

ACADEMIC INTERNAL MEDICINE

INSIGHT

CERTIFICATION

The President's Update has been removed from this issue at the request of ABIM. The launch for the new MOC has been indefinitely delayed. ABIM will provide more information as it becomes available.

2

EVIDENCE-BASED MEDICINE

Teaching and Evaluating Evidence-Based Medicine Competency Using a Web-Based Educational Prescription

University of Wisconsin's educational prescription integrates EBM education into clinical care and provides a rigorous method for evaluating resident EBM in support of the ACGME practice-based learning and improvement competency. The web-based tool facilitates resident use of evidence to answer clinical questions; the results of the inquiries are evaluated by faculty preceptors.

6

STRATEGIC PLANNING

The Triple Crown of Breakthrough Performance: Vision+Planning+Optimization

The division-based nature of most departments of internal medicine fosters creativity and independence, but risks lack of coordination or even competition for resources. This article discusses how University of California, San Diego, School of Medicine recognized the need for directed innovation and growth, then developed the Clinical Operations Redesign Enterprise to develop common vision, commitment, institutional champions, patience and fortitude, and education in support of their strategic plan.

9

ADVOCACY

Teaching Community Engagement and Advocacy Skills to Residents

Since many internal medicine residency programs are based in safety net settings, it is essential for resident education to provide skills and knowledge in leadership, advocacy, community partnerships, and cultural competence. A collaborate of four residency programs in California provide insight on how they trained residents to better care for underserved populations through these curricular topics.

20

COMPETENCE

The Clinical Competency Committee: Approaches to Function, Composition, and Legal Issues

When it comes to evaluating competency, there is safety in numbers. This article addresses the role of the clinical competency committee, potential committee structures, role in remediation, and the legal issues, including establishing due process in medical education litigation as well as for resident "employees."

22

By the Numbers

1

Number of AAIM invoices per residency program sent in May
Page 12

16

Number of Potato Head family members involved in the UMass quality improvement curriculum exercise
Page 13

100

Points to acquire within five years under the new MOC process
Page 3

Also in This Issue

- 4 Applying Deliberate Practice to Teach Clinical Reasoning
- 8 2012 APDIM Dema C. Daley Founders Award Presented to Lee Berkowitz, MD
- 13 "Think QuIC!" Using Mr. Potato Head and Other Innovative Techniques to Teach Quality Improvement
- 14 Milestones and EPAs: Keeping Pace with the ACGME Next Accreditation System
- 15 Implementing a Successful Curriculum for Hospitalist Career-Bound Residents
- 19 Omofolasade Kosoko-Lasaki, MD, Receives 2012 APM Diversity Award

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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.



Applying Deliberate Practice to Teach Clinical Reasoning

Promoting mastery of skills is an important role of any medical educator. Popular books such as Malcolm Gladwell's *Outliers* (1) have demystified some of the techniques that lead to mastery, including the intensive time requirement and the methodical nature of practice. Deliberate practice, or goal-directed practice, involves repeated focus on a specific aspect of a larger task, at a level of difficulty appropriate for the learner (2). This focus is coupled with timely, formative feedback from a coach who monitors progress toward each successive goal (2). The book *Talent Is Overrated* (3) uses Tiger Woods as an example of deliberate practice. Woods did not become an expert golfer by playing thousands of golf games from start to finish. Rather, he achieved mastery by focusing on one aspect of his game at a time (for example, putting from 10 feet) with regular feedback from his coach.

In medical training, we often use deliberate practice, perhaps unconsciously, when teaching procedural skills or remediating medical knowledge. For example, a surgical intern may practice tying several hundred knots before she is allowed to close a patient's incision. A medical student struggling with reflexes may be assigned to test reflexes on every patient he encounters. A resident who performs poorly on the endocrine section of an in-training examination may meet with a mentor and develop a targeted reading plan in endocrinology. Unfortunately, we have not applied deliberate practice as commonly to the crucial skill of clinical reasoning.

Clinical reasoning is an important skill for learners to master (4), but it is also one of the most difficult to teach. This difficulty may be partly explained by how the brains of experts function. Research has shown that experts group critical steps of a process together so that these steps can occur almost unconsciously (2). Much like Tiger Woods no longer struggles with a six-foot putt, an experienced clinician can efficiently synthesize complex clinical information without always engaging in a step-wise process. The difficulty comes when expert clinicians must disassemble their reasoning to teach the process to learners. This series of steps represent how master clinicians may unconsciously navigate a case and is one approach to using deliberate practice in teaching clinical reasoning. Each step in clinical reasoning builds on the previous one; therefore, learners must master earlier steps before becoming proficient in later ones. This framework can be adopted for various teaching venues, for the unique struggles of each learner, and for the style and goals of the medical educator.

Framework for Teaching Clinical Reasoning

Step 1: Identify the Top 10 Key Clinical Findings

The first step in understanding a case is identifying the important information in the history, physical examination,

and ancillary data. We have found that learners who appear to struggle with generating differential diagnoses may actually be struggling with this earlier step. To practice, assign learners to read several histories and physical exams written by other team members and asked them to identify the important findings. Each of these exercises should be reviewed by a more senior member of the team with immediate feedback. All learners may not identify the same 10 key findings, but each learner should be able to justify why each of the findings was chosen.

Step 2: Use the Top Three Clinical Findings to Create a Summary Statement

Learner summary statements are frequently long and unorganized. A concise summary statement is vital to guide the subsequent differential diagnoses. We ask learners to narrow the list of 10 key findings to two to four findings and then create a summary statement from them. To practice, ask a learner to choose the three most important findings from an oral presentation and use them to create a summary statement.

Step 3: Create and Order the Problem List

Learners can easily become overwhelmed in their assessments if every pertinent finding is viewed as a separate problem. By grouping findings into coherent problems, the subsequent differential diagnoses will be more focused. To practice, prompt a learner with a few key findings from a case and ask how he or she would combine these into problems. A learner can also create problem lists from written histories and physical exams, with review by the preceptor. Pay attention to the order of the problem list, because early learners frequently have difficulty prioritizing problems.

Step 4: Generate Differential Diagnoses for Each of the Primary Problems

Learners who struggle with this step often have a knowledge gap. For example, they may be able to identify "acute kidney injury" as an important problem but do not know enough about the condition to generate an appropriate differential. To practice, direct a learner to resources organized by problem. Alternatively, give the learner a series of hypothetical problems (for example, "22-year-old female with abdominal pain") and ask them to list differential diagnoses for each, with review by the preceptor.

Step 5: Rank Differential Diagnoses and Identify the Most Likely

The learner should use important findings from the history and examination to order the differential diagnoses

by likelihood. Learners who struggle with this step may have a knowledge deficit about the etiologies on their list. In that case, direct them to general resources describing typical presentations of various conditions. Learners may also struggle with applying the data from the history and examination to alter the probability of each diagnosis. To practice, ask them to identify the most likely diagnosis after an oral presentation and then justify it based on the data that was presented.

Implementation

At University of Pittsburgh, where this framework was developed, medicine clerkship students meet regularly with a faculty member for case discussions. These sessions are structured similarly to a resident morning report: the presenter provides history, physical examination, and ancillary data without revealing the team's assessment and treatment. We use the above framework to structure the discussion and to assess individual and group progress over the course of the rotation. Individuals who struggle with a certain step may be asked to perform that step every session. We have also used the first few steps with pre-clinical medical students as they are learning presentation skills. On inpatient services, we find that this framework helps students organize complicated cases and allows us to more easily identify specific deficits. It also allows team members to simultaneously practice different steps. For example, after the initial presentation, a clerkship student could be asked to identify the key clinical findings, and another student could create a summary statement. A first-year resident could then generate an appropriate differential based on the key problem identified.

In summary, clinical reasoning is a crucial skill in the practice of medicine but can be difficult to teach. Deliberate practice provides a model in which clinical reasoning is divided into steps and each step is practiced independently. After identifying the step with which a learner is struggling, the learner can be given a specific strategy to repeatedly practice that step. With the aid of regular feedback, we can foster and track our learners' progress in this crucial skill. 

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Continued from page 2
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Teaching and Evaluating Evidence-Based Medicine Competency Using a Web-Based Educational Prescription

Medical residents must learn techniques to manage and appraise the ever-expanding medical literature to incorporate relevant evidence into patient care. Evidence-based medicine (EBM) represents a framework for integrating clinical evidence into patient care. The Accreditation Council for Graduate Medical Education (ACGME) developed the Outcomes Project with EBM as a core component of the practice-based learning and improvement competency (PBLI) (1). However, we lack validated tools to evaluate whether residents are competent in some of the domains of EBM: asking a clinical question, acquiring available evidence, appraising the quality of the evidence, and applying evidence to the patient care (2,3). Furthermore, EBM education often occurs in the classroom via journal clubs or workshops and not at the point of patient care, where it is more effective at improving learner's skills and behavior (4). These shortcomings led us to develop the EBM Educational Prescription (EP) designed to integrate EBM education into clinical care and provide a rigorous method for evaluating resident EBM competence.

EBM Educational Prescription

The EP is a web-based tool designed to facilitate resident use of evidence to answer clinical questions that arise during patient care. The results of these inquiries are then evaluated by faculty preceptors. Residents develop questions after seeing actual patients. They use the EP website as a structured way of completing the EBM process; it has areas for asking the clinical question, describing the search for evidence, validity of the evidence, results, application to the patient in question, and overall conclusion. Residents also enter whether the EP led to a change in the patient's treatment plan (Figure 1). The website has a resource button for each step of the process that provides just-in-time information needed to complete the EP. Once residents have completed an EP they present it to a faculty preceptor who uses the online EP evaluation page with a built-in scoring rubric to evaluate residents' competency (Figure 2). Faculty evaluate residents in the areas of clinical question formation, searching for evidence, evaluating evidence, application of evidence to the patient, ability to teach the team, and overall competence.

Faculty Training

Faculty feedback from initial studies of the EP demonstrated a lack of comfort with the scoring rubric, which was a barrier to using the EPs for evaluation (5). We built faculty development into the website to increase their comfort with the rubric, address the differences in faculty member EBM skills, and attempt to standardize resident evaluation. The faculty training is interactive and uses several

FIGURE 1. Resident Educational Prescription Page (Partial)

videos of simulated EP presentations to train faculty on how to grade EPs. Faculty view the simulated EP and then grade the EP in each area. They receive immediate feedback about the recommended score.

EP Website Reports

Program directors have the ability to run reports on individual residents, showing the number of EPs performed as well as the types of questions the resident answered and their scores. This information allows the program administrators to ensure that residents are completing EPs as required and also to develop resident-centered learning plans based on current questions and scores. These same reports can also be used to support reporting of resident milestone achievements in PBLI to ACGME. Program directors can run program level reports that provide an overview of all resident scores and types of questions by postgraduate year. These program-level reports

FIGURE 2. Faculty Educational Prescription Evaluation Page



Multicenter EP Study

We designed and executed a study to evaluate the feasibility and reliability of the web-based EP at five internal medicine residency programs: University of Wisconsin, Henry Ford Hospital, Mayo Clinic, Oregon Health and Sciences University, and Scripps Healthcare. The study took place between July 2009 and March 2011, with each site using EPs for six months. EPs were used in a variety of clinical settings including continuity clinic, ambulatory block rotations, and inpatient wards. During the study period, 210 residents completed 616 EPs and 57 faculty members participated in grading EPs. EPs were successfully integrated at the five institutions. Residents took a median of 45 minutes (interquartile range (IQR) 30–60 minutes) to complete each EP and faculty took a median of 15 minutes (IQR 10–20 minutes) to grade each EP. EPs were well received by residents and faculty. Eighty percent of residents reported that performing EPs improved their ability to use evidence in practice. Faculty noted that EPs were a valuable tool for evaluating resident EBM skills (94%); 80% felt that performing EPs actually improved patient care. Most important, 23% of the EPs performed actually led to a change in the patient's plan of care. Early reliability testing on 41 EPs that were graded by multiple faculty members showed that only 21% of the variability in EP scores was due to differences between graders.

Conclusions and Future Directions

The EP was designed to fill a need for high-quality evaluation tools to determine resident EBM competency while providing a structured method for teaching EBM during clinical care. A multicenter study demonstrated that EPs are not only feasible, but can change patient care. EPs were so well received that four of the five residency programs involved in the study are currently using EPs for teaching and evaluation. Initial reliability testing of the tool is promising and we are completing a study to look at criterion-related validity. The EP was designed to meet current and future ACGME requirements for resident evaluation. As the ACGME moves toward resident milestones in 2013, the EP is ideally situated to document milestones in PBLI while allowing programs to easily report learner progress to ACGME (9). EPs allow for documenting almost all of the milestones suggested by the ACGME Internal Medicine Milestone Task Force related to "learning and improvement via answering clinical questions from patient scenarios" (10). The domains developed in the EP map almost exactly to the ones suggested by the task force. We envision EPs being used by residents multiple times per year in a variety of settings to enhance residents' abilities to integrate clinical evidence into patient care. The EP website is currently available as a subscription service to residency programs and medical schools. 🔄

help determine if resident skills are improving over time and help define program needs.

EP Development

Educational prescriptions are a well-established tool for teaching EBM (6). We added the evaluation component and scoring rubric, which were first tested in paper form with select residents and faculty on inpatient services at the internal medicine residency program at University of Wisconsin (5). In an attempt to standardize grading and overcome the tendency toward grade inflation, we developed a faculty grading rubric with the help of EBM experts at University of Wisconsin. After the initial paper trial, it became clear that the task of expanding EPs to an entire residency program would be easier to facilitate via a web-based interface. We designed the website (www.ebm.wisc.edu/ep) using human factor principles for usability. Usability testing was performed with residents and faculty to ensure ease of use (7). The scoring rubric was also refined with input from national EBM experts, including the Society of General Internal Medicine EBM Task Force. The EP meets many of the criteria described by Norcini et al for good assessment (8). The EP is feasible and provides an educational effect by incorporating EBM learning and real-world practice. As seen in our multicenter study, it has a catalytic effect on learning, leading residents to develop answers to actual clinical questions and is acceptable to faculty and residents alike.

Continued on page 8

2012 APDIM Dema C. Daley Founders Award Presented to Lee Berkowitz, MD

The Association of Program Directors in Internal Medicine (APDIM) awarded Lee R. Berkowitz, MD, the 2012 APDIM Dema C. Daley Founders Award during the 2012 APDIM Spring Conference, held April 22-26, 2012, at the Marriott Marquis Atlanta in Atlanta, GA. The Founders Award honors a member of the internal medicine community recognized nationally as an educator, innovator, and leader.

Dr. Berkowitz was recognized for his leadership and dedication to graduate medical education, both locally during his tenure at University of North Carolina School of Medicine and nationally through his leadership in multiple professional organizations.

Colleagues of Dr. Berkowitz highlight his history of service nationally to APDIM and the Alliance for Academic Internal Medicine (AAIM) as APDIM President and former council member as well as a past chair of the APDIM Program Planning Committee. His service to AAIM, as board member, chair of the AAIM Board of Directors, and chair of the AAIM Education Redesign Committee also displays a profound dedication to the internal medicine education community.

Throughout his time at University of North Carolina, Dr. Berkowitz has been awarded a number of medical teaching awards and provided significant support in the growth and development of the school. His current and former residents identify him as a superb role model and mentor. In addition to his innovative leadership in the classroom, Dr. Berkowitz has also contributed to more than 80 publications including, but not limited to, medical journals, abstracts, and medical textbooks.

Dr. Berkowitz began his career with the same enthusiasm and commitment to improving medical education that he

shows today. His nominators agree his unique leadership style sets him apart from most of his colleagues; "he is notable for inclusiveness and calm, clear thinking." Dr. Berkowitz is often credited as having transitioned several of his professional organizations through challenging times; his nominators noted that "his stewardship was needed to strengthen and preserve relationships." Dr. Berkowitz's abundant patience and consideration are what makes him extraordinary.

Dr. Berkowitz is currently Professor of Medicine and Vice Chair for Education at University of North Carolina School of Medicine. Prior to his current positions, he served as instructor and assistant professor in the division of hematology/oncology at the same institution.

Dr. Berkowitz earned his undergraduate degree from University of Cincinnati and completed his MD at Ohio State University College of Medicine. He completed his internal medicine residency at University of North Carolina School of Medicine and a fellowship in hematology at Washington University School of Medicine. Upon finishing this fellowship, he returned to University of North Carolina School of Medicine to complete a second fellowship in hematology.

For more information about the APDIM Dema C. Daley Founders Award or to review a list of previous award recipients, please visit www.im.org.

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Continued from page 7

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The Triple Crown of Breakthrough Performance: Vision + Planning + Optimization

Academic medicine provides innovative and effective patient care, employing the latest and most advanced technologies and techniques to achieve medical excellence. Just as the clinical enterprise uses the best evidence-based information, equal diligence must be exercised when assigning organizational structures and appropriate management to achieve business excellence.

Academic departments are typically composed of divisions, each functioning as a separate center with delegated responsibility for day-to-day operations and strategy. Organizational theory characterizes this layout as a multidivisional structure (M-Form)—a configuration that supports the creativity and independence expected of an academic program but also risks lack of coordination or outright competition for scarce resources between divisions. Management methodology for M-Form organizational structures is best when balancing support for individual initiatives with feedback about how well the division is contributing to the larger departmental goals and performance, including collaboration between units (1).

This article highlights how the Department of Medicine at University of California, San Diego, School of Medicine (UCSD) has capitalized on a management opportunity. Recognizing the need for directed innovation and growth, the department initiated and subsequently appointed in July 2009 a Vice Chair for Clinical Operations (VCCO). The multifaceted Clinical Operations Redesign Enterprise (CORE) was developed as the program's springboard. We outline the fundamentals of the CORE initiative to include groundwork elements, central structure, and the pursuant path to establish clinical excellence, abridged as the "Triple Crown for Breakthrough Performance – Vision, Planning, and Optimization."

Foundations and Essential Methods

CORE was commissioned with the following goals:

- Establish a communication forum for leadership to align strategy and priorities.
- Create a common vision for the department's clinical mission.
- Implement a uniform strategic planning framework and measurement tool.
- Outline a measurement strategy using innovative approaches that informs change and enables management to make decisions that optimize enterprise performance.

Underlying the strategic planning efforts is a set of foundational elements: common vision, commitment from leadership, institutional champion, patience and fortitude, and education. The rationale for these constituents is

necessity. A shared common vision is vital. Strong leadership commitment must come from within an organization (for example, the department's appointment of a VCCO). An institutional champion, logically the department chair, provides the gravitas to launch a strategic planning mission and to create movement. In any new endeavor are early adopters, skeptics, and those who initially reject the

Management methodology for M-Form organizational structures is best when balancing support for individual initiatives with feedback about how well the division is contributing to the larger departmental goals and performance, including collaboration between units.

agenda; patience, fortitude, and education can help instill confidence in the process by emphasizing reliable and verifiable methods as well as successes.

In establishing a forum for communication, four specialized, interactive teams with specific functions were created to best address diverse clinical issues (**Figure 1**). The planning group is a grassroots committee meeting weekly to strategize on the clinical mission and design related activities. Members include the VCCO, several faculty members (physicians, management science, etc.), and various departmental staff, such as decision support services and division business administrators.

The guiding coalition meets quarterly and includes executive-level key stakeholders from the enterprise (health system and school of medicine) and the department of medicine, plus rotating division leadership relevant to the current enterprise focus. This group addresses strategic planning efforts of the department.

The clinical services team meets approximately 10 times per year and involves division chiefs, clinical service chiefs, and division administrators; forums focus on strategy development, education, and information sharing.

Finally, three times per year the VCCO and relative CORE members meet with individual divisions to review their strategic and management tool, the balanced scorecard (as

FIGURE 1. Clinical Operations Redesign Enterprise (CORE) Planning and Communication Structure

<p>Planning Group: A grassroots planning committee meets weekly to strategize clinical mission and plan all clinical strategy-related services.</p>	<p>Guiding Coalition: Executive-level key stakeholders, including hospital leadership, serve as a guiding coalition and meet quarterly.</p>	<p>Clinical Services: Division Chiefs and Clinical Service Chiefs meet 10 times a year for strategy development, education, and information sharing.</p>	<p>Strategy Mentoring: Quarterly meetings with individual divisions to review their Balanced Scorecard and facilitate implementation.</p>
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referenced under planning), and facilitate implementation of objectives and initiatives.

Central Components of the Triple Crown

The three remaining goals set by CORE comprise the triple crown of breakthrough performance. Best implemented in a phased approach, the curriculum begins with a vision statement, followed by a strategic planning framework, and concludes with an optimization strategy to ensure long-term achievements.

Vision

A vision statement creates unity in the department's clinical mission. The statement telegraphs what is really important to the department, division, and external partners. The statement is easy to grasp and serves as a signpost for the alignment of efforts: "UC San Diego Department of Medicine will be regarded as the best and most sought after care provider for unique and complex patients. The Department will do so by synergistically building on the strengths of its world-class clinical research and teaching while employing a patient-centered systems approach." Our vision statement expresses the tripartite mission, the people we seek to care for, and the patient-centered philosophy that underlies all our clinical efforts.

Planning

Achieving superlative performance requires a common framework for divisions in developing their own vision and strategy as well as a methodology to clearly communicate the information. The balanced scorecard (BSC) concept was carefully adapted to serve the academic clinical medicine environment (Figure 2) (2).

In its formulation stages, BSC stimulates discussion of vision, goals, strategy, barriers to success, and resources. Its working framework provides a structure to identify and organize measures meaningful to a particular entity, targets drivers of performance, and enables detailed communication on how to achieve desired outcomes. A committed and well-versed leadership team was able to successfully engage enterprise and department stakeholders and subsequently craft balanced scorecards relevant to each division. Introduction and acceptance was achieved through a formal

committee structure, cultivation at the division level, and ensuing success. While the academic medicine environment presents a unique challenge to implementation of such a tool, technical know-how, management commitment, and trust were necessary.

Optimization

A multitude of management tools are used to guide each division in reaching their specific goals while also ensuring the division is meaningfully contributing to the department's overall performance. Broadly speaking these tools include leadership mentoring and training and elucidating career paths; process mapping combined with analytic tools such as data envelopment analysis, which measures the relative performance of each division to identify common and unique performance drivers; performance enhancement methods targeting issues identified by the analytic tools, such as dynamic scheduling allocation to improve appointment "fill rates" or discrete event simulation to improve patient throughput; and financial engineering to ensure the return on investment for division initiatives supports performance goals.

Summary

Achieving breakthrough clinical performance in an academic department of medicine sporting various and oft-conflicting goals among divisions as well as with umbrella institutions demanded a disciplined, dedicated approach. The creation of a vice chair position to address clinical issues signaled a commitment to achieving effectiveness and provided the perception of a "champion" for the cause. A conversant leader and nucleus team were able to accomplish a formalized approach to strategic planning by engaging faculty at both functional and operational levels, secure faculty buy-in, and subsequently move on to exploring optimization possibilities employing technical models. The strategic planning structure is being used to identify pathways for developing centers of excellence and implementing novel business approaches. 

FIGURE 2. Example of UCSD DOM Balanced Scorecard

Division: Test BSC Division Balanced Scorecard: Sample Balanced Scorecard

1. Quality and Safety: Process of care most critical for the division to succeed

1.1 Objective: Improve outpatient clinical access

	Initiative	Lead	Measure	Target	Category	Status
1.1.1	Observe workflow and develop simulation model to identify barriers	Service Chief	Improvement in new visit availability above baseline	1. Workflow observations: FY12: Q1 2. Simulation and barrier identifications FY12: Q2 3. Action Plan FY12: Q3	Division	Open
1.1.2	Determine optimal number of physician extenders using DEA	Clinical Operations	Staffing efficiency ratios	Dependent upon 1.1.1 FY12: Q3	Division	Open

2. Customer Satisfaction: Perception - How we appear to serve, e.g., patients, referring physicians, community, other

2.1 Objective: Excellence in customer service

	Initiative	Lead	Measure	Target	Category	Status
2.1.1	Physicians complete mentoring program	Jones	% of level 5s on Press-Ganey report for Physician Satisfaction	Individual - 75th percentile Division - 50th percentile	Division	Closed

3. Physician/Staff Satisfaction: Identify the gaps in skills, training, tools, etc., required for breakthrough performance

3.1 Objective: Capitalize on implementation of EMR

	Initiative	Lead	Measure	Target	Category	Status
3.1.1	Collaborate with IT on the development of 'Smart Sets'	Smith	% of time physicians spend charting relative to time spent seeing patients	Establish baseline Upon establishment of baseline, set target for improvement	Division	Delayed

4. Finance: Fiscal initiatives involving growth, innovation, and revenue

4.1 Objective: Increase the regional footprint of the specialty

	Initiative	Lead	Measure	Target	Category	Status
4.1.1	Develop a telemedicine program and implement	Chief	% of market share above baseline using TR data	1. Two contracts in FY12 2. Increase market share by 3% above baseline	Division	Open

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“Think QuIC!” Using Mr. Potato Head and Other Innovative Techniques to Teach Quality Improvement

Teaching medical students and residents about patient safety (PS) and quality improvement (QI) is both a professional and educational responsibility of medical educators. Published reports demonstrate that medical care is not consistently as safe (1, 2), reliable (3, 4), or cost-effective as it could and should be. National medical education governing organizations have provided some guidelines in curriculum to be delivered at the undergraduate medical education (UME) and graduate medical education (GME) levels. Although vague, the Liaison Committee on Medical Education (LCME) now requires that medical schools provide curriculum in the areas of PS and QI in its Education Standards (ED-10) (5). The Accreditation Council for Graduate Medical Education (ACGME) has provided more focused requirements for residency programs with the common program competencies, specifically practice-based learning and improvement and systems-based practice (6). With the rapidly expanding national health care budget, some have proposed an additional competency of providing high-value, cost-conscious care (7). For our profession to meet the charge of improving the current health care system to one that ensures the care we deliver is safe, efficient, evidence-based, patient-centered, and cost-effective, medical students and residents must graduate with strong educational foundations in the areas of patient safety and quality improvement as well as the leadership skills to lead interdisciplinary health care teams in change. Although this poses many challenges to an already packed medical school curriculum, it also allows for innovation and collaboration. It is now more important than ever for educators to deliver curriculum in this area and to do so in a way that engages and excites learners.

Think QuIC!

At University of Massachusetts Medical School, a vertically integrated Quality Improvement Curriculum (QuIC) is delivered at the medical student, resident, and faculty levels. QuIC was developed through a three-year collaboration between members of the departments of internal medicine, pediatrics, and family medicine. Our curriculum includes:

1. UME - medical students’ repeated exposure to basic QI tools and PS applications in their pre-clinical and clinical years, as well as a daylong third-year patient safety interclerkship.
2. GME - an ACGME competency-compliant, wiki-based resident QI education, which uses didactic and independent learning activities to complete QI projects.
3. Faculty - a faculty-level yearlong quality scholars certificate program, involving didactics and hands-on project management, to train future QI leaders and educational mentors (8).

An innovative exercise using the toy Mr. Potato Head has been integrated at all three levels.

The Mr. Potato Head Metaphor

A terrible accident has occurred. Several buses, each filled with 16 Potato Head family members, have crashed. Emergency medical services arrives at the scene to find only scattered body parts. Luckily, there is an electronic medical record (photograph) for each patient. Each “trauma team” must work together to correctly assemble as many family members as possible in seven minutes. Only two members of each six to 10 member team are trauma surgeons, so only these “implantation specialists” are able to reassemble the patients.

Teams compete against each other, using “outcomes” (number of completely assembled family members in seven minutes) and “medical errors” (number of incompletely or incorrectly assembled family members) as measures of quality, safety, and efficiency. Sharing of ideas and observations across teams is encouraged. Teams then repeat the exercise incorporating what they have learned. Through multiple plan-do-study-act (PDSA) cycles, participants learn about the importance of teams and systems in QI projects, how to eliminate waste, and increase value-added work.

There are numerous variations for this exercise, which allow learners and facilitators to focus specifically on safety, communication, team function, efficiency, or leadership for example. For more advanced learners, specific QI concepts and vocabulary can be added, including writing aim statements, understanding measures, and graphing results on a run chart. A faculty facilitator guide is available upon request.



Conclusion

Much has been published in the medical literature about quality improvement and patient safety curriculum delivered to medical learners of different levels and disciplines. Our Mr. Potato Head exercise reinforces the concrete QI tools, vocabulary, and concepts taught in traditional didactic sessions. The hands-on component lets learners experience in real-time the power that rapid PDSA cycles have on improving both quality and efficiency. It can be done with four to more than 100 learners and with learners of all levels and disciplines. It is always highly evaluated by all levels of learners, both for its effectiveness in delivering knowledge and also because learners enjoy it.

The Mr. Potato Head exercise is a fun, interactive, innovative way to demonstrate patient safety and quality improvement concepts, lean process management, and the importance of teamwork, communication, and collaboration. 

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Milestones and EPAs: Keeping Pace with the ACGME Next Accreditation System

The AAIM Education Redesign Committee is charged to develop a model approach to operationalize milestones and entrustable professional activities (EPAs) in preparation for full implementation of the Accreditation Council for Graduate Medical Education (ACGME) Next Accreditation System (NAS).

The AAIM Education Redesign Committee, working to bridge the gap between the core competencies and the milestones, developed a list of 13 proposed End of Training EPAs. When considered together, these EPAs describe a resident who has sufficiently demonstrated competence and can be entrusted with entering into unsupervised practice.

- Manage the care of patients in general internal medicine continuity clinic
- Manage the care of patients on general internal medicine inpatient ward
- Manage the care of patients in the critical care unit
- Provide general internal medicine consultation to nonmedical specialties
- Provide preoperative assessment and preoperative care
- Manage transitions of care
- Lead interprofessional care teams
- Lead family meetings
- Assure patient safety

- Improve the quality of personal and system-level care
- Engage in lifelong learning
- Provide patient advocacy
- Behave professionally

These EPAs were introduced during a plenary session at the 2012 APDIM Spring Meeting. AAIM continues to offer educational opportunities to help members prepare for NAS. Look for the following workshops and sessions at **Academic Internal Medicine Week 2012**, October 10-14, 2012, in Phoenix, AZ.

- AAIM Joint Workshop Session – A Roadmap for Navigating the IM Milestones: Work of the AAIM Education Redesign Committee
- AAIM Joint Workshop Session – EPAs and Residency Milestones: The Sub-Internship as a Model for Bridging the Educational Continuum
- Plenary Session IV – Bringing It All Home: EPAs to Narratives to Reporting

If you have any questions about milestones, EPAs, or Education Redesign Committee efforts, please contact AAIM Director of Academic Affairs Margaret A. Breida at (703) 341-4540 or mbreida@im.org.

Implementing a Successful Curriculum for Hospitalist Career-Bound Residents

An increasing number of graduates trained in internal medicine are selecting careers in hospital medicine (1). While the traditional emphasis on inpatient and intensive care experience leaves the categorical resident well prepared to manage most inpatient medical conditions, are they optimally prepared to enter the workforce as a hospitalist? This question is particularly relevant given the published core competencies for hospitalists and their expanding involvement in nonclinical activities, such as hospital leadership, resource utilization, quality improvement, transitions in care, and patient safety (2,3,4).

Additionally, enhancing hospital medicine training supports the Accreditation Council for Graduate Medical Education (ACGME) competencies for all residents, not only those bound for hospitalist careers (Figure 1). Several prior studies (5,6,7) have identified that residents may be underprepared for hospital medicine careers in geriatrics, neurology, perioperative care and consultative medicine, palliative care, and health care systems (quality improvement, utilization review, finance, transitions of care), which creates an opportunity for the development of curriculum to address these gaps.

FIGURE 1. Hospital Medicine Training Supports ACGME Competencies

Competency	Content Areas
Medical Knowledge	<ul style="list-style-type: none"> Familiarity with the evaluation/management of conditions common to inpatient care Procedural skills Evidence-based medicine
Patient Care	<ul style="list-style-type: none"> Provision of safe, effective, timely, patient-centered, satisfying care Drug safety
Interpersonal/Communication	<ul style="list-style-type: none"> Timely/accurate documentation Handoff communication End of life/palliative care communication
Professionalism	<ul style="list-style-type: none"> Engagement of primary care physicians Ethical billing practices Consultation etiquette Equitable care for all, including vulnerable populations
Practice-Based Learning and Improvement	<ul style="list-style-type: none"> Involvement in quality improvement/patient safety initiatives Utilization of data to inform practice habits Teaching role
Systems-Based Practice	<ul style="list-style-type: none"> Cost-effective care Engagement of multidisciplinary care teams Appropriate use of ancillary services Identification of systems issues contributing to error

FIGURE 2. Advantages and Disadvantages of Curricular Format

Hospital Medicine Training Format	Pros	Cons
Modification of the curriculum for all residents	<ul style="list-style-type: none"> • Uniform expectations • Flexibility for future practices • Meet core program requirements 	<ul style="list-style-type: none"> • May increase faculty needs to provide enhancements for all residents • Less enthusiasm among residents who feel requirements match their future practice goals
Adding enhanced electives and mentoring to the existing curriculum	<ul style="list-style-type: none"> • More flexible and resident centered • Requires less structure 	<ul style="list-style-type: none"> • Less recognitions externally (i.e., employers) with regards to specific skills acquired
Dedicated track (match) or pathway (chosen during training)	<ul style="list-style-type: none"> • Recruiting: generates student interest • Greater individualization of resident curriculum • Resident enthusiasm • Allows for collaboration with institutional hospital medicine group via mutual interests • Development of skill set for future faculty (pre-faculty development/recruitment) • Innovation 	<ul style="list-style-type: none"> • Infrastructure • Expertise • Funding, resources <ul style="list-style-type: none"> - Track director - Non- clinical electives - Time for curriculum development, mentoring • Political - why not have other pathways • Need to “carve out” of other important general curriculum
Post-residency fellowship	<ul style="list-style-type: none"> • Well respected • High quality research training 	<ul style="list-style-type: none"> • Time intensive from resident standpoint • Delays employment • Requires strong faculty and institutional network

During a fall 2011 workshop, program directors and associate program directors from four internal medicine residencies shared their experiences in implementing curricula for hospital medicine-bound residents and closing some of the gaps in traditional training. Several methods were discussed, including modification of the curriculum for all residents, adding enhanced electives and mentoring to the existing curriculum, developing formal pathways/tracks within residency training, and post-residency fellowship programs in hospital medicine (Figure 2).

For the purpose of this discussion, “pathways” generally refer to a group of experiences, rotations, and requirements that a resident selects during residency whereas “tracks” refer to training into which the residents match prior to the beginning of residency. Workshop presenters began with the results of a search on FRIEDA and Google for programs that identified themselves as having an hospital medicine pathway or track. The curriculum listed on the websites for 14 programs were reviewed and demonstrated tremendous diversity in the definitions of pathways and tracks but similarities in the content areas covered. Overall, each

method for curricular enhancement has advantages and disadvantages; described below are the experiences of the various programs.

In 2008, University of Washington internal medicine residency program began to develop a formal hospital medicine pathway in the context of concurrent development of pathways in global health and HIV medicine. Pathway curriculum was shaped by responses to an electronic needs-assessment survey sent to two academic and five community hospitalist groups in Seattle. Most of the respondents were young hospitalists practicing in community settings with less than five years of experience. The majority had no formal hospital medicine training during residency. The survey confirmed curricular gaps (8), particularly in palliative care, transitions of care, neurology, basic radiology and team training; of interest, 70% of respondents felt that there would be value in offering a specific training track or pathway for hospital medicine in residency. The UW pathway was selected by 14 residents in 2009, nine in 2010, and seven in 2011. At the outset, residents could elect in or out at any time but most selected participation prior to postgraduate

FIGURE 3. Curricular Components to Enhance Training of Hospital Medicine-Bound Residents

Medical Consultation	Transitions of Care	Surgical Co-Management
Perioperative Medicine	Administrative Skills	Leadership Training
Inpatient QI/Patient Safety (9)	Team Training	Geriatric Care
Hospital-Based Research	Community Hospital Medicine Rotations	Career Mentorship Program
Procedural Competence	Hospital Medicine Journal Club	Health Economics
Palliative Medicine	Medical Informatics Training	Wound Care
Pain Management	Hospital Committee Participation	Patient Satisfaction
Inpatient Billing/Documentation	Basic Radiology	Knowledge of Quality Measures
Acute Stroke Care	Infection Control/Hospital-Acquired Infections	Risk Management

year two (PGY)-2. Now after several years of experience, planned changes for 2012–2013 include a shift to an application-only pathway limited to four residents applying in PGY-2 year (for a total complement of eight PGY-2/3s); a greater focus on quality, safety, and health care systems; and mandatory rotations in stroke neurology, palliative care, and pain management.

Virginia Commonwealth University internal medicine residency began with an hospital medicine pathway to complement its women’s health pathway. Residents elected into the pathway at the end of the PGY-1 year and completed two specialized rotations in the PGY-2 year (hospital performance improvement (PI) and community-based hospitalist) and an advanced practice hospitalist rotation as a PGY-3. Additionally, they attended monthly hospitalist meetings, participated in a specialized journal club, and continued their longitudinal PI project. Other specialized experiences included enhanced procedure training, medicine consultation, perioperative management, code team leader training, and palliative care, which were added as requirements for all residents. One of the most significant successes of this format was the success with the PI project. The projects result from a structured morbidity and mortality/safety conference during which contributing factors and potential interventions are discussed. Initially it was required only of residents in the hospital medicine pathway, but based

on its success it has been expanded to all residents in the program.

Banner Good Samaritan Medical Center and Saint Vincent Hospital have approached the gaps in hospital medicine training as having relevance for all residents and have developed enhanced required rotations in neurology/stroke, infectious disease, geriatrics, perioperative, and consultative medicine. Residents entering hospital medicine receive specific guidance during their usual advisor/evaluation meetings and are encouraged to take electives with hospitalist mentors. All residents at both programs are now required to do a PI project in some setting. At Saint Vincent Hospital, hospitalists in the institution were surveyed on how prepared they were on entering the workforce. An analysis of mismatched training similar to a prior study by Plauth et al (8) confirmed that training gaps existed in billing/coding, risk management, palliative care, and substance abuse while graduates felt well prepared in geriatrics, stroke management, perioperative, and consultative medicine because of the current design of their curriculum.

Regardless of the specific curricular format chosen, there are common challenges. Each of these structures requires a faculty champion with dedicated time to monitor resident progress, develop process/quality improvement projects, and harness the support of other mentors. Some common advantages to all formats were the provision of a format for

curriculum development that might ultimately be generalized to all residents and that in all cases, components of hospital medicine curricula aligned with the priorities of hospital stakeholders.

In summary, even though the delivery of hospital medicine curricula may vary (embedded in training versus designated pathway), the content and challenges were surprisingly similar. As residency programs consider developing or enhancing hospital medicine curricula, program directors and key faculty should reflect on topic areas that are frequently underrepresented (**Figure 3**) and consider whether their programs currently prepares graduates in those areas. Next, programs should take stock of the existing resources within their institution and draw on national shared curricula and resources. New experiences can be created to bridge necessary gaps and create structure to ensure that more residents have access to those opportunities. Finally, programs should consider how to package and promote their hospital medicine curriculum to students, residents, and future employers to bring specific attention to their enhanced training. 



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Omofolasade Kosoko-Lasaki, MD Receives 2012 APM Diversity Award

The Association of Professors of Medicine (APM) awarded Omofolasade Kosoko-Lasaki, MD, the 2012 APM Diversity Award during the 2012 APM Winter Meeting. The award was presented to Dr. Kosoko-Lasaki by Sharon Anderson, MD, Chair of the APM Diversity Committee. The APM Diversity Award

Dr. Kosoko-Lasaki works to expand the training of diverse health care professionals, and runs a mentoring program that pairs younger students with experienced upperclass persons.

recognizes an individual who has effectively improved diversity within a medical school or who has worked to ensure patients of all races and ethnicities receive the highest quality of care.

Dr. Kosoko-Lasaki currently serves as the Director of Health Sciences Multicultural Affairs and Community Affairs (HS-MACA) at Creighton University School of Medicine in Omaha, NE. Under her leadership, HS-MACA recruits under-represented and disadvantaged students and faculty into the Health Science Schools of Creighton University. In addition, HS-MACA addresses health disparities through teaching and advocacy, works to expand the training of diverse health care professionals, and runs a mentoring program that pairs younger students with experienced upperclass persons.

Her nomination letter from Syed M. Mohiuddin, MD, described Dr. Kosoko-Lasaki as “a scholar, educator and clinician, a skill set which is becoming rare to find in the medical and academic community.” Further, Dr. Mohiuddin states that under Dr. Kosoko-Lasaki’s leadership, HS-MACA “has been instrumental in enhancing the diversity of medical students entering Creighton University School of Medicine.”

Throughout her distinguished career, Dr. Kosoko-Lasaki has been the recipient of numerous awards and recognitions, including the 2011 Physician of the Year from the American Academy of Surgery, the 2007 Eye Care for You Award from the Friends of the Congressional Glaucoma Foundation, the 2006 and 2004 YWCA Omaha Women of Distinction Awards, and the 1988 “Intern of the Year in Surgery.” In addition, Dr. Kosoko-Lasaki serves on the Education Commission for Foreign Medical Graduates and has been a contributing author for several books about cultural diversity.

Dr. Kosoko-Lasaki is currently Associate Vice President of Health Sciences, Professor and Chief of Ophthalmology, and Professor of Preventative Medicine and Public Health. She received her medical degree at University of Ibadan. Dr. Kosoko-Lasaki is a diplomate of the Royal College of Surgeons in Ireland and a Masters of Science in Public Health from Howard University. She completed a fellowship in preventive ophthalmology at Johns Hopkins Medical Institutions, a residency in ophthalmology at Howard University, and a fellowship in glaucoma at the Wilmer Institute at Johns Hopkins Hospital.

For more information about the APIM Diversity Award or to view a list of past recipients, please visit www.im.org.

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The image features the logo for IM Career Source, which consists of a blue square icon with a white cross-like shape inside, followed by the text "IM Career Source" in a blue, sans-serif font. Below the logo is a black rectangular sign with a white border and a white outline, tilted slightly to the right. The sign contains the words "HELP WANTED!" in large, bold, white, sans-serif capital letters. At the bottom of the sign, there is a blue horizontal bar with the text "careersource.im.org" in white, lowercase, sans-serif font.

Teaching Community Engagement and Advocacy Skills to Residents

With the explosion of chronic diseases, widening health disparities, and the resultant morbidity and mortality from these conditions, it is imperative that the next generation of internal medicine physicians has knowledge, skills, and attitudes to address these medical problems and to design health care systems that consider the economic, political, and social factors that can exacerbate them. Since many medicine residency programs are based in safety net settings, it is essential for resident training to include curricular topics such as leadership, advocacy, community partnerships, and cultural competency that allow them to serve as local and national agents of change to improve outcomes for their patients. We describe a collaborative process among four internal medicine residency training programs that provide care for underserved populations to develop and implement these curricular topics.

Participants

Residents from the University of California, San Francisco (UCSF) Primary Care Medicine Program, based at San Francisco General Hospital (SFGH) (six residents), the Primary Care Medicine Residency Program at Alameda County Medical Center (six residents), the Primary Care Program based at University of California, Davis, School of Medicine (four residents), and the General Internal Medicine Program at Santa Clara Valley Medical Center (10 residents enrolled in individualized learning pathways) participated in the new curriculum developed through this collaboration. Although these training programs have similar goals and similar training missions that include direct care for vulnerable populations, each one has different logistical issues that require flexibility in curriculum design and delivery. We describe the modules that were developed; each was created at one site and adapted by the other programs.

Curriculum

Community Partnership (Alameda County Medical Center)

Partnership between a medical facility and its community is an essential component of our health care system. The Institute of Medicine's 2003 report on unequal treatment (1) identifies this partnership as an important part of addressing health disparities. Community partnership helps residents understand the community they serve and places health care delivery in a context beyond the traditional physician-patient relationship. We defined community partnership as an ongoing nonclinical experience in the community with a local organization. Each residency program developed a list of its community collaborations and shared this list to find comparable community organizations in other locations. Examples of activities with local organizations include

talks with public school classes, attending drug or alcohol rehabilitation meetings, helping with food distribution in food banks or homeless meal centers, visiting local adult and senior day centers, and participating in needle exchange programs. One challenge identified has been maintaining residency involvement with community partnerships in an ongoing fashion outside the traditional block rotation model.

It is essential for resident training to include curricular topics such as leadership, advocacy, community partnerships, and cultural competency that allow them to serve as local and national agents of change to improve outcomes for their patients.

Community Engagement (UC Davis)

Resident physicians often do not recognize the critical role they can play in the communities in which they work. To educate residents on this role early in their training, we immerse them for one week early in their internship in a community engagement curriculum. This nonclinical week in the local underserved community emphasizes learning about the community from the perspective of community members. Residents work with community members to understand a physician's potential impact on his or her community. The residents do a "windshield tour" of the neighborhood around the medical center, tour a local community resource center, attend a county Board of Supervisors meeting, attend a drug treatment group session, work at the local food bank, serve lunch at a local shelter, visit a community Federally Qualified Health Care center, work at a harm reduction services program, and do several "day-in-the-life" activities that community members might perform (for example, take public transit to job services location). The interns also interview community members about what projects physicians might help with to improve the health of the local community. The residents work in small groups to create a community project based on their interactions with community members and then present this at the end of the week to faculty and community leaders. The residents also keep journals to reflect on their daily activities and their role in the community.

Physician Advocacy (UCSF/SFGH)

Although opinions differ, we believe that physician advocacy is a critical component of internal medicine residency training. Our advocacy curriculum includes modules on health care finance as well as legislative, administrative, and media advocacy. We have partnered with local community-based organizations to assist with several of our experiential sessions; in addition to leading discussions on topics of local importance, these organizations have assisted in arranging legislative visits for the residents to discuss issues of significance to their patients with elected representatives. We also developed the curricular innovation "Writing for Change," in which residents link patient care experiences with larger societal issues to educate and inspire social change. Residents read narratives prior to each session, write their own narratives during and between sessions, and receive feedback from one another and the faculty. Several pieces have been published in academic journals as well as general media. The advocacy module was extremely well received by the residents; the "Writing for Change" curriculum has been especially popular for its provision of opportunity to translate daily practice into tangible advocacy work on behalf of patients and society.

Leadership Training (Santa Clara Valley Medical Center)

Much of traditional medical curricula have emphasized autonomy in decision making, the individual physician-patient relationship, and hierarchical cultural processes that are counterproductive to effective leadership (2,3). The leadership training curriculum is specifically designed to foster active learning and prepare residents for understanding and serving effectively in positions of leadership. We developed four interactive, team-based modules on personal effectiveness, teamwork and interpersonal communication, understanding and leading organizational change, and creating and communicating a vision. Capitalizing on curricula from business schools and research published in the business literature, each module utilizes didactic presentations, case studies with trigger questions, online personality inventories, and pre-session reading assignments of key articles or materials. Since leadership training is fundamental in all aspects of the curriculum, the curriculum devotes much time to ensure that these modules are specifically developed with the intention to share them between institutions and to provide flexibility to meet each program's curricular goals and structures. Furthermore, each module requires that the facilitator be only familiar with the material rather than expert.

Evaluation

Pre- and post-curricular surveys were administered to assess the curriculum's impact. The curriculum improved self-reported knowledge and comfort in applying learned skills across the domains of community engagement, community partnerships, physician advocacy, health care disparities, and leadership training. The greatest impact was seen in areas around leadership skill development and knowledge about

available community resources. Additionally, each program director who participated in this project noted that the process of collaboration, creation of modular curricular elements, and the sharing of ideas and experiences contributed to the ease of delivery and the curriculum's overall success.

Conclusion

Through collaboration among four primary care medicine residency programs that are located in safety net settings with similar training missions, we have been able to develop and introduce curricular modules in leadership, advocacy, community partnerships, and engagement. We believe that these topics are critical in the training of our residents to be leaders in eliminating health disparities and addressing the new challenges facing health care reform. Our process has allowed us to share training materials effectively and efficiently. Our results show a trend toward increased self-efficacy: residents cite greater understanding of the challenges that lead to health care disparities and acknowledge improved comfort with the skills and attitudes required to address disparities and affect change. The next generation of internists will require these skills not only to address medical problems but also to design health care systems that consider the economic, political, and social context that can exacerbate these problems. Through collaboration, a shared, modular curriculum designed by four internal medicine residency programs can be effectively implemented to positively affect resident knowledge, skills, and attitudes in the areas of leadership, advocacy, community partnerships, and cultural competency. 

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The Clinical Competency Committee: Approaches to Function, Composition, and Legal Issues

Clinical competency committees (CCCs) are used by most institutions with resident learners to ensure they meet requirements for promotion and graduation. As the American Board of Internal Medicine (ABIM) and Accreditation Council for Graduate Medical Education (ACGME) both move toward competency-based evaluation, programs need to ensure that their CCCs are also evolving in their evaluation of residents. This article addresses the role of the CCC, its differing structure across institutions, its role in remediation, and the legal issues that surround its function.

Overview of the Clinical Competency Committee Function

When it comes to evaluating competency, there is safety in numbers. There is no evidence that individuals in groups dominate discussions or that there is “ganging up” in this setting. Rather, the wisdom of the group is more effective than a single decision-maker and narrative comments are more helpful than numbers on evaluations (1). Group conversations were more likely to uncover deficiencies in professionalism among students (2). Group assessment also improved interrater reliability and reduced range restriction in multiple domains (3). Thus, making decisions by committee provides richer discussions about residents and can uncover a variety of issues that a single evaluator may not discover.

Competency committees serve as a natural site for conversation and descriptive narratives about learners. Committees synthesize multiple different types of assessments into an evaluative statement about competence. This setting can also be useful for making recommendations for struggling residents. Multiple tools are available to the CCC for assessing a resident’s competence and can include evaluations from supervising physicians and other members of the clinical care team, objective structured clinical exams (OSCEs), clinical evaluation exercises (CEXs), and medical record audits. Programs should ensure that the evaluations completed by faculty and residents reflect the information required by the committee in their deliberations of competence. Faculty and resident development are also key factors in ensuring that evaluations are completed honestly and in a timely manner.

Competency Committee Structure

While serving one goal, CCCs vary widely in composition, structure, methods, and authority.

Diversity in the CCC can lead to a more balanced evaluation of the learner and also provide additional insight into issues surrounding remediation. Program leadership generally plays a role in the committee, but most institutions also include members that serve in different roles, such as core and non-core faculty. Likewise, the academic role of

the chair of the CCC varies (program director or associate program director, core or non-core faculty, or chair of the department). Other variations exist as well, including differing sizes of committees and frequency of meetings (ranging from twice yearly to monthly). The authority that the CCC has to make and enforce recommendations also varies, with most CCCs having either sole or shared authority with the program director to make binding recommendations about residents. CCCs generally have a formal grievance process, and residents occasionally opt to use this process. Programs should recognize that these structural issues are important to the function of the CCC, and, when necessary, adapt the structure of their own CCC to help ensure the success of its mission.

Remediation through the Competency Committee

Most CCCs not only provide decisions about promotion and graduation, but also recommend plans for remediation. Such plans should be as personalized as possible. Generally, program directors and chief residents play active roles in the remediation of residents. The members of the committee should be familiar with their institution’s resources when developing a remediation plan. When appropriate, they can include such things as fit-for-duty evaluation by the institution’s health services or other credentialed providers, counseling sessions for behavioral issues such as anger management, and problem-targeted OSCEs. Additionally, the location in which the resident spends their time should be tailored to the specific issue. Rotation through the intensive care unit, general medical wards, and the ambulatory setting may challenge residents in different ways. Finally, it is essential that relevant data is collected during the remediation period to aid the committee’s decision concerning promotion. Specific follow-up plans for evaluating remediated residents should be instituted as soon as it is determined that remediation is necessary. Of note, formal probation is part of a resident’s record and is reported to future sites of employment.

Legal Issues Surrounding Competency Committee Decisions

Because the role of the CCC increasingly involves major career-altering decisions, there is an increased risk of legal challenges of those decisions. Medical education litigation has increased in the past few decades (4). Preemptive measures that programs can engage in to help prevent litigation include conducting due diligence before hiring and selecting residents who have evidence of competent, ethical, and professional behavior during medical school. However, the CCC must ensure that learners are evaluated fairly and honestly and that each resident receives consistent treatment. The CCC should

“fairly, faithfully and indiscriminately apply the institution’s evaluation, remediation and due process protocols.” (4) The legal system does not typically weigh the wisdom of the CCC’s decision. Rather, it judges the process by which the decision was made, whether it was done fairly, and whether the institution’s own due process was followed.

Due process may include some or all of the following: providing notice to the resident and the grounds asserted for it; allowing him or her the opportunity to appeal as well as the right to present evidence, call witnesses, and cross-examine adverse witnesses; that the decision be based exclusively on the evidence presented to counsel and to an unbiased tribunal (5). Unfortunately, no consistent framework exists from decisional law, but components of due process guarantees are adopted by different institutions in their termination policies (6). The institutional due process typically provides the resident a reasonable opportunity to review the evaluations, records, and complaints with time to respond, including addressing the specific concerns and presenting his or her side to an impartial decision maker at some point in the process.

Residents are considered both students and employees; depending on the nature of the issue (that is, whether it is academic or a disciplinary/misconduct issue), the due process may look different. For instance, for academic issues, the due process may involve notice, a remediation process with reassessment outlining the consequences of failure to correct. The CCC and program director usually oversee this process. For actions by the CCC involving professional judgment about a learner’s clinical competence, courts “accord substantial deference” (7) to the professional judgment of the evaluators, and the requirements for due process are minimized. Disciplinary dismissals that involve fact-finding regarding violations of institutional or other rules or policies (for example, dishonesty, harassment, or violence) are more closely scrutinized for adherence to due process requirements with formal notice and hearing procedures. The program director may often work with their chair, the department of human resources, and legal counsel to address these types of issues. An informal hearing that allows the resident to be interviewed by the CCC and then respond presenting his or her side is usually a good idea, particularly if the committee is considered the impartial decision maker. The requirement for a full adversarial hearing will depend on the institutional policy or possibly the contractual agreement with the resident.

Additionally, the Health Care Quality Improvement Act of 1986 (HCQIA) may enable health care entities to first take action and then subsequently provide notice and hearing or other adequate procedures where concerns about a physician’s practice suggest that the failure to immediately suspend or restrict his or her privileges may result in an “imminent danger to the health of any individual.” This act also provides immunity to peer review bodies (such as CCC or quality committees) from liability for certain claims arising out of credentialing and employment decisions as long as the

decision is objectively fair and reasonable (8). However, none of these decisions should be undertaken without discussing concerns with institutional legal counsel.

The bottom line is that CCC and program leadership should be thoroughly aware of their institution-specific policies as well as the due process procedures. Any questions should be addressed with the institution’s legal advisor. All disciplinary action should be accompanied by appropriate documentation. Such documentation is critically important and should include formal communications, specific comments of individual evaluators, counseling and feedback sessions with the residents, and any other activities that surround the recommendations and implementation of CCC decisions.

In summary, decisions made by the CCC are critical for our residents. Thus, it is important that these committees are structured to maximize their ability to reach balanced, unbiased decisions. Remediation plans should be personalized, explicit, and well documented. Finally, institutional due process should be followed to ensure equitable treatment of residents and to provide legal protection to CCC decisions. ☺

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