

Saturday Abstracts

RIME Oral Abstracts II Saturday 10:15-11:45 am

Medical Student and Resident Acquisition of Medical Working Knowledge

M. Rebecca Hoffman, MD, MSPH, Southern Illinois University School of Medicine

Reed G. Williams, PhD, Southern Illinois University School of Medicine

Debra L. Klamen, MD, MHPE, Southern Illinois University School of Medicine

Background: Working knowledge of physicians manifests as a combination of global, pattern detection and analytic fact checking.

Purpose: To study medical student and resident acquisition of these abilities as a function of years of medical training/experience.

Methods: A cross sectional study involving students who had completed 0, 1, 2, and 3 years of medical school and family medicine residents who had completed 0, 1, and 2 years of family medicine residency. Subjects at all levels of training took the same tests of diagnostic pattern recognition and clinical data interpretation. Percent correct scores were calculated and used to estimate learning curves.

Results: Diagnostic pattern recognition (DPR) and clinical data interpretation (CDI) ability demonstrated a steady upward growth curve but leveled after year 3 of medical school, staying at a near plateau throughout residency training. CDI scores improved less rapidly, had a similar plateau, and were consistently lower than DPR performance in all groups tested.

Conclusions: Medical students rapidly acquired clinical pattern detection ability, and all years of medical school training contributed. DPR performance remained high throughout residency training, with an apparent ceiling effect. The rate of CDI performance improvement was slower, and absolute CDI performance level was lower. Most surprising was the lack of improvement of CDI performance with increasing clinical training experience. More study is needed to more fully understand the development of working clinical reasoning and knowledge.

Examining Medical Students' Reflection on their Performance in Medical School

Melissa Griggs, MEd, University of Missouri-Columbia Medical School

Wei-Hsin Lu, MS, University of Missouri

Kimberly Hoffman, PhD, University of Missouri

Elizabeth Garrett, MD, University of Missouri

Caroline Kerber, MD, University of Missouri

Purpose: Educating physicians to provide effective patient centered care is the mission of our School of Medicine. In order to achieve this goal, 8 key competencies were developed which students should be able to demonstrate prior to graduation. This project explores students' perceptions of their performance and practice related to these competencies by asking them to respond to questions regarding current strengths, areas needing attention, and ways to develop their strengths.

Methodology: Medical students answered a series of questions through a web-based system at the end of year 1 (M1=90, 95% response) and after the first clinical clerkship (M3=54, 60% response). Relying on grounded theory, the research team used open coding to develop initial and subsequent coding structure with the aid of NVivo software. Continuous cross-checking strengthened the codes' reliability.

Results: Both M1 and M3 students felt that their "honesty/high ethical standards" were one of their current strengths. "Ability to communicate" and "critical thinking" were also often cited as strengths. Both groups cited "knowledge in biomedical sciences and social/cultural issues" and "critical thinking/problem solving" as characteristics needing extra attention. M1s placed more emphasis on formal educational experiences than did M3s who more often cited developmental activities involving interaction or feedback from others such as seeking out mentors or patients themselves.

Conclusions: Analyzing students' perceptions of their performance in relation to program goals provides information about the impact of curriculum on student behavior and how these perceptions evolve with increasing experience. This information will guide future improvements to our curriculum.

Saturday Abstracts

Striking While the Iron's Hot: One Approach to Improve Student Assessment during Curricular Innovation

S. Beth Bierer, PhD, Cleveland Clinic Lerner College of Medicine of CWRU

Elaine F. Dannefer, PhD, Cleveland Clinic Lerner College of Medicine of CWRU

Christine Taylor, PhD, Cleveland Clinic Lerner College of Medicine of CWRU

Alan L. Hull, MD, PhD, Cleveland Clinic Lerner College of Medicine of CWRU

Purpose: Our faculty developed weekly, open-book essay questions known as concept appraisals (CAPPs) to encourage students to integrate new basic science and research concepts with previous material and to apply their knowledge to solve problems. This study pilots a process to determine CAPP quality.

Methods: Twenty-one CAPPs from two organ-based courses were examined. Course faculty (n=11) assessed each CAPP item using checklists designed to judge item quality and to assess student performance. Then, two educational researchers classified CAPP questions into four categories using an adaptation of Mazano's taxonomy of educational objectives¹. Interrater agreement was assessed before/after discussion. Finally, student feedback from course evaluations was used to monitor if CAPPs met intended goals.

Results: Faculty reviewers agreed that students mastered most major concepts (M=82%, SD=10), provided logical responses (M=79%, SD=15), and integrated basic science concepts (M=85%, SD=10). They also identified 9/21 CAPPs requiring revision. Educational researchers assigned the 21 CAPPs to four categories (60% agreement before discussion; 100% following discussion): 5% Retrieval; 25% Comprehension; 50% Analysis, and 20% Knowledge Utilization. Of consenting students, 95% agreed that CAPPs contributed to their learning of medical knowledge and emphasized concept integration rather than rote memorization.

Conclusions: We have two conclusions based on this study. First, we developed a feasible method for determining which CAPPs require revision. Second, we collected evidence supporting the hypothesis that CAPPs assess higher levels of student cognition and integration of basic science medical knowledge.
1Marzano, R.J. (2001). Designing a New Taxonomy of Educational Objectives. Thousand Oaks, CA: Corwin Press Inc

What is the Impact of Regional Training Centers on Practice Location and Specialty Choice of Medical Students?

James J. Brokaw, PhD, MPH, Indiana University School of Medicine

Christina A. Mandzuk, BS, Indiana University School of Medicine

Michael E. Wade, MPH, Indiana University School of Medicine

Dennis W. Deal, MA, Indiana University School of Medicine

Terrell W. Zollinger, DrPH, Indiana University School of Medicine

Indiana University School of Medicine (IUSM) has a unique training program, where during the first two years, half the students study at the main medical campus in Indianapolis, and the other half are distributed among eight regional training centers throughout the state. All students attend the main medical campus the last two years. The purpose of this study was to determine whether students who attend regional training centers are more likely to return to those same regions and practice primary care medicine. The study cohort included 2,487 IUSM medical graduates from 1988 to 1997. The study variables included age, sex, race, socioeconomic status, academic achievement, hometown, training region, current practice location, and specialty. Multivariate logistic regression was used to determine the effect of training at a regional center on graduates' practice location and specialty choice while controlling for the effects of several covariates thought to influence these career choices. Students who attended two of the regional training centers were significantly ($p < 0.05$) more likely to practice primary care medicine (O.R. = 1.6, 1.8). For five of the eight regional centers, students who trained in a specific center were significantly ($p < 0.01$) more likely to return to that same region to set up practice (O.R. = 2.3, 2.5, 3.1, 4.5, 7.3) when controlling for the covariates, including hometown location. These findings may provide guidance for medical schools as they attempt to design training programs to address the growing shortage of primary care providers in rural and other underserved regions.

Saturday Abstracts

Evaluation of an Observed Structured Teaching Exercise (OSTE) for Fourth-Year Medical Students

Donald W. Scott, MD, MHS, University of Chicago, Pritzker School of Medicine

David Rubin, MD, University of Chicago, Pritzker School of Medicine

Sandy Smith, PhD, University of Chicago, Pritzker School of Medicine

Krista Johnson, MD, University of Chicago, Pritzker School of Medicine

Background: Analogous to an Observed Structured Clinical Examination (OSCE), an OSTE is a performance-based teaching exercise, using standardized learners, designed to provide assessment of teaching skills.

Purpose: To evaluate the performance of a 2 station OSTE module used for formative assessment, as part of a 4 week teaching skills elective for 4th year medical students: Becoming a Resident Teacher (BART).

Methods: A 2-station, in-patient OSTE module was designed to allow participants to engage in the deliberate practice of the One-Minute Preceptor Method. The cases were: 1) Fever of Unknown Origin and 2) Asthma. An 8 question retrospective pre-post survey was administered to the 33 fourth year students participating in the 2006 BART course. The question stem read, " Please rate your confidence (1) before participating in this teaching practice session (as viewed retrospectively) and (2) currently." A 5-point Likert Scale was used (5= highest confidence.) Global ratings and qualitative comments were also collected. The Wilcoxon Signed-Rank Test was used for statistical analysis ($p < 0.05$).

Results: All participants completed the survey. The median and mean values for the global statement, "I believe this exercise will improve my teaching skills," were 5 and 4.55, respectively. All comparisons of the retrospective pre-post medians were statistically significant and will be presented.

Conclusions: These results provide preliminary evidence for the effectiveness of this OSTE module as one tool for formative assessment. The next step is to assess this methodology employing a control group.

Basic Science SIG Invited Workshop: Getting Started with Team Based Learning

Regina Kreisle, MD, PhD, Indiana University School of Medicine- Lafayette

The purpose of this workshop is to help faculty plan for the incorporation of TBL sessions in basic science courses. The session will focus on specific steps that need to be taken to design and implement sessions, including the creation of team-based application exercises. This session will not be an introduction to TBL or designed to convince faculty that TBL is a worthwhile activity. Instead, it is intended to provide guidance to those who are planning to do TBL or are already doing TBL and want to solve specific problems. We will include several resource persons who have experience with TBL.

Participants will

- Review the structure of TBL sessions and how they differ from other active learning modalities
- Develop task lists for preparation in advance of TBL sessions, including formation of student teams, pre-session assignments, and how to evaluate the sessions
- Identify key components of readiness assessment tests and explore different options for conducting the tests
- Design activities for the active learning component of the TBL session
- Examine approaches for giving students feedback for the TBL session

Saturday Abstracts

UGME/GME sponsored session:

How do We Effectively Present Our Work and Value as Educators? Applying the Findings from the AAMC-GEA Consensus Conference on Educational Scholarship

Presenters:

Deborah Simpson, PhD, Medical College of Wisconsin

Thomas Viggiano, MD, Med., Mayo Medical School

Karen Mardante, MD, Medical College of Wisconsin

Facilitators:

Debra Klamen, MD, MHPE, Southern Illinois School of Medicine

Kathryn Dey Huggett, PhD, Creighton University School of Medicine

Kristi Ferguson, PhD, University of Iowa

Bill Jefferies, PhD, Creighton University School of Medicine

Clint Snyder, PhD, Northeastern Ohio Universities College of Medicine

Effective presentation is one of the criteria associated with scholarship. How do we, as educators, effectively present our individual evidence of excellence and scholarship for annual reviews and/or academic promotion? How do we, as educators, effectively present and respond to questions about what evidence should "count" for educators in these high stakes decisions? Building on the findings from the 2006 AAMC-GEA Consensus Conference on Educational Scholarship we will address these questions by: (1) reviewing the key features associated with effective presentations of individual evidence; (2) develop examples of effective presentation of evidence for common educator activities; and (3) collaboratively create effective responses which we, as educators, can use in effectively presenting answers to FAQ's like "Who cares about a MedEdPORTAL acceptance, publications are the coin of the realm here?"

Workshop: An Approach to Comprehensive Course Review: Beyond Student Evaluations

Linnea S. Hauge, PhD, Rush University Medical Center

Susan Jacob, PhD, Rush University Medical Center

Faculty efforts to develop and enhance our curriculum yielded a need to change curriculum committee structure, and revise our course review process. Our newly implemented course review process is a team-based, comprehensive approach to evaluating all medical school courses. The purpose of this session is to describe our new course review process and the faculty development benefits related to this process. Our new course review process includes several components, including each of the following: • Student evaluation of experience • Review of course objectives and materials • Review of course administration via a structured interview with course director • Review of evaluation and grading processes. Course reviews are conducted by teams of 3-4 faculty members. The product of their review, the Course Review Team Report, includes recommendations related to each of the sections above, organized by need. Recommendations are specific, and categorized as high priority, moderate need, or maintain good practice. Faculty development efforts ensued to enhance faculty skill in the new course evaluation process. Materials have been developed to facilitate faculty participation in the review process, and examples of these materials will be shared with participants. Materials include guidelines for the course review process, a checklist for evaluating course materials, and an exam item review guide. The new review process has provided opportunities to address LCME requirements, faculty development needs, and facilitate course enhancement.

Workshop: Preparing for an RRC Site Visit or an Institutional Internal Review: What do you need to do?

Monica L. Lybson, MD, University of Michigan Medical School

Scott Gitlin, MD, University of Michigan Medical School

Stanley Hamstra, PhD, University of Michigan Medical School

Purpose: Residency program directors and faculty involved in resident education have been charged with continuous educational quality improvement. This reflective practice is often put to the test at the time of the institutions' internal review and during the Residency Review Committee's (RRC's) accreditation site visit. This session will provide a step-by-step approach to an ACGME accreditation site visit.

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Methods: Using the University of Michigan Internal Review format we will provide participants with feedback and consultation. We will provide an experiential workshop for interested faculty review. The format for this workshop will be interactive. We will spend 5-10 minutes discussing required policies and procedures that must be in place in all programs. Our intention is to provide a model for residency program directors & administrators to facilitate internal review procedures and interactions.

Expected Outcomes: This workshop is intended for educators involved in preparing for residency accreditation. With the skills and consultation gained from this workshop participants will be better able to develop, share and understand the fundamental aspects of creating a residency outcome program that meets various RRC requirements.

Workshop: A Look at Learners: The Relevance for and Application to Medical Education

Caren M. Stalburg, MD, MA, University of Michigan Medical School

Educators utilize their own understanding of pedagogy, or educational theory, to guide teaching methods and their approach to instruction. Pedagogy is generally teacher-focused and does not factor in the individual learner. The use of andragogy over pedagogy, on the other hand, factors the learner into the process of education, creating a partnership between the educator and the student. A variety of theories and perspectives attempt to describe the ways in which people think and learn. This workshop will review deep/surface/strategic learning theories, experiential learning theory, understandings of personality type and multiple intelligences, as well as consideration of reflective thinking. Participants will have the opportunity to explore their own learning styles. As a group, based on the principles of andragogy, and informed by various theories regarding learning styles and cognitive approaches, new options and opportunities for curriculum planning will be explored.

RIME Oral Abstracts III

Impact of Iowa's Clinical and Professional Reflection (CPRP) Program

Kimberly Ephgrave, MD, University of Iowa

Marcy Rosenbaum, PhD, University of Iowa

In response to concerns regarding a lack of coherence in the clinical curriculum, we developed a program (CPRP) for junior medical students to reflect with clinical faculty on what they had learned, what went well, and problematic clinical situations during their junior year.

Methods: Senior students from 2003-2006 responded to open-ended prompts regarding their medical education and attitudes toward internship during match week. We compared their open-ended responses and their AAMC Graduate Questionnaire (GQ) ratings of faculty mentoring before ('03/'04) and after ('05/'06) the CPRP program implementation. We also collected evaluation data from students during and after participation in the CPRP program.

Results: Comparison of students' open-ended survey responses before and following implementation of the CPRP program revealed more complex descriptions regarding student concerns and what they expected to enjoy as interns after the CPRP program. On the GQ, student dissatisfaction with faculty mentoring fell 52% (from 17.5% to 8.5%), while the top 'Very Satisfied' cohort rose 60% (from 22.5% to 36%). Students reported CPRP benefits included the opportunities for 1) one on one time with faculty; 2) expressing concerns and 3) explicit reflection on junior year experiences. CPRP meeting topics included problems with the behavior of residents/faculty/staff; career/specialty choice; clinical teams; positive role models and ethical issues. Suggestions for improvement included clarification of program purpose and format and providing more opportunity to meet with faculty in different specialties.

Conclusions: Senior medical students exposed to a program promoting reflection on their junior year clinical experiences found a variety of benefits from participating in the program, gave more complex responses to survey questions, and gave markedly improved ratings to faculty mentoring.

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Medical Student Self-Evaluation of Clinical Skills

*Toshiko Uchida, MD, Stroger Hospital of Cook County/Rush Medical College
Andem Ekpenyong, MD, Rush University Medical Center*

Purpose of study: To compare medical students' self-evaluation of their clinical skills with their performance on an objective structured clinical examination (OSCE.)

Methodology: In May of 2006, 118 third-year students participated in a 6-station OSCE which assessed four clinical skills components: history, physical exam, note-writing and communication/interpersonal skills. At the end of the OSCE, students were asked to rank their performance for each component on a Likert scale from 1-10.

Summary of results: Students rated their communication/interpersonal skills most highly with an average (std dev) of 8.30 (1.13) as compared to averages of 7.79 (1.23) for history, 7.32 (1.27) for physical exam, and 7.43 (1.23) for note-writing skills. Self-evaluation scores were modestly correlated with performance for history and communication/interpersonal skills with correlation coefficients of 0.25 and 0.36 respectively, but there was poor correlation between self-evaluation of physical exam and note-writing skills with correlation coefficients of -0.02 and -0.04 respectively. For the subset of lowest-performing students, there was uniformly poor correlation between performance and self-evaluation. Of the 11 lowest-performing students, all but one ranked themselves within one standard deviation of the mean in performance even after a formal remediation program which included participation in 3 additional OSCE cases.

Conclusions: These medical students were somewhat accurate in their self-evaluation of history and communication/interpersonal skills but not their physical exam or note-writing skills. The lowest-performing students were inaccurate in self-evaluating their performance even after formal remediation.

Examining the Validity of a Resident Assessment Tool for Aseptic Technique using Nurses and Medical Students

*Monica L. Lypson, MD, University of Michigan, Ann Arbor VA Healthcare System
Stan J. Hamstra, PhD, University of Michigan
Lisa Colletti, MD, University of Michigan*

Abstract: Purpose Despite its importance as a key technical skill for resident physicians, there are currently no validated assessment instruments for aseptic technique. In this study, we assessed the performance of novices (medical students) and experts (operating room nurses) while preparing a surgical site for incision and drainage to validate our previous findings of resident differences using the same tool.

Methods: We examined the instrument's reliability and construct validity in a controlled comparison study of novices and experts using a standardized patient in a structured live examination setting. Performance was assessed by 2 independent raters. The assessment tool consisted of a checklist and global rating scale.

Results Reliability: The internal consistency of the checklist for the two raters was 0.87 and 0.71 (Cronbach's alpha), while for the global rating scale, inter-rater reliability was 0.74, $p < 0.001$ (intraclass correlation coefficient - single measure). Validity Both raters judged the OR nurses as outperforming the medical students on the global rating scale ($t(14) = 7.47$; $p < .0001$ for rater SH and $t(14) = 10.66$; $p < .0001$ for rater ML) and several of the checklist items, indicating construct validity. The effect size values for both raters on the global rating scale was extremely large (Cohen's $d = 3.0$ for SH, and 4.4 for ML).

Conclusion: The assessment instrument exhibited good reliability and construct validity, supporting the use of this instrument in summative assessment of aseptic technique. Further validation is required to distinguish among levels of postgraduate trainees, or among individuals.

A Learners' Needs Assessment: End-Of-Life Care Training in Medical School

*Lisa Vargish, MD, MS, The University of Chicago
Sandy G Smith, PhD, The University of Chicago
Rita Gorrawara-Bhat, PhD, The University of Chicago
Donald Scott, MD, The University of Chicago*

Background: With increasing emphasis on improving care at the end of life, many medical schools are adding courses addressing End-of-life Care (EOLC) to their curricula. As a first step in enhancing our EOLC curriculum at the University of Chicago, a learner's needs assessment was performed.

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Purpose: The primary aims are to define the educational needs of our medical students and to identify the current state of the curricula in relation to EOLC, in order to help guide the development and implementation of a new EOLC curriculum at our medical school.

Methods: Participants from second and fourth year medical school classes answered a ten minute online survey regarding their exposure to EOLC skills, their evaluation of the importance of learning EOLC skills, and their confidence in performing EOLC skills compared to other medical skills. Participants were also invited to participate in a focus group concerned with EOLC teaching.

Results: Second and fourth year students rated the importance of EOLC skills more highly than other medical skills, although they reported significantly lower confidence in performing EOLC skills than other medical skills. Focus groups with these students highlighted the need for more teaching of EOLC skills by observation, practice and small group discussion throughout their medical education.

Conclusions: Medical students rate EOLC skills as very important and their confidence in performing them low. The students expressed a need for more teaching in EOLC skills throughout their medical training.

Collaborative assessment: Group participatory exams as an innovative and effective learning tool in medical and anatomical education

Mark A. Terrell, EdD, The Ohio State University

Medical and higher education are currently experiencing a major educational paradigm shift from teacher-centered classrooms intended to provide instruction to learner-centered classrooms intended to produce student learning that is deep, transferable, and life-long. Although cooperative learning is becoming a common learner-centered instructional strategy, classroom assessment practices have remained very traditional and student collaboration during assessment is virtually non-existent. As a result, a social constructivist model of learning was used to develop structured peer group lecture exams to test the hypothesis that lecture exams can be used as a formative learning tool during assessment. After completing a unit exam using individual efforts, students immediately retook the same unit exam in a small group-discussion format. Performance on the collaborative exams was higher ($P < 0.001$) than on the individual-effort exams. Final comprehensive exam scores, completed using individual efforts only, increased ($P < 0.01$) during semesters that coupled a collaborative testing approach with traditional lecture assessment. Students rated collaborative testing as positive and helpful toward their mastery of course content. These results suggest that traditional summative assessment (measuring learning after instruction) can be improved to include a formative learning component, which allows students to actually learn from the assessment tool itself. This research on social constructivism demonstrated that collaborative assessment can help build a knowledge community that 1) engages in active learning, 2) motivates students to overcome inhibitory feelings of isolation and anxiety, and 3) self-discovery and reasoning strategies for problem solving, collaborating with and articulating concepts to peers, and conflict resolution, which are good lifelong learning skills.

Library SIG Special Session: PubMed Unleashed!

Kellie Kanshiro, AMLS, AHIP, Ruth Lilly Medical Library, Indiana University School of Medicine

Beth Whipple, MLS, Ruth Lilly Medical Library, Indiana University School of Medicine

Are you a PubMed user? Want to unleash the full potential of PubMed? Unlock the mysteries of PubMed in this 1.5 hour, hands on workshop. We'll focus on some of the advanced features of PubMed, learn how to refine and expand searches, use specialized features for displaying, printing and saving, use Medical Subject Headings via the MeSH Browser, and customize PubMed using MyNCBI. Participants will also leave with an understanding of how PubMed fits into the context of other National Library of Medicine/National Center for Biotechnology Information (MyNCBI) products and their exciting implications for medical education. This class will be best for participants who have some experience with searching PubMed.

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AAMC Invited Session: An Electronic Portfolio System for Physicians - Thinking Nationally, Acting Locally?

Larry Gruppen, PhD, University of Michigan Medical School
Robert Galbraith, MD, National Board of Medical Examiners
N. Brownell Anderson, MEd, AAMC
Timothy Knettlar, MBA, Federation of State Medical Boards

Description of the issue/topic and rationale: Portfolios are increasingly in use or under development as educational tools for documenting learner achievement of competency and other educational activities and outcomes. Simultaneously, electronic communication and dissemination systems are increasingly replacing traditional paper systems. For example, residency application processes are almost entirely on-line now through the Electronic Residency Application Service (ERAS). Given the increasing need to document professional development, there is developing interest among professional organizations, including the Association of American Medical Colleges (AAMC), the National Board of Medical Examiners (NBME) and the Federation of State Medical Boards (FSMB), to partner and develop an electronic portfolio infrastructure that would serve to document learner experiences and outcomes (e.g. competencies appropriate to phase and institution) in medical school and residency. Such a system could also be used for a variety of credentialing applications (e.g. licensing, certification and privileging) and to promote the self-reflection, self-assessment and improvement that are key foundations of life-long learning.

Session objectives:

- 1) Discuss the advantages and disadvantages of a national physician electronic portfolio system that transitions seamlessly across medical school, residency and into practice.
- 2) Discuss the possible attributes of a national physician electronic portfolio system.
- 3) Discuss the mechanisms for developing a national electronic portfolio system for physicians through collaboration between medical schools and professional organizations.

Strategies for audience involvement:

The audience will be engaged in this Workshop through a series of questions posed by the moderator and discussant. (Questions to be posed are listed below in the session plan.) The session is intended to learn participants' perspectives about the desirability and feasibility of a national electronic portfolio for physicians and thus is designed to maximize involvement of the audience.

Session plan:

Welcome and Introduction of Session – 5 minutes

- Introduction of presenters
- General introduction of session and presentation of session agenda

Background of the Idea of an Electronic Portfolio for Physicians – 10-15 minutes

- Presentation of general idea, including impetus for initial conceptualization

Discussion of Session Questions – 60 minutes

- The session moderator will present the following questions for engaging the audience in group discussion. For each question, participants will be asked to brainstorm ideas. Notes will be taken on a flipchart to record comments.
 - 1) What are the advantages and disadvantages of a national physician electronic portfolio system?
 - 2) What features/attributes should be included in an electronic portfolio, and of these, which might be standardized and which might be optional for users?
 - 3) How do we ensure that information in the portfolio stays under the control of the learner/physician?
 - 4) What opportunities for research in medical education might this approach offer?
 - 5) How could an electronic portfolio be developed that is national in scope and potential utility but which recognizes differences across institutions?
 - 6) What obstacles exist to developing local systems? National systems?
 - 7) How could all this be done collaboratively between medical schools and professional organizations?

Session Summary and Conclusion: 10 minutes

- Presenters will provide a summary of the discussion and possible next steps. Persons interested in further participation in the project will be encouraged to express their interest.

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GME Invited Session: We're in Phase 3? Approaches to Educational Outcomes in Graduate Medical Education

Michelle Raible, MD, PharmD, University of Illinois College of Medicine at Chicago

Karen Wendleberger-Marcdante, MD, Medical College of Wisconsin

Ernie Yoder, MD, PhD, Providence Hospital and Medical Centers

Rationale: Phase 3 of the ACGME Outcome Project began on July 1, 2006. GME training programs are now required to 1) demonstrate full integration of the competencies and assessment tools with clinical care; 2) use resident performance data to determine educational improvements in their program; and 3) use external measures as a method of evaluating their educational programs. Site visitors will be paying particular attention to evidence that programs are making data-driven improvements and will be reviewing external program performance indicators and input from GME Committees to make sure programs are achieving their educational objectives.

But what does this all mean? How can the competencies be integrated into clinical care? How can we collect and synthesize valid data on resident performance in a way that allows us to evaluate and revise educational programs? Ultimately, is there a reliable way to demonstrate that our educational programs have any impact on patient outcomes? Review committees will be asking for internal and external data and information soon. A review of the literature reveals some of the possible strategies for integration of competencies into clinical care. For example, the Emory University Internal Medicine program reports success in improving operational and clinical performance in their general medicine practice through use of PDCA cycles. Similar results were reported from two Yale Internal Medicine outpatient practices after implementation of a quality improvement curriculum. Kupersmith recently provided a meta-analysis of improvement in inpatient quality of care through continuous improvement methodology. Competency-based promotion criteria for Family Medicine Residents have been developed and applied, and a systematic review of instruments for evaluating education in evidence-based practice was published in JAMA. In addition, the mini-CEX has been shown to be valid and reliable in assessing resident competencies. This workshop will provide a forum to discuss several current attempts at creating systems to integrate methods as well as identify and collect useful information that will meet the need for documentation of Phase 3 activities.

Session objectives: Upon completion of this session, attendees will be prepared to discuss:

1. ACGME requirements for integration of the six general competencies into the residency curriculum and evaluation system
2. Methods for utilizing outcomes data for improving resident education
3. Application of the principles of evidence-based medicine and continuous quality improvement in improving educational outcomes

Topic outline:

- Review of ACGME Outcome Project, competency-based education, and educational objectives
- Identification and discussion of literature-based examples and possible approaches, including quality initiatives
- Brainstorm in small groups to build on or incorporate these strategies or create new projects within individual programs

Methods: Following introductions, presenters will review the ACGME's Outcome Project concept of competency-based education and educational objectives. (10 minutes) Examples of published innovative projects will be discussed. Several approaches will be discussed including ways in which residents are involved in a variety of quality initiatives (highlighting systems based practice and practice based learning competencies) (10 minutes). Current activities designed to integrate measurement of educational programs with hospital quality initiatives will also be introduced. (10 minutes) The participants will then brainstorm about how to build on and incorporate these and other innovative strategies into their own programs, identifying resources and barriers to implementation. (45 minutes) Opportunities for multi-institutional collaboration will be investigated during a wrap up session. (15 minutes)

Outcomes: Participants will leave with several ideas that can be used in their own institutions for meeting the ACGME requirement for integration of competencies and use of performance data in the assessment of educational programs. We will identify and facilitate collaborative projects that may result from this discussion.

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Speakers/Presenters:

The presenters, representing three different specialties, are all involved in graduate medical education programs and issues within their own institutions and also within regional and/or national medical education groups.

Workshop: Using AAMC Data Resources

Heather L. Hageman, MBA, Washington University School of Medicine

Brian Mavis, PhD, Michigan State University College of Medicine

Jason Cantow, MS, AAMC

An increasing number of medical schools are building outcomes assessment data bases to analyze the impact of curricular initiatives, track their graduates progress through the medical educational continuum and to address the LCME requirement to assess the extent to which educational objectives have been met. However, medical school faculty and administrative staff may not be fully aware of the extent of resources/data available through the Association of American Medical Colleges (AAMC), including the ability to benchmark individual institutions against others and over long time periods. By working through research questions using blinded AAMC data, participants will 1) understand how to access, and develop a working knowledge of the wide array of data resources available from the AAMC; the American Medical College Application Service (AMCAS), GME Track and Faculty Roster data bases; and the AAMC Data Book and Minorities in Medical Education Facts and Figures Report; 2) recognize important issues to consider when using these data, such as response rates to questionnaires (who responds), value of programmatic vs. individualized data; what additional types of data the AAMC can provide by request; and 3) develop an approach for identifying and incorporating relevant AAMC-based data and resources of value in addressing specific questions pertaining to educational outcomes for their schools.

1:30-2:15 pm

Lecture:

Enhancing Medical Student Commitment to Professional Values Through a Novel Community Partnership

Patricia S. Sexton, MS, Kirksville College of Osteopathic Medicine

Phillip C. Slocum, DO, Kirksville College of Osteopathic Medicine

Sandy K. Richardson, BA, Kirksville College of Osteopathic Medicine

Service learning is an educational modality, which links community service and academic experience. It is thought that a service learning component in the medical curriculum both contextualizes learning and promotes student understanding of their purpose and role in society (Seifer, 1998). In medical education, students enter school with a strong orientation toward helping others. Often this is not fostered during the educational process due in part to the burden of the scientific and clinical course material to be mastered (Coulehan, 2005). The Kirksville College of Osteopathic Medicine – Adair County Court Appointed Special Advocate partnership was formed as an elective course offering to allow students in medical school to reinforce their service ethic, develop civic and social responsibility, leadership skills, cultural competence, professionalism, altruism and verbal and written communication skills. This workshop will detail the concept of service learning, the background and formation of this unique partnership, allow for brainstorming by participants of possible educational partnerships in their communities, and sharing of those ideas to create an overview of possible opportunities increased service learning. Coulehan, J. (2005). Viewpoint: today's professionalism: engaging the mind but not the heart. *Acad Med*, 80(10), 892-898. Seifer, S. D. (1998). Service-learning: community-campus partnerships for health professions education. *Acad Med*, 73(3), 273-277.

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2:15-3:00 pm

Lecture:

The Implementation of an Online Family Medicine Clerkship for the Promotion of Evidence-Based Practice: Focused Instruction for Improving and Sustaining Students' Clinical Decision-Making and Information-Retrieval Skills

Katherine Schilling, EdD, Indiana University School of Medicine

Double-blinded randomized controlled trial. Third year medical students (N = 150) enrolled in a Family Medicine clinical clerkship were randomly assigned to one of two experimental groups: 1.) The control group received traditional clinical instruction, and 2.) The intervention group participated in an Online Clerkship that included both clinical and online instruction. Data from pre- and post-intervention surveys and MEDLINE searching scores were tabulated to assess the development of students' information retrieval and disease management skills, evidence-based practice, and several measures of humanism. MEDLINE searches linked to simulated patient cases were captured, blinded, and evaluated, allowing for a comprehensive analysis of students' searching skills. Data analysis indicated significant differences between control and intervention groups, with intervention group participants performing more effective MEDLINE searches ($P < 0.001$). Longitudinal analysis showed that intervention group students conducted significantly more MEDLINE searches during and following the clerkship ($P < 0.001$). Intervention group students also outperformed control group participants ($P = 0.005$) in EBM exercises requiring them to identify and apply randomized controlled trials to the care of a diabetes patient. Post-clerkship data indicated that intervention group students considered themselves to be more highly skilled in several key areas including their abilities to search MEDLINE effectively, identify gold standard journal literature, and practice EBM. This study provides information on how online learning impacts on the acquisition and use of information literacy and clinical skills. The electronic learning model for integrated online curricula is flexible and addresses many challenges in medical education.

1:30-2:15 pm

Lecture:

Care of the Underserved-Implementing Curricula and Measuring Its Outcomes

Matthew Fitz, MD, Loyola University Medical Center

Loyola Stritch School of Medicine developed a unique curriculum that attempts to provide students with both a far-sighted perspective on their role as future physicians and a skill set to deliver quality care to underserved populations/ Integrated in the Internal Medicine Clerkship, the underserved elective allows interested students to pursue an ambulatory clinical experience in a resource-poor setting. Approximately one-third of the students choose to have their clinical experience in an underserved setting. Although many schools offer or require their students to rotate at in a resource-poor community, our elective is unique for the following reasons: Students participate in formal case-based small group seminars facilitated by faculty and health care personnel on topics salient to the underserved community. These topics include but are not limited to access to care, pharmaceutical access, stereotype and bias. These small group seminars are held after the core lecture series within the Clerkship. Additionally, this underserved elective utilizes the talents of faculty from both allopathic and osteopathic schools throughout Chicago. This model allows for the exchange of ideas and information across institutions and limits the demands on any one, individual faculty member. Both student and patient outcomes are emphasized. Students' ability to uncover and address the needs of underserved patients are measured by standardized patient exercises as well as following end-point goals for patients (hemoglobin A1C and blood pressure) during their longitudinal clinic experience. This elective provides students with a skill set that results in better patient care.

Saturday Abstracts

2:15-3:00 pm

Lecture:

How Much Do Our Students Know About Obesity? A Collaborative Approach to Medical Education

Paola Palma Sisto, MD, Medical College of Wisconsin

Ann Maguire, MD, Medical College of Wisconsin

Douglas Bower, MD, Medical College of Wisconsin

Jeff Morzinski, PhD, MSW, Medical College of Wisconsin

Dawn Bragg, PhD, Medical College of Wisconsin

Laura Currey, Medical College of Wisconsin

The current rate of obesity and disordered eating has reached epidemic levels in a very short period of time. Current physicians feel unprepared for this epidemic (Perrin E, et al., Preventing and treating obesity: Pediatricians' self efficacy, barriers, resources and advocacy. *Ambulatory Pediatrics*, 5(3):150-56. 2005). Many medical educators are scrambling to develop innovative and timely curricula aimed at educating the new physicians of the 21st century. Although many medical schools have established curricula on clinical nutrition and several have active teaching programs, there is little known about effective collaborations among clinical departments to design and deliver 3rd year medical student instruction on obesity. Therefore, clerkship directors from three primary care departments (Internal Medicine, Pediatrics and Family Medicine) at the Medical College of Wisconsin developed, implemented and evaluated a web-based, case-based module on obesity for all incoming 3rd year students including an 18-item pre-test, tutorials, and post-test. During the lecture portion of this session we will present a focused review of the literature on obesity education in medical schools, the Collaborative Curriculum being developed as a result of the data received from the module, an overview of the module itself, and the lessons learned from the module and the first full year of this collaboration. The participants will be able to evaluate the strengths and limits of the on-line module for use at their institutions and appreciate some of the key resources, risks, and benefits associated with a new collaboration among three clinical departments. The discussion will stimulate ideas for moving medical student education toward effective instruction about assessing and managing obesity.

RIME Oral Abstract IV Session: Saturday 3:15-4:45 pm

A Comparison of Residency Selection Criteria From 1996 to 2006

Marianne Green, MD, Feinberg School of Medicine, Northwestern University

Paul Jones, MD, Rush Medical College, Rush University

John X. Thomas, Jr., PhD, Feinberg School of Medicine, Northwestern University

In early 2006, a questionnaire with 51 different items was sent to approximately 2200 residency program directors at university and community hospital settings throughout the US to learn about changes in residency selection criteria that had occurred during the last 10 years since a similar study was completed. Completed forms were obtained from approximately 1200 residency program directors in a variety of specialties. This report will focus on the comparison of selection criteria for specific specialties from 1996 to 2006. Program directors rated criteria from unimportant to critical using a 1-5 scale. The mean value for each criteria was ranked in terms of importance. To facilitate the comparison, the original groups used in 1996 were used here. Group A included orthopedics, surgery, Ob/Gyn, and ophthalmology. Group B included pediatrics, family medicine, internal medicine, and emergency medicine. Group C included psychiatry, pathology, radiation oncology, Dx radiology, anesthesiology, and PM&R. Results: The top 5 criteria are shown for each group: Group A Group B Group C 1 M3 clerkship grades M3 clerkship grades M3 clerkship grades 2 USMLE Step 1 Sr. electives grades USMLE Step 1 † 3 # of Honors USMLE Step 2 Sr. electives grades 4 Sr. electives grades † # of Honors USMLE Step 2 † 5 AOA USMLE Step 1 # of Honors † indicates a change in rank order by 4 or more from 1996 There were significant differences in the ranking of selection criteria between 1996 and 2006. These will be presented in detail.

Saturday Abstracts

Does Perceived Importance of Essential Communication Skills Reflect Performance in Emergency Medicine Residents?

Christine Sullivan, MD, FACEP, University of Missouri-Kansas City School of Medicine, Truman Medical Center

Stefanie Ellison, MD, FACEP, University of Missouri-Kansas City School of Medicine

Jennifer Quaintance, PhD, University of Missouri-Kansas City School of Medicine

Louise Arnold, PhD, University of Missouri-Kansas City School of Medicine

Background: A Communication and Interpersonal Skills (CIPS) curriculum for the acute emergency department (ED) encounter was implemented. We wanted to determine if emergency medicine (EM) residents' perception of importance of CIPS reflects actual performance.

Methods: Residents were asked to rate the importance of skills in an anonymous survey prior to the curriculum and performed an Objective Structured Clinical Exam (OSCE) at its conclusion. The resident viewed their videotaped encounter with 2 EM faculty and the standardized patient; all completed a created checklist with 22 skills separated into 5 categories.

Results: Twenty-four residents completed the survey (ratings were defined by increasing importance on a 1-5 scale); 26 performed an OSCE with assessment by a faculty observer. The most performed categories were Respect/Interpersonal Skills (98%, SD 0.054) and Efficient/Effective Communication (95%, SD 0.123); resident reported importance ratings were 4.42 (SD 0.318) and 4.58 (SD 0.359) respectively. Patient/Family Communication received the highest rating at 4.64 (SD 0.361) but was second least performed (70%, SD 0.212). The least performed skill was Empathy (34%, SD 0.168) which also had the lowest importance rating (4.00, SD 0.433). Healthcare Team Communication was performed 73% (SD 0.211) with a rating of 4.42 (SD 0.351). Three of the 4 lowest performed and rated skills were Empathy related.

Conclusion: If a resident perceived a communication skill as less important it was also less likely to be performed. Perceived importance of specific communication skills is an obstacle that should be addressed in a CIPS curriculum.

Non-traditional Career Paths Among Contemporary Medical Graduates

Dorothy Andriole, MD, Washington University School of Medicine

Donna Jeffe, PhD, Washington University School of Medicine

Kimberly Ephgrave, MD, University of Iowa College of Medicine

Heather Hageman, PhD, Washington University

Alison Whelan, MD, Washington University School of Medicine

Paul Jones, MD, Rush Medical College, Rush University

Problem Statement: Contemporary medical graduates who pursue non-traditional careers have not been characterized.

Method: In a project funded by a CGEA-collaborative grant, non-traditional graduates (i.e., those who did not enter specialty-based residency training following graduation) were identified from among all 1997-2004 graduates of five Midwestern medical schools. Data pertaining to these graduates' demographic characteristics and academic performance were collected, and graduates were invited to complete questionnaires pertaining to their medical school experiences and subsequent career paths. Chi-square tests measured associations between graduate characteristics and questionnaire completion (2-tailed p-values).

Results: Ninety-five non-traditional graduates (95/5760, 1.6%) were identified. These graduates were more likely to be from private (87/3162, 2.8%) than public (8/2598, 0.3%) schools ($p < .001$); 17% (16/95) had additional advanced degrees at graduation. Thirty-eight graduates completed questionnaires (38/95, 40%), including five who had graduated with additional advanced degrees. Graduates in AOA ($p = .001$) and from private schools ($p = .014$) were more likely to complete surveys. Respondents had pursued careers in a wide range of fields, including biotechnology, health care communications, public relations, real estate investing and venture capitalism.

Conclusions: Only a small proportion of graduates from any single medical school pursued non-traditional careers. However, their collective impact on the magnitude of the projected physician workforce shortage may be substantial and merits further investigation. As numerous non-traditional graduates in our study held dual degrees, we recommend further study of the impact of the growing number and scope of dual-degree medical-school programs on the physician workforce.

Saturday Abstracts

Everyone Who Wants to Change, Raise Your Hand! Evaluation of the Effect of Job Position and Training on Attitudes Towards Systems Change

Stefanie Simmons, MD, University of Michigan

Purpose: To evaluate the effect of job position and exposure to training on attitudes towards systems change in the Emergency Department (ED).

Methodology: A survey was sent via email to faculty, residents, physician assistants (PAs), nurses and techs in the ED during the institution of new ordering and discharge systems. Respondents were asked their job class, exposure to training on the new system, use of the new system and, via Likert scale, whether the changes would increase or decrease the efficiency of operations. Each job class had calculated mean, median, and modal responses on the Likert scale as well as analysis of grouped "1-2" or "pessimistic" scores and grouped "4-5" or "optimistic" scores.

Results: All job classes except faculty (25%) reported 42 to 67% respondents trained in the new system. Predicted efficiency score means descended in order: PA (3.5), faculty (3.06), residents (2.86), nurses (2.71), and techs (2.67). Faculty, resident and techs had matched numbers of pessimistic and optimistic responses while PAs had exclusively optimistic responses and nurses showed a trend (2:1) towards pessimistic responses.

Conclusions: Training was roughly consistent across job classes (except faculty) and there was no correlation between training optimism. There were significant variations in attitude by job class. Focus groups have since identified specific facets of the system that evoke attitudes differing by job class and a second survey will examine whether these attitudes are universal. Identification of perceived flaws and benefits may be utilized to design a more robust and universally accepted system.

Comparisons of Perceived PG1 Performance Between University-Trained and Community-Trained Third Year Pediatric Students

Gary L. Beck, MA, University of Nebraska Medical Center Department of Pediatrics

Fredrick A. McCurdy, MD, PhD, MBA, Texas Tech University School of Medicine in Amarillo

Purpose: The UNMC Pediatrics Clerkship was modified to reflect an ambulatory practice in 1994. A community practice (CP) option was added to the University (UNMC) course. The objective of this study was to determine if either track better prepared students for residency. Participants: A convenience sample of 108 students from 1999 to 2005. Sixty-three (58%) interns and 88 (81%) program directors (PD's) responded. Surveys where PD and intern responded were used in this study (n=60).

Methods: Graduates matching into pediatrics or medicine/pediatrics training programs and their PD's received a 32-question survey. Questionnaires were analyzed using two-sample t-tests with unequal variance to determine significance between responses.

Results: CP-trained interns rated themselves higher on 24 items (75%). Conversely, PD's rated UNMC-trained interns statistically higher on 88% of the same items while only 31% of PD ratings of CP-trained interns were higher. Thirty responses from PD's of UNMC-trained interns were higher than PD's of CP-trained interns. Further analysis of clerkship oral exam scores and senior OSCE scores revealed CP-trained interns had lower oral exam averages but performed better on the OSCE, providing confounding results from their PD's lower overall evaluations.

Conclusions: Our previous work reported CP students had statistically greater satisfaction with their clerkship experience than their UNMC peers. Portions of this study support the conclusion CP students are more confident due to this experience. However, UNMC interns may have acquired knowledge of skills lacking in the preparation of the CP interns. Further study of the differences in preparation of interns is definitely warranted.

Saturday Abstracts

CME Invited Session:

Overcoming Barriers to Adopting the Novel CME Formats of Performance Improvement and Internet Point of Care

George C. Mejicano, MD, MS, University of Wisconsin School of Medicine and Public Health

Physicians are now able to earn continuing medical education (CME) credit for participating in performance improvement (PI) and/or internet point of care (POC) initiatives. These two new forms of CME are important because they promote physician self-assessment, encourage critical thinking, and embrace the notion that continuing professional development ought to focus on improving clinical practice. They also signal a major paradigm shift in continuing education because (1) credit is no longer linked to "time on task" and (2) applications may consist of both educational and non-educational interventions. Indeed, altering the system in which a physician practices may be more important than what a person learns if the ultimate goal is to improve physician behavior and/or improve clinical outcomes.

Despite the potential importance of PI and POC, relatively few academic medical centers have embraced these new CME methods. This workshop will explore the practical issues and philosophical concerns that have hindered the widespread adoption of these novel approaches to continuing professional development. In addition, the instructor will lead a discussion on how CME providers may overcome these barriers. The ultimate goal of the workshop is to encourage other academic medical centers to adopt these new educational formats so that clinical faculty members deliver better care to the patients they serve.

Invited Session:

Using AAMC's Curriculum Management Information Tool (CurrMIT) for Curriculum Review and Change

Terri Cameron, MA, AAMC

Robby Reynolds, MPA, AAMC

Hameed Ahmed, MS, AAMC

Designed for faculty, curriculum committee members and staff, and administrators, this workshop will demonstrate how CurrMIT can provide nearly instantaneous answers to questions such as "How many schools have a required fourth-year subinternship?" or "How is anatomy taught at other medical schools?" All US and Canadian schools have at least a course-level presence in CurrMIT, and most have high levels of curriculum detail such as number of hours for each educational method, assessment methods used for each course, and curriculum innovations. In addition, content is tracked through the use of elements that link LCME Hot Topics, ACGME Competencies, individual school outcome objectives, and MeSH headings, and USMLE Content Outline headings, to name just a few.

This 90-minute session will provide an overview of how to quickly create reports that allow faculty to verify where, how, and to what extent content is covered at their institutions and to compare these results from one grad year to another; to compare how content is covered at different institutions; to quickly see where faculty are teaching in the curriculum and what educational methods they are using; and a host of other issues that are routinely discussed at curriculum committee meetings.

Learning Objectives:

At the conclusion of this workshop, participants will:

- 1) Understand and be able to demonstrate how CurrMIT can assist schools in conducting an annual curriculum review and report to the curriculum committee
- 2) Understand and be able to demonstrate how CurrMIT can be used to monitor proposed curriculum change and provide comparative reports
- 3) Understand and be able to demonstrate how CurrMIT can be used to recognize faculty teaching effort
- 4) Understand and be able to demonstrate how CurrMIT can be used to monitor and report on educational and assessment methods used in each course and/or teaching session
- 5) Understand and be able to demonstrate how CurrMIT can be used to monitor course coverage of important educational issues such as school objective, ACGME objectives, LCME Hot Topics, and other content issues

Saturday Abstracts

Small Group: Restructuring Residency Director Surveys to Incorporate ACGME Competencies

Susan L. Dottl, PhD, University of Wisconsin School of Medicine and Public Health

Brian Mavis, PhD, Michigan State University College of Medicine

Dawn Bragg, PhD, Medical College of Wisconsin

Medical schools collect information from residency directors about their graduates' performance during residency, which is used to inform their curriculum, planning, and reporting needs. These surveys are not standardized across schools, creating a variety of forms for residency directors to complete. Acquisition of ACGME competencies by residents must be demonstrated by residency programs, so residency directors are familiar with them. Basing survey items on the competencies would provide valuable information to medical schools, help graduate programs document competencies in their program, increase consistency across undergraduate and graduate medical education, and make completion of forms easier for residency directors. The 90-minute small group discussion will include a brief presentation outlining these issues, followed by group discussion about the potential usefulness of ACGME competencies in residency director surveys and the implications of standardizing forms across schools. Sample surveys from different schools will be provided. The group will share ideas on developing items and formats. Participants are encouraged to bring copies of their own institution's residency director surveys to share. Following the discussion session, participants will be able to describe how ACGME competencies may inform medical schools in the education of their students, evaluate the pros and cons of incorporating these competencies into residency director surveys, discuss benefits and drawbacks of standardizing surveys across institutions, formulate plans to follow up on this issue and, if desired, to incorporate the competencies into their school's surveys.

Small Group: Medical Education and Patient Outcomes: Where Should We Be Going?

Gary M. Gaddis, MD, PhD, University of Missouri-Kansas City School of Medicine and St. Luke's Hospital of Kansas City

Louise Arnold, PhD, University of Missouri- Kansas City School of Medicine

Gary Salzman, MD, University of Missouri- Kansas City School of Medicine

Medical education researchers have been challenged to link medical education efforts to measurable patient outcomes. Toward that end, some researchers have asked, "Which education-related patient outcomes might our current university and hospital systems permit us to measure?" Perhaps the question should be, "What education-related patient outcomes should we be measuring, and how can we overcome limiting factors inherent in our current systems, to permit us to obtain such measurements?" A panel of medical education researchers, with varying university roles, will briefly present their perspectives on this issue. During the group discussion, participants will conceptually move beyond consideration of the restraints that their current systems place upon associating patient outcomes with medical education. This will allow participants to conceptualize the outcomes that they would like to or should be measuring, without limitations. Once participants have identified these outcomes, which they desire to measure, they will brainstorm ways to move from where they are now, to where they need to be to achieve these measurements. Participants will leave with ideas for possible means to overcome institutional or system-imposed limitations, which inhibit linkage of medical education with patient outcomes.

Saturday Abstracts

Small Group: The Challenges and Opportunities of Creating a Comprehensive Clinical Skills Curriculum

Daniel M. Clinchot, MD, The Ohio State University College of Medicine
Carol Hasbrouck, MA, The Ohio State University College of Medicine

Over time, there have been concerns that clinical skills education has been more implicit than explicit (Barnsley, 2004; AAMC, 2005). The changing health care environment has resulted in fewer opportunities for clinical skills encounters due to changes in patient stays, economic forces, and institutional regulations. A recent effort at reviewing clinical skills education is reported by the AAMC in their document Project on the Clinical Education of Medical Students (2005). The Ohio State University COM faculty were charged with redefining the clinical education experiences for medical students with a goal of preparing physicians to practice in 2006 and beyond. The "2006 Initiative" (1996) that was undertaken resulted in goals and objectives that provided the foundation for the development of a clinical skills curriculum spanning all four years with specific skills identified per year. An innovative aspect of the curriculum is the Clinical Skills Immersion Experience - a required seven-day third-year procedural clerkship implemented July 1, 2006. The interdisciplinary clerkship lays the foundation for procedural competency; includes over sixteen procedures; provides interactive, hands-on training with simulators guided by procedural checklists; and utilizes a web-based course management system. Assessment of the students and course include a written exam, skills station exam, and course evaluation. This small group session will focus on processes used in developing a comprehensive skills curriculum; how skills/procedures to be learned are identified; when, where and how specific skills/procedures are taught; how and what should be documented regarding skills/procedures; and barriers encountered when implementing a comprehensive clinical skills curriculum.

Small Group: Using Standardized Patients for the Screening Head to Toe Physical Examination: One School's Perspective

Mary Aiello, MA, Southern Illinois University School of Medicine
Tracey Smith, APRN, BC, MS, Southern Illinois University School of Medicine
Susan Hingle, MD, Southern Illinois University School of Medicine
Debra Klamen, MD, MHPE, Southern Illinois University School of Medicine
Gary Rull, MD, Southern Illinois University School of Medicine

Using Standardized Patients for the Screening Head to Toe Physical Examination: One School's Perspective
Rationale: Medical students see a variety of physical exam techniques throughout their medical education. However, they need to know how to perform one complete head to toe screening physical examination. Knowing an agreed upon head to toe screening physical exam facilitates faculty in designing/using an objective measurement of clinical skills performed. It also gives faculty peace of mind knowing graduating medical students are competent at performing a screening physical exam from head to toe. This institution implemented the use of the Screening Head to Toe Physical Examination Guide initially developed by the Chicago Basic Clinical Skills Consortium.

Objectives/Methods: As the result of the need to implement the use of the HTT, many logistical questions developed. Being cognitively aware of the time constraints on faculty, a plan was implemented to require minimal faculty time for training of the practical instructors (PIs) and scoring of the HTT while ensuring accuracy of exams performed and consistency in scoring among the PIs. Budget constraints also limited the number of PIs used and the number of hours trained.

This session will present how the presenters developed a training program, recruited standardized patients (SPs), taught SPs to be PIs on the HTT, coordinated test day and scoring.

Saturday Abstracts

Workshop: One Patient at a Time: Using Evidence-Based Cases to Teach Patient-Centered Care and Diversity

Sajani Tipnis, MD, Medical College of Wisconsin/Children's Corporate Center

Gunnar Larson, MD, Medical College of Wisconsin

Travis Webb, MD, Medical College of Wisconsin

Douglas Bower, MD, Medical College of Wisconsin

Elizabeth Bredan, M4 Medical Student, Medical College of Wisconsin

Sonja Haw, M3 Medical Student, Medical College of Wisconsin

Deborah Simpson, PhD, Medical College of Wisconsin

When a patient comes to a physician, the physician (and patient) must make decisions that result in a mutually agreeable management/treatment plan. To be successful, per the literature, that treatment plan should take into consideration three perspectives: 1. The patient's values and beliefs emerging from a social review of systems (SROS); 2. The physician values and beliefs as an individual health care provider (e.g., personal values/beliefs/biases, best practices grounded in evidence-based medicine, biomedical model); and 3. The societal perspective including resource allocation, and racial, ethnic and socio-economic barriers to and disparities in health care. How does one learn to efficiently and effectively apply this 3-perspective approach to developing a patient centered care plan? This session will overview our approach to teaching this 3-perspective PCC plan model. Participants will have opportunity, just as our learners' do, to apply this model to a series of strategically crafted case scenarios complimented by critical incidents. Each scenario, deliberately constructed to emphasize patient diversity, incorporates evidence-based findings to trigger and inform the discussion. This approach to teaching PCC, has been very positively evaluated by both third year medical students and PGY1 surgery residents, and is aligned with the ACGME competencies. All session participants will receive an instructor's guide, case scenarios and associated resources along with the critical incident and evaluation forms.