directly reimbursed, it is important to teach residents these management skills as reimbursement models change with the advent of more accountable care organizations and pay-for-performance incentives.

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A Practical Approach to Rounding in the Modern Era

The term "attending rounds" derives from the efforts of Sir William Osler when hospitals were designed with open bays and learners were truly residents of their institution. Attending rounds have evolved in format, function, and location to include the bedside, in hallways, and behind team room doors (1,2). Pressure to improve quality, documentation, and oversight have placed increased stress on attendings. Barriers to effective rounding include decreased time, multiple levels of learners, variable resident effectiveness or attending skills, large team size, high patient acuity, admitting schedules, physical distance between patient rooms, and competing demands among patient care, teaching, and billing. Despite the increased complexity and decreased time allotted for rounds, few programs have faculty and resident development targeted toward improving the quality of rounds. Rounding is a core activity for both caring for patients and learning the practice of medicine on inpatient teaching services. The Accreditation Council for Graduate Medical Education (ACGME) states that teaching must be formally conducted on all inpatients through direct interaction between the learner and the attending (3). However, the best practice to accomplish this interaction is not specified.

Attending rounds exist so that junior team members may present patients to attendings to direct patient care decisions or facilitate teaching. The power of efficient and thoughtful rounding in providing patient care, education, and evaluation guidance is unmistakable. Attendings should use the optimal rounding format based on each patient rather than ascribe to a predetermined one-size-fits-all style (**Figure 1**). The attending should look for opportunities to pause for educational emphasis. For immediate interaction with the patient and family for a particular clinical issue, round at the bedside (4). To reduce patient distractions during a discussion of pathophysiological processes, take rounds to a whiteboard. To increase availability and visibility to ancillary team members, round in the hallway (5). Additionally, vary who is in charge of rounds. This variation allows residents to develop leadership skills both by practicing and at times observing how the attending runs rounds. Ultimately, with whatever rounding method you choose, it is important to be aware of potential educational trade-offs (6). This point was highlighted by a recent study that demonstrated that different models of rounds (card flip rounds, hallway rounds, or bedside rounds) are more likely to cover particular ACGME competencies (6).

Varying presentations is another avenue to change rounding. Are formal and exhaustive presentations still required given the electronic medical record where data are available to all team members? Certainly, we still need to teach novice learners how to efficiently obtain clinical data and sort through its relevance. Hearing presentations in a formalized way is one method of assessing that goal. However, you may ask vetted learners to move away from the traditional subjective, objective, assessment, and plan format and instead use assessment-oriented oral presentations. This format has been shown to be more time efficient without sacrificing clinical information and may better demonstrate clinical reasoning (7). Despite the widespread use of a night float team, which admits from 31% to 51% of patients on a medicine service, many institutions do not alter the format of rounds (8-10). If a patient was admitted overnight by the night float team, effective rounds may use high-quality summaries of the clinical information with updates of pertinent data (11). Furthermore, these patients provide an excellent opportunity to focus on the admitting team's decision making; for example,

FIGURE 1. Characteristics of Rounding Models

Location	Pros	Cons
Bedside	Communication with patient, clinical skills of physical examination, demonstration of professionalism	Time expansive, inappropriate or futile for some patients, unable to address complex pathophysiological processes
Conference Room	Flexible (dive deeply or gloss over), whiteboard/chalkboard, workspace	Exclusive of patient, reliant on reported information, unable to see clinical skills of learner, no input from ancillary staff
Hallway	Efficient with a geographic structure, inclusive of nursing, patient visualizes the teams, allows for sensitive discussion without patient hearing	Interruptions can readily occur, sensitive information may be overhead by others, potentially limits computer access
Split Rounds	Efficiency of work, allows part of the team to complete daily tasks while the remainder is rounding	Missed learning opportunities on shared cases
Card Flipping	Efficiency of work, resident autonomy in running work rounds	Possibly less teaching, may not include the whole team if done with just resident
Others: Geographic, Discovery, Interdisciplinary		

critically considering its use of cognitive biases that led to either an incorrect diagnosis or low value care (11).

Today's learners use mobile devices before, during, and after rounds (12). How can we harness this technology to optimize patient care? Smartphones and tablets can be used to answer patient questions in real time through images and videos. Though technology has changed how we round, it has not yet reached the point of being truly disruptive. The availability of information via mobile devices now allows providers to answer questions while they are rounding—to clarify a lab result, determine a medication side effect or interaction, or search the literature for an answer to a clinical question. Addressing these issues and placing orders on rounds can provide a more succinct flow of patient care rather than having to return to the issues later (13). Unless a significant amount of time is needed to find an answer to a question, we advocate for using available resources to answer the question on the spot. One recent study examined using LEAN principles for patient rounding. The idea is that you address all patient needs for a particular patient before moving to the next (13). After implementing these principles, the authors observed earlier discharge orders and fewer duty hours violations among interns. The tradeoff in such a system is potentially time expended per patient as well as impact on education. Nevertheless, the study suggests that LEAN principles of rounding may be beneficial. If a question arises on rounds, it can be answered by a team member delving into the patient's electronic chart in real time. If a diagnostic question arises on rounds, the literature should be accessed, a group consensus obtained, and orders placed at the bedside (14).

Attendings are still expected to teach clinical judgment and decision-making. However, the attending who is the omnipotent repository of information is being supplanted by attendings who know how to quickly and effectively weave technology into teaching rounds. Given the availability of data through electronic sources, attendings must be more prepared for rounds by reviewing clinical data and developing teaching topics prior teaching with the residents. This preparation allows attendings to focus on clinical decision-making rather than listening to data.

For many faculty, rounding looks very similar to what we experienced as residents whether five or 25 years ago. Some institutions have developed formalized programs to improve the quality of rounds with respect to clinical efficiency or educational value (14,15). Other innovative rounding practices include geographic rounding, reinvigorated bedside rounding, and incorporated interdisciplinary teams. "Gator rounds" at University of Florida implement a team approach that focuses on the patient as the team owner and emphasizes communication in rounds with the bedside nurse, case manager, and pharmacist. In a two-phase prospective trial, Gator rounds showed a 30% reduction in 30-day readmission, 18% decrease in length of stay, shorter rounds, and improved satisfaction (16). This exciting example can help others reshape rounds to improve education and patient care.

FIGURE 2. Top 10 Tips for More Effective Rounding

1. Resident and attending should set expectations.
2. Provide faculty development and resident training on efficient and effective rounding.
3. Attending must be prepared for rounds.
4. Give flexible presentations based on patient complexity and situation (SOAP, Assessment Oriented).
5. Vary who (resident/attending) leads rounds.
6. Rounding is a team sport—incorporate the pharmacist, nurse, librarian, etc.
7. Split rounds with part of team while others work.
8. Use technology for patient care and teaching.
9. Place orders at bedside.
10. Set timelines for rounds.

This article has highlighted a few practical ideas to improve rounding (**Figure 2**). Programs should invest in faculty development to help attendings address the barriers of rounding and inspire ways to be more effective in both patient care and resident/student education. Attending rounds are ripe for innovation. By asking the right questions about the purpose of rounds, improving the use of existing and future technology, and using quality or performance improvement techniques, the quality of rounds can be improved at any institution (17).

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Drowning in Debt: Creating Swimming Lessons for Internal Medicine Residents

Today's millennial residents enter training in an era of both burgeoning debt and often diminishing financial resources, resulting in significant financial burdens and stresses. With a median educational debt burden of $180,000 and deferred income associated with residency training, young physicians experience economic hardship even more acutely when compared with the majority of their college-educated peers. These financial pressures contribute to burnout and depressive symptoms while in training and may also relate to competency outcomes. This article presents the data regarding resident debt and financial practices, the few curricula addressing this topic that have been published, and innovative practices we have identified to promote financial wellness in residents.

Background

Residents entering training are not the only group with suboptimal financial practices and options. The American public in general is far from financially savvy. For example, according to the 2014 Consumer Financial Literacy Survey, the National Foundation for Credit Counseling found that only 39% of American adults have a budget and keep track of their spending (1). A significant proportion carry a credit card balance month to month and an even greater percentage (~60%) have never accessed their credit report (1). The millennial generation has not fared any better than their elder peers. Americans in the millennial generation have the lowest credit scores, a fact that is only partially explained by their lower age (2). They are more likely than other generation to miss bill payments or end up being contacted by crediting agencies (2). Their practices for attempting to mitigate financial pressures are also problematic. Almost one-half of millennials have borrowed money from costly non-bank entities, such as payday loans or pawn shops (3).

The vast majority of our residents and medical students are part of this millennial generation and face these same challenges. In addition, they have a much higher debt burden than both their nonmedical peers and previous generations of medical school graduates. The median educational debt of medical school graduates has increased from $84,368 in 1992 (in 2014 dollars) to $180,000 in 2014 (4,5). The amount of debt learners have affects both career decisions such as specialty choice as well as factors relating to wellness. Students with higher debt relative to their classmates in the same institution are more likely to choose specialties with higher incomes, less likely to practice in underserved areas, and less likely to choose primary care (6). Increasing debt levels are associated with a lower quality of life and higher burnout in internal medicine residents (7). Residents with higher debt also report more callous feelings toward patients relative to their less-indebted peers (6). Debt also has been shown to negatively affect life choices, such as marriage and children, that are potentially protective against burnout (6,8). Residents with higher levels of debt have been shown to delay these life events as a result of their financial situation (6,8).

Perhaps most striking is the finding that incrementally increasing levels of debt are associated with incrementally decreasing performance on internal medicine in-service training exams, indicating that indebtedness is associated with potential competency outcomes (7). This trend is notable for residents educated in US medical schools, but it is even more pronounced for international medical graduates in US residency programs (7).

Published Curricula

Unfortunately, there is a dearth of medical education literature on teaching financial literacy and wellness to residents. In 2007, a 90-minute interactive financial seminar was created by Dhaliwal and Chou and given to internal medicine residents during an ambulatory rotation. Compared with residents who did not attend the seminar, residents who did were more likely to change from low- to high-yield investment accounts, showing evidence that this curriculum changed resident financial knowledge and actions (9). At University of Arkansas in 2012, Mizell and colleagues created an 18-hour, year-long curriculum on financial topics for surgery residents. Pre- and post-testing revealed increased interest and knowledge of financial topics (10). Though additional curricula undoubtedly exist at other institutions, the published literature outlines neither these curricula themselves nor specific outcomes related to this important aspect of resident wellness.

Innovative Practices

Beyond traditional curricula as outlined in the literature, multiple novel potential strategies to incorporate financial wellness into residency programming exist (**Figure 1**). At the individual level, mentoring relationships in medicine have increasingly focused on learner wellness given the highly cited rates of burnout (8,11). One-on-one mentoring meetings are venues that can allow for confidential discussions of finance tailored to each learner while negating the need to find additional curricular time. Faculty may not consider financial literacy to be within their mentoring purview; however, the literature indicate financial pressures affect not only resident wellness but also competence and performance (7). Faculty may be concerned about their ability to provide advice in this arena; however, the ability to provide guidance to appropriate contacts or resources is just as likely to be helpful as is specific financial literacy expertise. In this way, programs may also choose to incorporate financial wellness "super users" to serve as resources for resident-faculty mentor pairs. Super users may range from faculty or staff with a specific interest in financial

FIGURE 1. Potential Hot Spots to Incorporate Financial Wellness

Mentoring

- Individualized faculty mentors
- Senior resident peer mentors
- Faculty "super-user" mentors

Curricula

- Noon-time topical lectures
- Pre-clinic conference discussion
- GME-wide orientation
- Evening program or GME-led sessions

Technology and Social Media

- Residency program intranet hub links
- Faculty, resident, or programmatic Twitter feed
- Other social media (e.g., Instagram, Tumblr)

wellness to individuals with additional certifications or training (e.g., certified financial planners or MBAs) and they ideally have knowledge of both the institutional resources available to residents (such as the local employee assistance programs) and basic general finance resources.

Programs may also incorporate financial wellness via technology or social media. Several general medical and specialty organizations, including the American Academy of Family Physicians, the American Academy of Pediatrics (AAP), the American College of Physicians, and the Association of American Medical Colleges, have online resources, videos, and archived webinars that outline financial basics geared toward learners and young physicians starting practice. Online residency hubs used for resident scheduling and evaluations can easily provide links to such available resources. Some organizations go a step further, incorporating social media to reach a larger audience. For example, AAP has recently promoted "Financial Wellness Wednesdays" on Twitter, tweeting about finance as well as providing access to up-to-date primer videos on several basic finance topics. Learners can choose to follow for small, digestible pieces of advice. This strategy can be incorporated at the local level in a similar way. For example, one of this article's authors (AEM) posts regular financial wellness Tweets of the Week, with basic tips, ranging from budgeting and savings to loan consolidation and insurance-type clarification geared toward physicians-in-training. A multitude of additional platforms frequently used by residents can also potentially be adapted for use in this arena.

Conclusions

Financial stressors significantly affect the majority of our residents from choice of specialty or subspecialty to interpersonal interactions to medical knowledge competencies. Incorporating financial wellness strategies—not only via one-time curricula but also through individual mentoring, residency programming, and institutional policies—can greatly affect the well-being of our residents during residency and even beyond their training.

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The AAIM Clinical Competency Committee Collaborative Learning Community

The AAIM Innovation Center has launched the Clinical Competency Committee (CCC) Collaborative Learning Community to involve members in sharing ideas and to enrich training in internal medicine. Consisting of internal medicine residency leaders from large and small programs across the country with a diverse, yet synergistic skill set, the collaborative learning community comes together to illuminate and improve the processes by which CCCs assess resident achievement of the milestones and progression toward independent practice.

The mission of the collaborative is to develop efficient and effective ways to plan, lead, implement and improve the CCCs in our programs. It serves as a laboratory in which members share successes and challenges, test hypotheses, develop "out of the box" ideas, and learn from one another. At the end of the first year, the collaborative will report its work to the AAIM Innovations Committee and, through scholarship, to the AAIM membership.

We began by sharing our current CCC successes and challenges (**Figure 1**) and used the sanctioned CCC guidebook (1) to develop a shared mental model of the current structure and function of CCCs as well as identify gaps and opportunities for further development. From this examination, several questions emerged:

- How can we better engage residents in the milestones assessment process, including providing them feedback?
- What are best practices regarding documenting CCC minutes and how can these minutes serve the legal process in the event of litigation?
- Are CCCs able to effectively perform their role as outlined in the ACGME guidebook and how can we measure this?
- How can CCCs help define promotion criteria for residency programs?

FIGURE 1. Successes and Challenges of CCCs

Successes	Challenges
Early identification of struggling learners	Developing new evaluations
Milestones-based remediation plans	Difficulty in assessing some milestones
Tools to run CCC meetings more efficiently	Unreliable raters
Real time faculty development for CCC faculty	Time constraints

At our first in-person meeting, we heard presentations about innovations developed at institutions to further the work of CCCs; these innovations can be grouped into four areas (**Figure 2**). These presentations stimulated further discussion and brainstorming about how each program can improve their current CCC. Using the themes of these innovations, the collaborative will hone in on specific projects to work on for the rest of the year; everyone has committed to implementing a change in their CCC this summer and will report the impact to the group during our fall meeting. Collaborative members will work as a group to provide feedback and lessons learned at their home institutions to avoid repeating mistakes and to share successes. We hope to share our results with the AAIM membership at poster sessions, workshops, plenary sessions, and via publications in the near future.

FIGURE 2. CCC Innovation Categories

- Applying process improvement to our CCCs, i.e. SWOT analysis
- Increasing resident engagement in their milestones assessment either before or during the CCC meeting
- CCC faculty development to improve assessment data synthesis and/or feedback to residents
- Faculty development for core faculty to improve their understanding of the assessment tools which provide data to CCCs

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Identifying and Coaching Emotional Intelligence to Improve Teamwork

"It's not about the milk, John," was the program director's response to John.

It was a busy night on call for John, a third-year resident. He finally had time to rush down to the cafeteria for cereal but forgot to get milk. On the floor, it was easy enough to step into the nutrition area where a dietary host was preparing the patient meals for the morning. John reached into the refrigerator filled with food intended for patients and pulled out a milk carton for his cereal.

When the host asked John what he was doing, he responded abruptly, "I'm getting some milk for my cereal because I forgot to get it when I was in the cafeteria." An argument ensued.

The host complained to his supervisor, and then things snowballed—the complaint was escalated to the chair of the department of medicine and the program director. Despite the program director trying to explain to John that the issue was his inability to relate properly with the nutrition host, John still didn't seem to understand.

Residency is a time when residents interact with many different types of people. Some individuals adapt better than others, and stressful times can lead to some tense moments for learners. They are placed in situations that require quick thinking, efficient and precise action, and teamwork. It is often the latter—the ability to work as part of a team with communication skills at a high level—that sometimes leads to breakdown.

Emotional intelligence (EI) is a concept particularly appropriate for helping learners improve their skills as part of a team. Understanding the concepts of EI can give educators an additional tool to help their learners achieve success in a complicated work environment. EI can be defined as the ability to identify and manage your own emotions and the emotions of others (1). The concept has been around for some time—as early as 1920, Thorndike described social intelligence (2). In 1983, Gardner proposed the theory of multiple intelligences (3).

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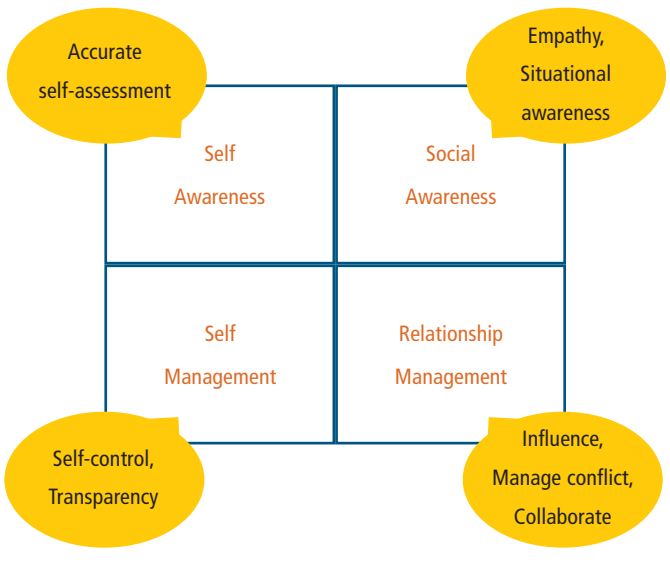
In 1995, Daniel Goleman published the best seller *Emotional Intelligence*, which set the stage to understand how we affect the people we interact with on a daily basis (4). Useful in the business world as well as in medicine, understanding EI and putting it into practice can help us all have more successful relationships.

EI scores have been linked to stronger physician-nurse and physician-patient relationships. In fact, physicians with higher EI suffer less burnout and have higher job satisfaction. They also have more effective teamwork and communication skills, cope better with stress, and are more effective leaders (5). EI provides a framework to analyze problems and counsel residents. A measure of a person's level of EI can be defined as the emotional quotient. It is important to note there is no correlation between emotional quotient and intelligence quotient (IQ). While IQ is relatively inflexible and fixed, EI can change over time as you learn. It is not correlated with personality type.

The components of EI involve self-awareness, self-management, social awareness, and relationship management. Both personal and social competence are part of the equation in understanding EI (**Figure 1**). If we analyze the components individually, we can understand how they relate to one another.

Self-awareness refers to a deep understanding of your emotions, strengths, weaknesses, needs, and drives. It also

FIGURE 1. Emotional Intelligence



refers to your understanding of your goals and values. People with high self-awareness understand how their feelings affect them. They will turn down a high-paying job if they know it isn't going to be personally or professionally fulfilling.

Self-management involves a link between the limbic system (emotions, motivation) and the prefrontal cortex (decision making, problem solving). This piece involves understanding and managing self-control. People with effective self-management skills control their moods and impulses and channel them effectively. They don't panic and are willing to acknowledge how they feel to others in a positive way.

Social awareness is the ability to pick up on what others are feeling, particularly when it is different than your own feelings. Listening and observing are key. Nonverbal cues are almost as important as verbal ones. People with high social awareness skills make effective eye contact. They ask open-ended unstructured questions about how others feel. They summarize people's comments and put them into context. Individuals with a high degree of social awareness can recognize mood shifts and understand how it can affect success.

Relationship management refers to the ability to affect others' emotions—positively or negatively. People with high relationship management skills inspire and influence others. They can effectively manage conflict and enhance teamwork and collaboration (**Figure 2**).

Why is the emotional quotient so important in graduate medical education (6,7)? Various milestones can be directly linked to this concept. Program directors need awareness of the topic to understand the effect on residents. **Figure 2** shows several examples linking the competencies and milestones with emotional intelligence.

As shown in **Figure 3**, the emotional quotient affects many issues relating to understanding ourselves and our interactions with others. In the end, it's not just what you say but how you say it. Awareness and observation is important as you work with others. Things may not always go smoothly, but you can and should learn from your mistakes. Control the difficult situation in which you may find yourself and do not respond to emotion with emotion.

Relationship management refers to the ability to affect others' emotions—positively or negatively. People with high relationship management skills inspire and influence others.

What are some strategies we can develop using EI to help residents change?

Self-awareness: "Check yo self before you wreck yo self" —Work on being aware of your emotions and that your emotions affect others. Asking others how they are affected is very helpful. It is hard to admit what needs to be changed, but understand that it is part of the process of improving. Seeking and accepting feedback is important.

Self-management: "Have some tact, don't react"—Use your awareness to influence your behavior. Think toward the future instead of reacting to the present. Breathe, count, sleep, and control self-talk—judge yourself less and do not blame yourself. Learn from everyone.

Social awareness: "Get a clue, it's not about you"—Perceive what others are feeling even if it is different from how you are feeling. Watch body language, listen, and practice (watch people).

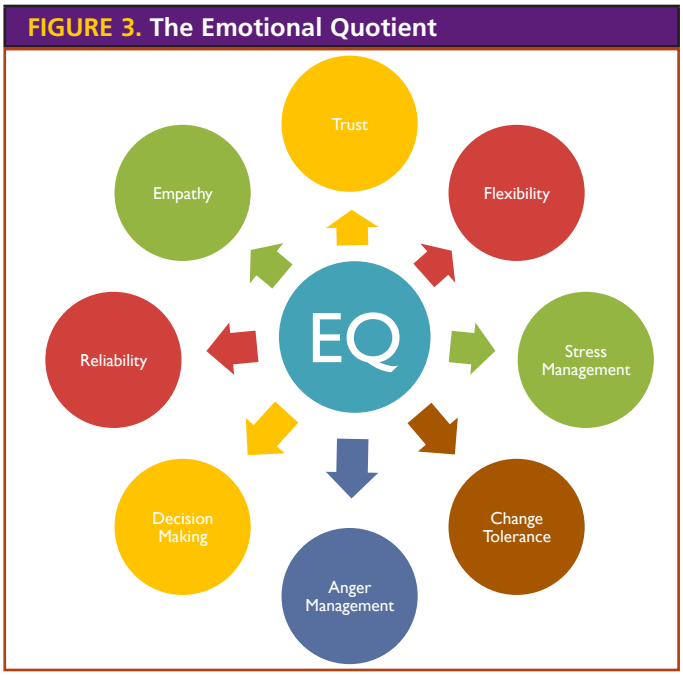
Relationship management: "Work the room so they will work for you"—All relationships take work, and it is your responsibility to make them work. Be curious about others and open about yourself. Work to build trust and acknowledge the other person's feelings.

In summary, EI skills may be more correlated with success than IQ is. When a resident is struggling, an emotional quotient deficit could be the problem, and EI awareness is the first step to improving it. Try to identify which of the four areas of the emotional quotient is creating the deficit. Coaching and mentoring will be the key to success.

FIGURE 2. Emotional Intelligence Milestones

Competency	Milestone Descriptor	Emotional Intelligence Link
Practice-Based Learning and Improvement	Monitors practice with a goal for improvement	Self awareness/self management
Systems-Based Practice	Works effectively within an interprofessional team	Relationship management
Patient Care	Manages patients with progressive responsibility and independence	Social awareness/relationship management
Professionalism	Exhibits integrity and ethical behavior in professional conduct	Self awareness/social awareness/self management/ relationship management
Interpersonal Skills and Communication	Communicates effectively with patients and caregivers	Self awareness/social awareness/self management/ relationship management
Medical Knowledge	Clinical knowledge	Self management/relationship management

FIGURE 3. The Emotional Quotient



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In spring 2017, AAIM will launch the new Academic Internal Medicine Week

Why combine Academic Internal Medicine Week, APM Winter Meeting, and APDIM Spring Conference?
The new Academic Internal Medicine Week format and timing ensure each organization's unique educational and networking needs are met while providing an opportunity to learn together and from each other for a portion of the meeting.

What are the benefits of the new consolidated Academic Internal Medicine Week?

- Each organization will have one-half day of combined education with one or more additional organizations
- The opening plenary session will be a joint plenary for all organizations
- Each organization will have one and one-half or two days of education and networking opportunities offered specifically to meet their individual needs
- Precourses and the APM New Chairs and Emerging Leaders Program will be offered the day prior to the start of the organization meetings (as they are currently)
- Chief Residents will meet for two days (one overlapping with the first day of the organization meetings)

Why move the new consolidated Academic Internal Medicine Week to the spring?
For the consolidated meeting to meet the needs of individual member organizations, the schedule accounted for the large number of national internal medicine subspecialty professional meetings, many of which occur in fall, as well as the predominant season for departmental budget planning. Likewise, the fall subspecialty fellowship interview and match process and the residency application and interview process presented scheduling challenges for a truly consolidated meeting.

Watch your inbox—more information about the format, content, and dates in 2017 is coming soon!

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