Conference Proceedings

Innovations in Medical Education

Transforming Health Professions Education through Innovation

February 23-24, 2013

Keck School of Medicine of USC
Health Sciences Campus
Aresty Auditorium
Los Angeles, California

Presented by
Division of Medical Education
and
Office of Continuing Medical Education

Keck School of Medicine of USC
University of Southern California

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Session 15: Poster Session I, continued

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Welcome to Innovations in Medical Education

The USC Registration Desk will be located in the Aresty foyer and will be open through the day and staff will be available to assist you throughout the course.

A Campus map with locations to the meeting rooms is included in your folder.

Continental Breakfast will be provided on Saturday, February 23rd in the Aresty foyer.

Hot Breakfast Buffett will be provided on Sunday, February 24th in the Broad Conference Room.

Lunch will be provided on Saturday, February 23rd in the Broad Conference Room.

Parking is located at the Eastlake Parking Lot.

For those who wish to have verification of attendance, a form is provided that must be completed by each participant and validated by USC Registration Desk Staff the last day of your attendance.

A course evaluation questionnaire is provided that we would appreciate your completing prior to your departure. This will help plan future meetings.

Please place cell phones and beepers on vibrate and take any calls outside the meeting room.

For those participants that are also faculty please note: As this program was approved for CME, the following information must be provided for your review although in most cases, it will be irrelevant to your presentation/s.

Identifying products and discussing unlabeled uses of products during an accredited CME activity

-Generic and Trade Names

Presentations must give a balanced view of therapeutic options. As a speaker, your use of generic names contributes impartiality. If trade names are used, those of several companies should be used rather than that of a single company.

-Unlabeled Use of Products

When you discuss an unlabeled use of a commercial product, or an investigational use not yet approved for any purpose, during an accredited CME program, ACCME guidelines require that you as a speaker inform the audience that the product is not labeled for the use under discussion, or that the product is still investigational.

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Innovations in Medical Education Conference 2013

The Keck School of Medicine of USC

Health Science Campus
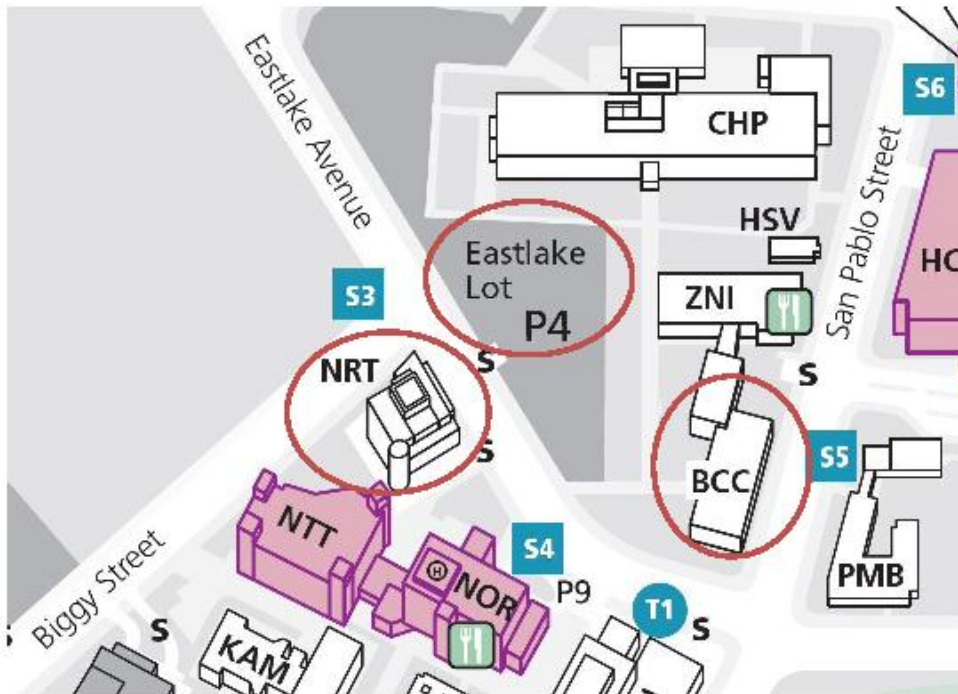
Aresty Auditorium at the NRT—Norris Research Tower 1450 Biggy Street, Los Angeles, CA

BCC—Broad Conference Center, 1st Floor, 1425 San Pablo Street, Los Angeles, CA

Parking—P4 Eastlake Lot

x

Keck School of Medicine of USC

Innovations in Medical Education Conference 2013

Broad Conference Center, 1425 San Pablo St, Los Angeles, CA 90089

Poster Session 5:00pm — 6:00pm

Saturday, February 23, 2013

Keck School
of Medicine
of USC

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Posters
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Entrance

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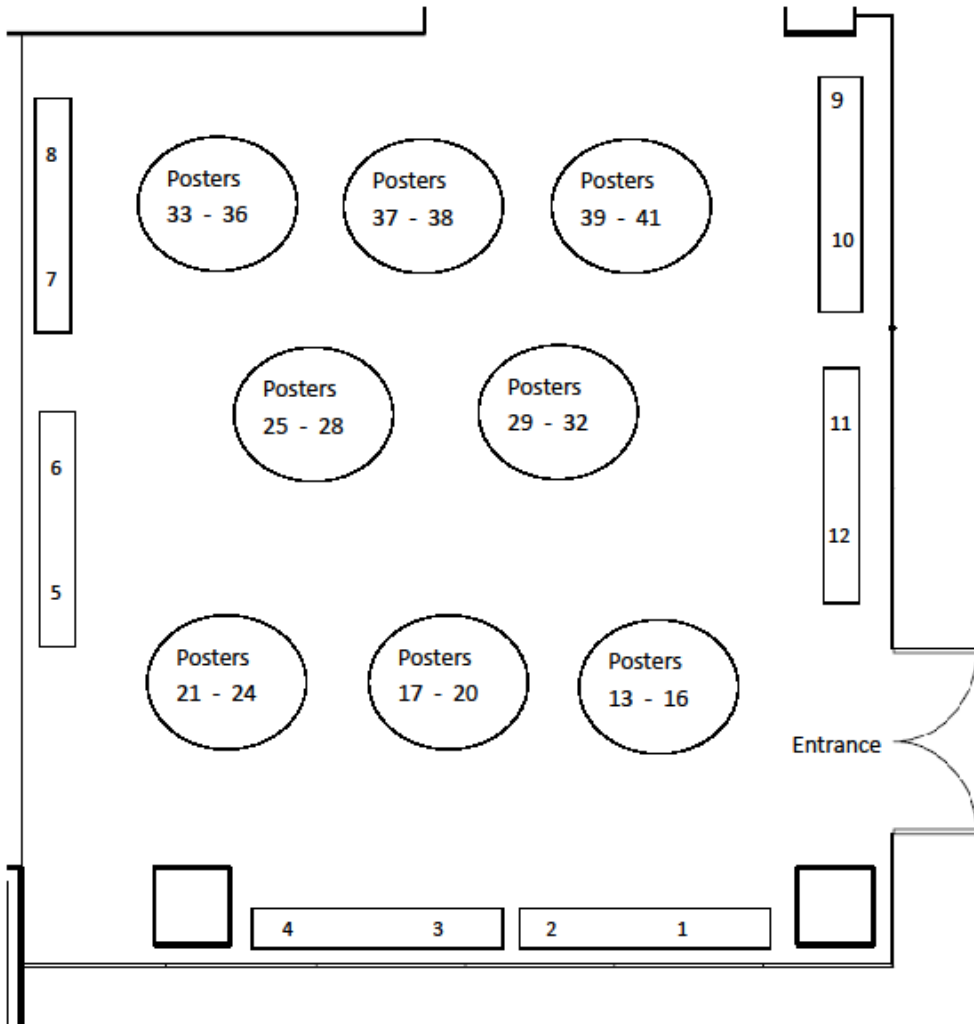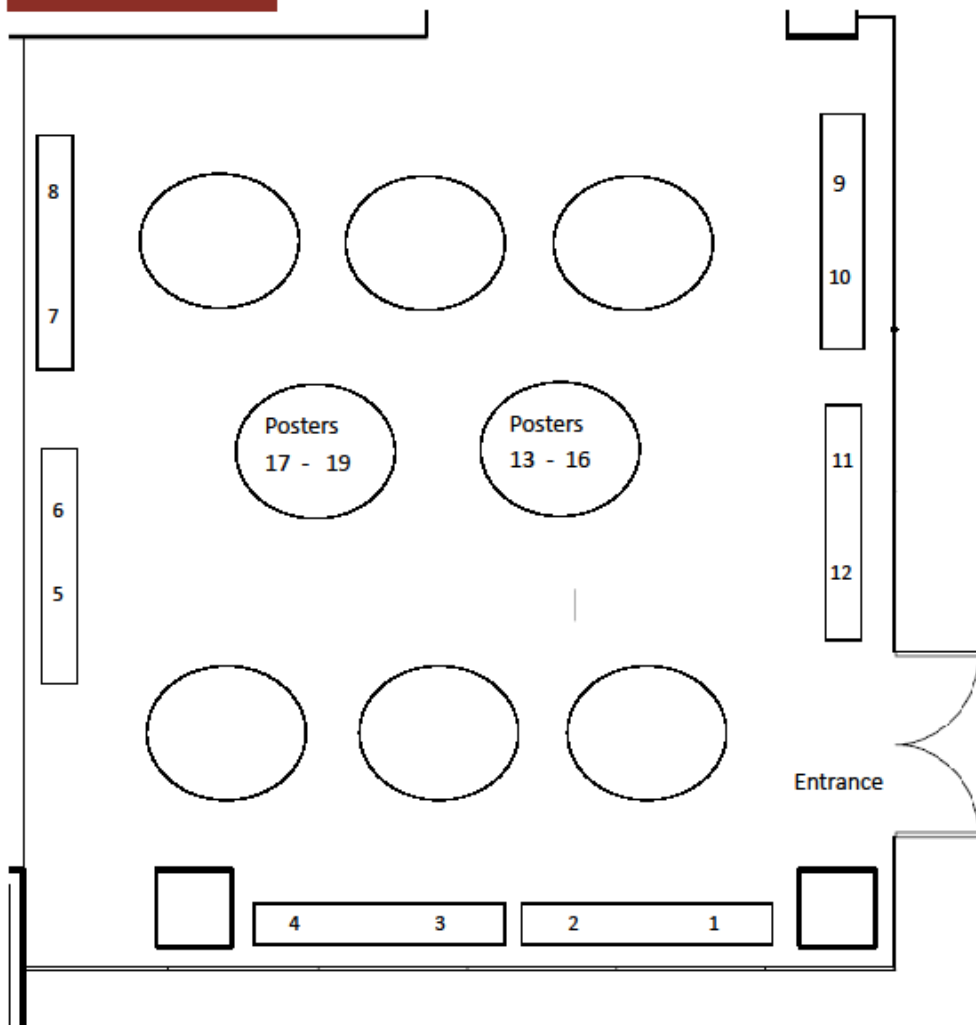
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Patricia O'Sullivan, Ed.D.

Patricia S. O'Sullivan is Director, Office of Research and Development in Medical Education at the University of California, San Francisco School of Medicine. At UCSF she co-directs the Teaching Scholars Program and oversees the Medical Education Research Fellowship as well as leads efforts in faculty development and educational research. She has over 30 years of experience in medical and health professions education. Much of her research has focused on clinical education both at the undergraduate and graduate level. Her studies on the use of portfolios for assessment, initially funded by the Stemmler Fund of the National Board of Medical Examiners, have expanded to include assessing reflective ability. More recently, her work has focused on research in faculty development. Currently, Dr. O'Sullivan serves as the past chair of the Research in Medical Education Section of the Association of American Medical Colleges and of the Division for Professions Education of the American Educational Research Association. Dr. O'Sullivan has undertaken educational research studies with health professionals in medicine, nursing, pharmacy, and health related professions. Her work has been recognized as a Fellow of the American Educational Research Association and as the 2011 recipient of the Merrel Flair Award of the Association of American Medical Colleges Group on Educational Affairs.

Randall M. Schell, MD, MACM

Dr. Randy Schell is the Academic Vice-Chairman and Program
Director in the Department of Anesthesiology at the University of Kentucky. He
is Professor of Anesthesiology, Pediatrics, and Surgery and is a Pediatric and
Adult Cardiac Anesthesiologist. In 2010, he received the Master's in Academic
Medicine degree from USC Keck School of Medicine.

Dr. Schell's interest is in evidence-based graduate medical
education and he leads an educational research group that publishes regularly
in this area and collaborates on educational research projects with other
institutions. He has given presentations at national meetings on Collaborative
Educational Research and Technology in Graduate Medical Education among other
topics. He regularly leads workshops at national meetings including the ACGME
on topics such as "Teaching and Evaluation", "Teaching Beyond the Classroom",
"Diagnosing the Learner", "Technology in Education", "Teaching Quality and
Safety in the Real World", and "Faculty Career Development."

Dr. Schell is Senior Editor for the American Board of
Anesthesiology and a member of the Educational Advisory Board for the Association
of University Anesthesiologists. He is also, Co-author of "Teaching Anesthesia" in the new edition of a
major textbook of Anesthesiology.

2013 Innovations in Medical Education

SCHEDULE
Saturday, February 23, 2013

7:00 – 8:00 am	**Continental Breakfast and Registration (Location Aresty Auditorium Foyer)**

8:00 – 8:15 am	**Welcome—** Carmen A. Puliafito, M.D., M.B.A. Dean, Keck School of Medicine of USC **Introduction of Plenary Speaker** — Henri Ford, MD, MHA Vice Dean for Medical Education, Keck School of Medicine of USC *Location Aresty Auditorium*

8:15 – 8:50 am	**Session 1: PLENARY SESSION** ## Collaborate! Surprise! It is Complex **Patricia O'Sullivan,** Ed.D. Director, Office of Research and Development in Medical Education at the University of California School of Medicine, San Francisco *Location Aresty Auditorium*

9:00 – 10:30 am	**Session 2: Oral Presentations – GME & CME** **Moderator: Ron Ben-Ari** **Location: Aresty Auditorium** **"The experiences of faculty of color in predominantly Euro-American Schools of Nursing and Medicine"** *Hassouneh* **"Postgraduate Ethics Curriculum Step 1"** *Remskar* **"Evaluation of Independent Learning Plans in PGY-1 Residents"** *Anderson* **"Use Of A Modified Script Concordance Test To Measure Clinical Decision Skills in Pediatric Residents – A Pilot Study"** *Ferdman*	**Session 3: Faculty Development Fundamentals Workshop *** **Location: LG 503** *Planning Educational Experiences – the Why, Who, What, When, Where and How (WWWWWH)* Julie Nyquist	**Session 4: Workshop** **Location: LG 504** *Competencies for Future Educational Leaders* Bill Anderson, Maurice Hitchcock, and Elza Mylona	

10:30 – 10:50 am	**Break (Refreshments – Location Aresty Auditorium Foyer)**

10:50 – 12:20 pm	**Session 5: Oral Presentations – SKILLS TRAINING** **Moderator: Win May** **Location: Aresty Auditorium** **"The impact of practical Pap smear cytology lecture on practice of pathology residents"** *Ebrahimi* **"Integrating interprofessional education in community-based learning activities"** *Hosny* **"Structured pattern analysis, a novel**	**Session 6: Faculty Development Fundamentals Workshop*** **Location: LG 503** *Interactive Large-group Teaching* Dixie Fisher and Gail Rice	**Session 7: Workshop** **Location: LG 504** *When the Teamwork Train Gets Derailed* Nancy Meshia, Ali Shakir, Dale Vincent	

	technique for teaching electrocardiograms, is superior to teaching via methodical electrocardiogram analysis." *Balmain* **"Comparative Effectiveness of 3- vs 2-dimensional Visualization in Training Novices for Complex Laparoscopic Procedures"** *Cologne*		
12:20 – 1:40 pm	**Session 8: HOSTED LUNCH RECEPTION CALIFORNIA STYLE (Broad Conference Room)** **Enjoy meeting new people and exchanging ideas.**		
1:40 – 3:10 pm	**Session 9: Oral Presentations – SIMULATIONS** **Moderator: Anita Richards** **Location: Aresty Auditorium** **"Use of e-simulation (virtual world) to teach communication skills in final year medicine"** *Milnes* **"The association between integrating simulation into nursing education, students' performance level and approaches during their first clinical rotation"** *Zlatkin* **"Transition to Residency Course Improves Student Confidence"** *House* **"Does adding simulation-based deliberate practice teaching of informed consent and spinal anesthesia to a baseline curriculum improve resident learning and retention?"** *Udani* **"Training nurses for shift management through simulations"** *Peker*	**Session 10: Faculty Development Fundamentals Workshop*** **Location: LG 503** *Giving Formative Feedback* Win May, Chachi Fung & Denise Souder	**Session 11: Workshop** **Location: LG 504** *Reflecting on Reflections* Lavjay Butani, Albina Gogo, Rebecca Blankenburg, Michele Long
3:10 – 3:30 pm	Break (Refreshments and snacks – Location Aresty Auditorium Foyer)		
3:30 – 5:00 pm	**Session 12: BEST OF COOL IDEAS** **Moderator: Julie Nyquist** **Location: Aresty Auditorium** **"Validation tests of an interactive computer-based laparoscopic hysterectomy trainer"** *Lichtman* **"Use of mentored residency teams to enhance addiction-medicine in education"** *Saffier* **"Enhancing consultations using the "evaluate, educate, relate" model"** *Badran* **"Improving preoperative consultation in an internal medicine residency program"** *Willett*	**Session 13: Faculty Development Advanced Workshop**** **Location: LG 503** *Professionalism* Jan Trial & Stephanie Zia	**Session 14: Workshop** **Location: LG 504** *Great Precepting: Three Essential Tools for Outstanding Teaching Moments* Belinda Fu
5:00 – 6:00 pm	**Session 15: COLLABORATORS' CORNER (Broad Conference Room)** **Poster Session I with hosted reception— Meet authors with "Cool Ideas" and discover collaborative possibilities**		

Plenary Session

<u>**Session 1 – Aresty Auditorium**</u>   <u>**8:15-8:50 am**</u>

Collaborate! Surprise! It is Complex
Patricia O'Sullivan, Ed.D.

LECTURE OBJECTIVES

At the end of this lecture, participants will be able to:

1. Define Collaboration

2. Identify in collaborators at this conference

3. List steps for a successful collaboration

Summary:

In the presentation we will focus on defining collaboration which is a commonly used term. We will distinguish collaboration from cooperation. We will highlight the movement toward collaborations including multidisciplinary collaborations. There are many strategies for successful collaborations and key steps will be highlighted. Finally, guidance will be given for how to initiate collaboration at this conference.

**Collaborate!
Surprise!
It's Complex!**

Patricia S. O'Sullivan, EdD
University of California San Francisco
patricia.osullivan@ucsf.edu

**Harvard Faculty Urged to Be Clear on
Student Collaboration**

Example of specificity now being encouraged.
   "For problem sets, students are strongly
   encouraged to collaborate in planning and thinking
   through solutions, but must write up their own
   solutions without checking over their written solution
   with another student," the syllabus said. "Do not
   pass solutions to problem sets nor accept them from
   another student. If you are ever in doubt, ask the
   course staff to clarify what is and isn't appropriate."

**By the end of this presentation,
you will be able to**

- Define collaboration
- Want to collaborate
- List steps for a successful f collaboration

How would you react?

Dr. X, Chief of the Division of Body Parts and Dr. Y, the Chief of the Medical Services, are delighted to announce the formation of a Center of Excellence in Q at the Great Hospital. The mission of the Center is to promote clinical and translational research in diseases that have a significant Q component. Dr. X will serve as the Director of the Center and Dr. Z as the Associate Director of the Center. Please, contact Dr. Z for consideration of potential **collaborations**.

What is your image of someone engaged in innovation and research?

MYTH

Shapin, S. The Scientific Life: A Moral History of Late Modern Vocation. Chicago, IL: University of Chicago press, 2008.

Isn't it easier not to collaborate?

- Might be more efficient, but working in isolation is not likely to produce high level scholarship
- May end with a limited view

Does she understand the financials? Time?

Is Cooperation an Option?

cooperation is defined as individual completion of tasks aimed at a shared goal/result. Arcidiacono, 2007

We Cooperate When

- We agree to add in our data so that there will be a larger sample size.
- We do a part of the study so that individual parts can be completed to assemble a whole.
- We replicate previous work.
- Engagement is largely passive.

ALL VERY IMPORTANT ACTIVITIES TO IMPROVE OUR SCHOLARLY WORK

Collaboration is Defined as

Working **together** to achieve a goal. It is a recursive process where two or more people or organizations work together to realize shared goals. This is more than the intersection of common goals seen in co-operative ventures, **but a deep, collective, determination to reach an objective by sharing knowledge, learning and building consensus.** Most collaboration requires leadership, although the form of leadership can be social.

Edited from http://en.wikipedia.org/wiki/Collaboration, 1/30/13

Characteristic	Collaboration	Cooperation
Actions	Similar	Different
Knowledge	Shared	Differential
Status	Similar	Asymmetry
Goals	Mutually negotiated and shared	Assigned
Interaction	Continual	Episodic
Learning	Collaborative through social interaction	?

Arcidiacono, 2007

Why Collaborate?

What Challenges Unidisciplinary Collaborations?

Four challenges
- inherent complexity of nature and society,
- desire to explore problems and questions not confined to a discipline,
- need to solve societal problems, and
- stimulus of technologies

So collaborations are becoming interdiscipliniary

Facilitating Interdisciplinary Research, 2005, p. 40

So collaboration is

COMPLEX

Toolbox for Philosophical Dialogue

- Collaborations are more effective when participants clarify their motivations, values, beliefs about science, and their definitions of appropriate data and methodology.
- These factors discussed and agreed upon prior to commencing a study

Eigenbrode, et al., 2007

Six Steps to Success

1. Careful selection of team members
2. Clarification of roles, responsibilities, and expectations including that of team leader
3. Regular, facilitated communication
4. Identifying processes for developing relationships and trust among collaborators
5. Examining effectiveness of team functioning on occasion
6. Ensuring that member organizations are tolerant of individual researchers' collaborative involvement

Amabile et al, 2001

So What Happens During the Collaboration?

- Phases
  - Developmental along discipline orientation, knowledge engagement, work orientation, and leadership (Amey and Brown, 2005)
  - Initiation, clarification, implementation, and interpersonal (Sargent and Waters (2004)
  - feedback loops among six core steps: retrospection and decision making, judgment, intuition and insight, knowledge, information and data (Klein, 1996)

Major Factors for Success

- environmental/institutional factors
  - commitment and resources
- team factors
  - communication, leadership, trust
- individual characteristics of team members
  - commitment, flexibility and agreeable to work with

(Aboelela et al., 2007)

Translate your Cool Idea into a Collaboration

When You Leave IME 2013

- Identify someone with whom you can
  - Talk with about ideas, beliefs, values
  - Discuss literature related to topic
  - Keep in communication with
  - Discuss the challenging issues of who gets credit for what
  - Develop a trusting relationship
- Start with a small study

To Understand Collaboration

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If more of us collaborate, just imagine!

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THANK YOU!

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GME & CME

<u>Session 2 – Aresty Auditorum</u>   **9:00 – 10:30 am**

Moderator: Ron Ben-Ari, MD

EVALUATION OF INDEPENDENT LEARNING PLANS IN PGY-1 RESIDENTS

Julie Nyquist, PhD and Cynthia Anderson, M.D.
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 9:00 – 10:30 am

BACKGROUND AND PURPOSE

Education within the health professions is under increasing pressure as is health care itself. Duty hours restrictions and increasing pressures to demonstrate resident competence has the potential of making resident training more stressful for both learners and faculty. Thus the importance of a smooth transition from medical school to residency and of assisting residents with their professional formation as specialists is increased. We present data on a pilot Independent Learning Plan designed to help PGY-i residents identify and establish competency-based goals.

METHODOLOGY

In July 2012, all 24 first year residents (family medicine, pediatrics, internal medicine and obstetrics/gynecology) were guided through development of their first individual learning plan. The following steps were used: 1) Discussion of excellent doctoring followed by each resident listing 3-10 characteristics/traits/behaviors he/she wants to be displaying at completion of residency; 2) Discussion of the Dreyfus model (describing characteristics as one advances from "novice to "expert") and the ACGME competencies, then completion of a self-assessment, marking their level of development for each sub-competency as novice, advanced beginner or competent; 3) Discussion of learning plans and professional formation and completion of initial individual plans (objectives and projected evidence they could use to demonstrate achievement of goals). Results were analyzed using descriptive statistics to gain insight into 1) traits most valued; 2) perceived level of development in relation to each competency and sub-competency; 3) distribution of objectives selected for ILP among the six competencies; and 4) the kinds of "evidence" residents selected.

RESULTS

1) Elements of professionalism and professional behavior were listed most frequently as characteristics most valued by new residents, with empathy, cultural sensitivity, compassion, and honesty the most common descriptors. In relation to ACGME Competencies: 100% included elements of professionalism, 50% patient care, 40% interpersonal & communication skills (ICS), 40% Practice-Based Learning and Improvement (PBLI), 25% teamwork element of Systems Based Practice (SBP) and 20% knowledge. 2) Within their self-assessment residents noted the highest percentage of sub-competencies as "novice" in Medical Knowledge (81.3%), and lowest in Professionalism (22.6%); 3) In the ILPs 88 objectives were listed by the 24 residents (average = 3.87). The percent of residents listing an objective for each competency was: medical knowledge=83.3%, patient care=75%, ICS=70.8%, PBLI=66.7%, Professionalism=41.6% and SBP=25%. 4) Residents listed 116 potential forms of evidence with feedback listed most frequently (44%), however 25% of their feedback evidence included suggestions that were subjective (ex. "I feel confident). A follow-up survey of the residents will be conducted to gain information on goal achievement and to assess whether there was follow-up with Program Directors/advisors.

Teaching professionalism and supporting professional formation are essential roles within residency. A process to guide residents in development and review of ILPs could have a positive effect on professional development.

Use Of A Modified Script Concordance Test To Measure Clinical Decision Skills in Pediatric Residents – A Pilot Study

Ronald Ferdman, MD, MEd
Children's Hospital Los Angeles, Department of Pediatrics Keck School of Medicine

Presentation time: 2/23/2013, 9:00 - 10:30 am

INTRODUCTION/EVIDENCE OF NEED
Single best answer multiple choice question tests (MCQT) are frequently used to assess learner performance pre- and post-short clinical rotations. While MCQT can assess factual knowledge, they are inadequate for testing clinical reasoning. Effective techniques for assessment of clinical reasoning are often too cumbersome to use for short rotations. An easily administered written test format to assess clinical reasoning would be of benefit.

PURPOSE STATEMENT
Examine the utility and acceptability of a modified script concordance test (mSCT) to assess clinical reasoning in pediatric residents in an Allergy-Immunology elective.

SUBJECT/SETTING
Pediatric residents (PGY1-3) completing a 2 or 4 week outpatient elective in the Allergy-Immunology Clinic at Children's Hospital Los Angeles.

METHODS
An Allergy-Immunology-specific mSCT was developed. The usual SCT format was modified by the addition of a Likert scale allowing the residents to self-rate their confidence in the answer they chose for each question. An expert reference panel of board-certified Allergy-Immunologists was used to norm the residents' scores. Pre- and post-rotation test and confidences rating scores were compared. An 8-item post-rotation questionnaire was administered comparing the residents' rating of the mSCT with standard MCQT for ease of use, utility for testing clinical versus factual knowledge, and overall like.

RESULTS
The unadjusted Cronbach alpha coefficient of the expert panel scores was 0.62. Thirteen residents were evaluated. There was a small, though statistically significant, increase in post-rotation test and confidence scores (p<0.05). Post-rotation test scores improved the least in PGY-3 residents, while confidence scores increased least in PGY-1 residents, though this did not reach statistical significance. There was a trend toward the association of increased confidence rating when the answers were correct or improved. Residents rated the mSCT as more challenging and difficult, but preferred the mSCT in terms of ability to test realistic clinical knowledge, learning from the test, and overall like (p<0.01).

CONCLUSIONS
Ease of administration of the mSCT format was comparable to standard MCQT. There was a significant increase in post-rotation test and confidence scores, with a trend toward more improvement in confidence for senior residents and more improvement in test scores for junior residents. While the mSCT format was more challenging, residents preferred it over MCQT for both learning and clinical relevance. The study was hampered by small number of subjects, but recruitment continues. Further studies are needed to determine the optimal mix of mSCT and MCQT type questions to obtain balanced assessments of both clinical reasoning and factual knowledge.

The Experiences Of Faculty Of Color In Predominantly Euro-American Schools Of Nursing And Medicine

Dena Hassouneh
Oregon Health & Science University

Presentation time: 2/23/2013, 9:00 - 10:30 am

BACKGROUND
Faculty of color (FOC) are under-represented in schools of nursing and medicine across the country. More information is needed about the experiences of FOC to inform the development of theory guided interventions intended to promote their recruitment, retention, satisfaction, and success in health professions education.

PURPOSE
The purpose of this study was to develop a substantive grounded theory of the experiences of FOC in predominantly Euro-American schools of nursing and medicine.

SUBJECTS/SETTING
Fifty-three FOC participated in the study from across the country.

METHODS
Data were collected via face-to-face and telephone interviews. Data analysis began with open coding followed by substantive open coding. The final stages of the analysis consisted of selective and theoretical coding to form the emerging theory.

RESULTS
Findings indicate that FOC are often subjected to Patterns of Exclusion and Control with the ultimate effect of controlling their influence on academic environments. The intensity of the exclusion and control experienced by FOC was mediated by the perceived threat posed by each individual FOC to the status-quo. In addition, the intensity of Patterns of Exclusion and Control, and FOC's response to these patterns was mediated by intervening protective conditions such as progressive school leadership and mentorship. School or departmental micro culture was also a factor that explained variation in FOC experiences. The core psychosocial process of our theory, Surviving, Resisting, and Thriving, described FOC's response to Patterns of Exclusion and Control as they struggled to progress in their careers and influence their environments. The final outcome was FOC Having Influence. Despite the barriers many FOC faced, they were able to have significant influence on students, residents, faculty, schools, and communities.

CONCLUSIONS
These findings document the complex ways that racism operates within predominately Euro-American schools of nursing and medicine and highlight the important roles of leaders and mentors in promoting the survival and success of FOC in health professions education as well as the numerous coping strategies that FOC employ. The profound influence the FOC have on academic environments is also noted.

Postgraduate Ethics Curriculum Step 1

Mojca Remskar Konia, MD
This abstract is the product of work in the course ACMD 591 under the guidance of Dr. Dixie Fisher.

INTRODUCTION/EVIDENCE OF NEED

All physicians consider adherence to ethical principles an essential professional competency. Ethics education in our postgraduate training, however, is limited to only a few activities during the entire course of residency (1, 2).

PURPOSE STATEMENT

We aimed to develop a comprehensive curriculum of ethics education, which utilizes high-fidelity simulation environment. The ethical problems are imbedded into clinical problems in order to provide realistic clinical conditions.

SUBJECTS/SETTING

A convenience sample of anesthesiology residents at a single anesthesiology department is included in the study.

METHODS

1. In stage I residents completed a Role concept essay (RCE), which assesses professional's understanding of and commitment to professional expectations and roles (3, 4). The essays were scored for six concepts derived from the literature (knowledge acquisition, life-long learning, commitment to basic ethics of the profession, standing by the professional code of ethics, to serve society, to participate in self-regulation) - 0 points for omission, 1 point for partial expressions and 2 points for full expression; maximum points 12.
2. In stage II residents are asked to fill out the DIT-II – a measure of moral reasoning and judgment (5).
3. In stage III residents get simulation-based ethics education (5 sessions, 2 hours each).
4. In stage IV they retake RCE and DIT II.

We have so far completed stage I.

RESULTS

We have scored 19 RCEs written by residents prior to participation in ethics curriculum. The data was not normally distributed. For the completed RCEs the score median was 6; min 4, max 9. Majority of residents considered attainment of knowledge and life-long learning as important professional roles (full expression of concept in 95% and 90% of residents). Thirty one % of residents fully expressed the concept of commitment to the basic ethics of profession and 26% fully expressed the importance of standing by the professional code. Only 31% of residents mentioned service to the society and no resident mentioned self-regulation as an important professional expectation.

CONCLUSION

Results of RCE can help us identify areas of deficiencies in understanding and commitment to medical professional expectations and roles. In our study group, we identified the inability to express their role in self-governance and decreased understanding of societal expectation of medical profession as the main areas for improvement, followed by commitment to ethical principles and professional codes. This information can be used to guide our ethics and professionalism curriculums.

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Workshop

<u>**Session 3 – LG 503**</u>   **9:00 – 10:30 am**

Certificate Workshop

Planning Educational Experiences: The Why, Who, What, When, Where and How (WWWWWH)

Julie G. Nyquist, PhD

Presentation time: Saturday, 2/23/2013, 9:00 – 10:30 am

Workshop rationale
Curriculum planning is a core educational skill. This workshop focuses on a simple acronym (WWWWWH or 5Ws and an H) to help participants master and remember the steps in planning curricular activities. The basic elements of planning an educational experience are the: Why, Who, What, When, Where and How (WWWWWH) along with a provision for program evaluation (evaluation of the experience itself). The first three areas (why, who and what) must be addressed first; that is what is the need, who are the target learners and what content and outcome objectives will be the focus for learning. Then based on those answers and on the resources available (time, money, personnel expertise, space, etc.) the next three elements can be addressed (when, where and how). The when and where are often part of the limiting parameters. Much of our creativity in education is in selecting the "best" teaching and assessment methods for any given teaching situation. Evaluation of the experience itself is the final step that helps us identify the needs or the "why" for the next educational experience.

Intended workshop participants
This workshop is part of the Faculty Development Fundamentals series and thus is intended for those who are relatively new to health professions' education or who have limited training in designing educational experiences.

Learner objectives
After attending the workshop participants should be better able to:
1.   Discuss the steps in planning educational experiences
2.   Apply relevant principles of learning at each step in the process (WWWWWH)
3.   Design an educational experience using a planning tool

Description of activities
In this session the participants will be examining their own teaching activities. Through discussion of the elements of planning a curricular experience they will gain a deeper understanding of the process of teaching from the initial examination of the needs of the learners, through use of learning principles to select appropriate teaching techniques. Participants will also be introduced to the ASCI system for selecting teaching techniques (Attention grabbers, Skill builders, Catalysts, Intensifiers). Throughout the workshop each participant will be completing his/her own plan for one teaching/learning experience using a planning tool based on the WWWWWH design.

Take-home tools
Handout for Creating Educational Experiences
Planning Tool for Creating a Curricular Unit
Planning Tool for Creating a Teaching Session

Pre-workshop preparation requested
Participants should bring to the workshop an idea for a one-hour classroom teaching session that they would like to create.

Workshop

<u>**Session 4 – LG 504**</u>   <u>**9:00 – 10:30 am**</u>

Essential Competencies for Future Educational Leaders
William A. Anderson, PhD (1) Maurice A. Hitchcock, EdD (2) Elza Z. Mylona, PhD (3)
(1) Michigan State University, (2) University of Southern California, (3) Stony Brook School of Medicine

Saturday, 2/23/2013, 9:00 – 10:30 am

Workshop Rationale:
Several national professional organizations have noted that the nation's medical schools and teaching hospitals stand at a crossroads of challenge and opportunity. Examples of future challenges include increased class size, faculty availability for teaching, increased expectations for learner competency, increased use of instructional and informational technologies, and dealing with a very different type of learner. Externally, new educational leaders will be challenged by declining funds for medical education, a nation of older and more diverse patients, and increased disparities in access to health care. Future educational leaders will require a much broader and more diversified set of skills and understandings to translate those challenges into relevant educational opportunities.

Targeted Audience:
This workshop will target Faculty Development professionals and medical educators with leadership aspirations.

Learner Objectives:
At the close of this workshop participants will be able to: / 1. Explain findings from the medical education literature on important challenges facing educational leaders and the new skills required to meet those challenges. / 2. Identify the essential competencies for future educational leaders. / 3. Explain different national and local strategies for achieving these competencies. / 4. Develop a career development "prescription" for preparing a future medical education leader, and / 5. Discuss issues and challenges in implementing their "prescriptions" at their home institutions.

Description of Activities:
INTRODUCTION (10 minutes)
        A. Statement of the Problem
        B. Workshop Faculty Introduction
        C. Session Objectives
        D. Session Agenda and Activities
 IDENTIFYING ESSENTIAL COMPETENCIES FOR FUTURE EDUCATIONAL LEADERS (35 minutes)
        A. Brief presentation: six competency domains from the literature:
                1) education and evaluation,
                2) leadership and management,
                3) educational research and scholarship,
                4) instructional technology and social media,
                5) career development, and
                6) the social context of medical education.
        B. Participant Activity #1: participants self-select into small groups and plan 5 needed competencies for a case (
        Dr. Toni Bennet) of a future leader to be promoted in 2 years to assistant dean.
STRATEGIES FOR ACHIEVING THE COMPETENCIES (35 minutes)
        A. Brief presentation of different ways to achieve the competencies. Strategies include individual study to
        mentoring, to short-term training programs, to structured degree/fellowship programs.
        B. Participant Activity #2: Participants will prescribe a strategy or strategies for achieving the competencies
        identified for Dr Toni Bennett in Activity #1.
ISSUES & CHALLENGES IN IMPLEMENTING LEADERSHIP PRESCRIPTIONS (5 minutes)
        A. Participants discuss issues and challenges in implementing their "prescriptions" at their home institution, and
        general issues in preparing educational leaders for the future.
        B. Participants brainstorm possible solutions.
SUMMARY AND EVALUATION (5 minutes)
        A. Review of session objectives
        B. Discussion of major "take-home" messages
        C. Workshop Evaluation

Take-home Tools:
Participants will take away a better understanding of educational leadership competencies and strategies available to reach them

Saturday, February 23, 2013

Skills Training

Session 5 – Aresty Auditorium   **10:50 – 12:20 pm**

Moderator: Win May, MD, PhD

Structured Pattern Analysis, A Novel Technique For Teaching Electrocardiograms, Is Superior To Teaching Via Methodical Electrocardiogram Analysis

Sean Balmain , Michelle Ellefson

Presentation time: 2/23/2013, 10:50 am – 12:20 pm

INTRODUCTION AND EVIDENCE OF NEED
Medical students and doctors in training often demonstrate poor electrocardiogram (ECG) analysis skills. ECG teaching is frequently via didactic transmission techniques or simple pattern recognition training. It has been proposed that transmission techniques and pattern recognition training are less effective than constructivist, guided learning techniques. ECG teaching rarely includes triage of cardiac rhythms into likelihood of causing patient compromise – a vital clinical skill. There is evidence of need for improved ECG teaching techniques to enhance medical students ECG rhythm diagnosis and triage skills. Specifically, there is literature documenting that junior doctors have low confidence in their ECG analysis skills and perform poorly on ECG reading tests.

PURPOSE AND STATEMENT
The purpose of this project was to develop a novel constructivist teaching method utilizing structured pattern analysis to teach ECG rhythm diagnosis and triage. We aimed to test the efficacy of this novel method compared to, and in combination with, the traditional transmission technique of ECG teaching via methodical analysis.

SUBJECTS AND SETTING
Twenty-one medical students from the British medical school system participated in this study.

METHODS
Students were randomized into two groups and underwent two contrasting ECG teaching sessions. Structured pattern analysis teaching (session 1): interactive discussion of ECG rhythm diagnosis, key features of the ECG pattern, likelihood of patient compromise. Methodical analysis teaching (session 2): interactive discussion of ECG rhythm diagnosis, etiology, pathophysiology, treatment and likelihood of the rhythm causing patient compromise. Group A (n=11) was taught session 1 followed by session 2. Group B (n=10) was taught session 2 followed by session 1. Students were tested on ECG rhythm diagnosis and triage skill after completing either session 1 or session 2 (test 1) and after completing both teaching sessions (test 2). Both tests included similar rhythms and were of comparable difficulty.

RESULTS
There was a significant interaction of group and test session, $F(1,19) = 6.53$, $p = 0.02$, with Group A scoring higher than Group B on test 1, but not test 2 (figure). The effects of group and time were not significant.

CONCLUSIONS
Teaching of ECG rhythm diagnosis and triage using structured pattern analysis was more effective than teaching methodical analysis when the techniques were used in isolation. Combination of techniques yielded similar learning outcomes.

Comparative Effectiveness of 3- vs 2-dimensional Visualization in Training Novices for Complex Laparoscopic Procedures

Kyle G. Cologne, Joerg Zehetner, Anthony Senagore
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 10:50 am - 12:20 pm

INTRODUCTION/EVIDENCE OF NEED
Complex laparoscopic surgery is difficult to master. This is made harder by the fact that one must interpret a 3 dimensional environment on a 2 dimensional viewing screen. It remains unclear exactly what effect the use of 3d technology has on the training of a surgeon. Shortening the learning curve in the era of resident work hour restrictions would be a great advantage to trainees.

PURPOSE STATEMENT
Our aim is to evaluate the effectiveness of 3d on learning and performing advanced laparoscopic tasks in the lab and to see what effect (if any) 3d has on the ability to learn laparoscopic surgery. / / Subjects/Setting : Junior surgical residents and medical students without significant laparoscopic experience (novices) are evaluated in the performance of a variety of tasks.

METHODS
Inanimate models are used to assess laparoscopic suturing and transfer of objects on a peg-board. Participants repeat the task in 2d and 3d. Time and error rates (including missed attempts, dropped objects, and failure to complete the task) are calculated and scored. Surgical procedures performed by residents are evaluated by a 3rd party viewing a videotape of the procedure (who is blinded to whether it was performed in 2d or 3d). This reviewer will again evaluate error rates and efficiency of performing pre-defined steps of the procedure.

RESULTS
Preliminary data demonstrate a 50% decrease in the time to complete the task among novice providers.

CONCLUSIONS
Early results indicate that 3d significantly improves visualization and ability to perform these complex tasks. It is likely that 3d technology is very effective at shortening the learning curve to train surgeons in advanced laparoscopy – a very important factor in the era of work hour restrictions.

The Impact of Practical Pap Smear Cytology Lecture on Practice of Pathology Residents

Abdolali Ebrahimi *1, Jaleh Mohsenifar 1
1-Department of pathology, Taleghani hospital, School of Medicine, Shahid Beheshti University of Medical Sciences, Tehran, Iran
Corresponding author: Associate professor of surgical and clinical pathology and MSc in Molecular Medicine
Presentation Time: 2/23/2013, 10:50 am – 12:20 pm

INTRODUCTION

Pap smear is a cancer screening test for cervical cancer and precancerous lesions; it is a useful experiment for detection of viral, bacterial and fungal diseases of uterine cervix as well. Pap tests at regular and standard intervals are most useful and considered as a highly effective test when cytology practices are optimized. Generally academic members just accept or changed the final cytology diagnosis which made by residents with a few feedback by using microscope. It seems it is required to present all the key points to the residents by using useful cytology pictures and describing all related definitions clearly based on faculty member 's experiences and up-to-date to optimize the education. Lecture based teaching is considered as traditional method and less effective in comparing with new teaching methods. However, it seems using traditional method in the right time for the right learners could have high educational benefits, this survey amid to test this idea.

MATERIALS AND METHODS

The survey was nearly double blind because one academic member and all pathology residents were not aware about the research. In this study the Pap smears slides were distributed equally between all residents in numerical orders. The pap smears reports of the same resident group were evaluated by the two faculty members two weeks before and after educational practical cytology lectures. The practical lectures just were presented by corresponding author.

RESULTS

Before practical lecture based education, the true specimen adequacy, endocervical cells/ Transformation Zone component , Candida , atrophy and shift in flora suggestive of bacterial vaginosis reports were 81.5% , 74% , 78%, 70.5% and 81.5% respectively. After the education the percentages of true reports were improved to 100%, 90%, 100%, 100% and 100% respectively.

DISCUSSIONS

There were dramatic improvements in nearly all analyzed pap cytology reports items after practical lecture based educational intervention. However, there was no smear with dysplasia during the research to analyze impact of the educational method on dysplasia diagnosis.

CONCLUSIONS

Implementing practical Pap cytology lecture is an effective educational method to optimize resident pap cytology reports.

KEY WORDS

Papanicolaou Smear, Medical Education, Cytopathology, Lectures

Workshop

<u>Session 6 – LG 503</u>   <u>10:50 – 12:20 pm</u>

Certificate Workshop

Interactive Large Group Teaching

Dixie Fisher (USC) and Gail Rice (Loma Linda)
USC Keck School of Medicine; Loma Linda University School of Medicine

Presentation time: Saturday, 2/23/2013, 10:50 am – 12:20 pm

"Lectures aren't bad…..bad lectures are bad.
Lectures aren't bad when used properly to motivate, inspire, or push thinking."
                                    — Jeff Utecht

Workshop Rationale:
What is the purpose of a faculty member in the lecture hall in this day of technology and instant access to knowledge and content? Lectures still have a purpose, but it's more than delivery of content. Presenters must determine what they want to have "stick" in the minds of their learners. Recent educational research suggests ways to lecture that dramatically increase retention, and still allow instructors to "cover" the topic. This workshop will demonstrate several methods that can be applied in the lecture hall to improve learner interest and retention, while making lecturing easier and more fun for the presenter.

Intended workshop participants
The methods presented are intended for anyone who presents to a large group and is interested in having the audience "remember or be able to apply" key concepts. The workshop will be especially useful to faculty lecturers and to those who present at meetings.

Participant objectives
Workshops attendees will be able to:
1. Apply the "Three Principles of Making Learning Stick" to their presentations
2. Build slides following 2 rules to guarantee interest and retention
3. Employ "pause procedures" to improve student comprehension and retention

Description of activities
   1. Participants will experience sure-fire methods for making learning "stick.
   2. Each participant will design a PowerPoint slide to accompany a key point from an upcoming lecture.
   3. Each participant will apply one or more methods presented in the workshop to an upcoming lecture or presentation.

Take-home tools
1. Three principles of "What Makes Learning Stick"
2. Interactive Pauses for use during lecture
3. References and handouts for further study

Pre-workshop preparation requested
None

Workshop

WORKSHOP: Full Steam Ahead: When the Teamwork Train Gets Derailed, and How to Get It Back on Track

Nancy Mesiha, MD; Ali Shakir, MD; Dale Vincent, MD; Julie Nyquist, PhD
St John Hospital & Medical Center, Detroit, Michigan; St John Hospital & Medical Center, Detroit, Michigan; Tripler Army Medical Center, Honolulu, HI; Keck School of Medicine, University of Southern California

Saturday, 2/23/2013, 10:50 am – 12:20 pm

Workshop Rationale
ACGME and RRC guidelines emphasize the development of competency in interprofessional communication, and training programs often use simulation experiences to teach these skills. Principles of effective communication have been identified by training programs like AHRQ's Team STEPPS, such as identifying a leader, flattening the hierarchy, and creating a shared mental model among team members. But the real world is messy, and glitches occur in real and simulated crisis events that can completely derail a team, or reduce its effectiveness. The purpose of this workshop is to identify common problems that can stop a team in its tracks, and to develop strategies for anticipating and overcoming these problems. For example,
- What do you do when a residents won't say, "I'll be the leader?" (Leadership)
- How do you use directed communication when you have forgotten the name of your fellow team member, even though you work with that individual every day? (Interpersonal communication)
- Who's running the code, when everyone on the floor shows up? (Role clarification)
- How do you motivate the radiology pre-select intern to take an active role? (Motivation)
- How do you actually get the residents and nurses to train together? (Workload)
- How do you prevent a new resident team leader from getting stuck on an ACLS protocol? (Distractions)

Intended Workshop Participants:
The intended audience for this workshop includes medical educators and healthcare personnel who teach teamwork skills for crisis events to medical students, residents, nurses, and other healthcare providers.

Learner Objectives:
At the end of this workshop, participants will be able to
1. Describe common problems that can derail a team in a real or simulated crisis event.
2. Apply a theoretical framework to the analyze problems.
3. Formulate and employ strategies grounded in educational theory to get the team back on track.

Description of Activities:
1. Crowdsourcing Using an audience response system
2. Disaster dead ahead! Situations that can derail a team in a heartbeat; Kinks in the track! Problems with individual team members; The bridge is out! Problems with the whole team
3. Disaster planning: Brainstorming in small groups
4. Repair & restoration: Applying educational theory and practice to get the train back on track
5. Lessons learned and workshop summary

Take-home tools:
- Scripts that can repair and restore team effectiveness
- An educational framework for identifying and implementing strategies that work

Pre-workshop preparation requested: None

Simulations

<u>Session 9 – Aresty Auditorium</u>   <u>1:40 – 3:10 pm</u>
Moderator: Anita Richards

Transition to Residency Course Improves Student Confidence

Hans House, MD; Jennifer Erbes, MD; Nicholas Kluesner, MD
University of Iowa

Presentation time: 2/23/2013, 1:40 - 3:10 pm

INTRODUCTION/EVIDENCE OF NEED
In 2010, the College of Medicine at the University of Iowa set about dramatically overhauling their curriculum. As a part of this process, a "capstone" course given just before graduation was proposed by curriculum developers. Students often feel unprepared for the transition that occurs between medical school and residency. 58% of surveyed fourth year medical students wanted a capstone course added to the curriculum.

PURPOSE
The purpose of a Transition to Residency course is to consolidate student's clinical education and help them feel prepared to function as house staff in a hospital. The goal of this course is for students to be willing to identify themselves as "doctors".

SUBJECTS
50 fourth-year medical students enrolled in a new "Transition to Residency" course held just prior to graduation.

METHODS
Students were given a pre-test assessing their willingness to identify themselves as physicians. They were then presented with a two-week curriculum that reviewed common inpatient problems, communication and transitions of care tasks, Advanced Cardiac Life Support (ACLS) certification, and basic procedures. Simulation with high-fidelity manikins, live actors, and task trainers was used extensively throughout the course. Finally, after a four-hour "in-situ" simulation of a day in the life of an intern, the students were given the same questions as the post-test.

RESULTS
Prior to the course, 14.6% of students reported they were "ready to take call as a PGY-1" and after the course 60% reported they were ready ($p < 0.0001$). Prior to the course, 14.6% reported they would feel comfortable responding to a code blue, compared to 62% afterwards ($p < 0.0001$). The students were also asked if they would help should a medical emergency occurred on an airplane. Prior to the course, 54.2% would identify themselves to the flight attendant, and after 84% would do so ($p= 0.0014$).   /

CONCLUSIONS
The Transition to Residency course is a popular and enjoyable elective option for fourth year students at the University of Iowa. One-third of the graduating class re-arranged their schedules to take it when it was added as an elective option. The pre and post-test measurements indicate that the course was successful at improving the student's confidence. Since confidence does not necessarily equate to competence, a better outcome measurement should be explored, such as comparing residency program evaluations of capstone course graduates to students who did not take the course.

Use Of E-Simulation (Virtual World) To Teach Communication Skills in Final Year Medicine

Sharyn Milnes

Presentation Time: 2/23/2013, 1:40 – 3:10 pm

IINTRODUCTION/EVIDENCE OF NEED

The use of web-based and blended learning may be useful in teaching communication of bad news for medical students. The emphasis on clinical exposure in medical degrees has made teaching communication skills difficult due to issues of equity in students' clinical exposure to relevant communication situations and adequate role models. Based on current evidence and the nature of rotations for final year students, the focus for Ethics, Law and Professional Development (ELPD) in final year of the Deakin University medical curriculum is End-of-Life discussions and decision-making. Four interactive on-line simulations (Medesims) were developed using real scenarios with the student in the role of the treating/communicating physician. Assessment was embedded into the simulations by scoring the student's prompt choices (what to say to the virtual patient). Prompt choices should be informed by the literature and virtual patient/family responses to given prompts. Student score is displayed at the end of each attempt.

PURPOSE STATEMENT

Evaluate students' learning experience in response to MedeSim learning tool in terms of usability, conformity to aspects of teaching and learning and relevance to the student's perception of the needs of the profession.

SUBJECTS/SETTING

Final year medical students at Deakin University (Victoria, Australia) from the 2011 cohort.

METHODS

A questionnaire with a total of 26 questions; twenty 5-point Likert-scale, three binary yes/no and three open-ended questions. Quantitative results were evaluated using non-parametric analysis. Qualitative thematic analysis was performed on open-ended questions. Survey questions focused on MedeSims concordance with; needs of the profession, relates logically to overall curriculum, learning and teaching, assessment and teaching.

RESULTS

112 students were asked to complete a survey of which 86 responded (77%). Student quantitative responses to questions relating to pedagogical emphases were positive. When asked if as a teaching resource MedeSim: meets the needs of the profession, 82% strongly agreed/agreed 5% disagreed, 1% undecided; Relates logically to overall curriculum, 78% strongly agreed/agreed 10% disagreed, 0% undecided; Learning & Teaching, 71% strongly agreed/agreed 16% disagreed, 1% undecided; Assessment and Teaching 40% strongly agreed/agreed 30% disagreed, 17% undecided; and Assessment 54% strongly agreed/agreed 19% disagreed, 14% undecided. Qualitative results involved safety, environment, opportunities for skills acquisition and feedback/assessment.

RESULTS

Students find MedeSims a worthwhile task for both learning and practising essential skills of the profession. Automated assessment is a strength of the simulations but needs to be refined to ensure learning outcomes are being met. Further work needs to occur to assess long term skill outcomes.

Training Nurses for Shift Management Through Simulation

Zlatkin Igal, RN, MN and Peker Haia, RN, MA

Presentation Time: 2/23/2013, 1:40 – 3:10 pm

INTRODUCTION/EVIDENCE OF NEED
Commencing shift management is a stressful situation for a novice nurse. The anxiety and uncertainty that novice shift managers feel stem from lack of experience in managing other staff members, the multitask nature of the job and the required on-going, sometimes critical, decision making. This stress is aggravated by more complex in-patients and shortage in manpower which may avert rapid yet quality response to emerging needs. Traditionally, novice nurses learned to perform effective shift management through trial and error. In order to diminish this stress and increase effectiveness, the novice nurse should be specifically prepared for shift management duties.

PURPOSE STATEMENT
 It is suggested that a specific workshop, based on simulations that portrayed real world situations in a controllable format, may provide an effective nurse's preparation for shift management.

METHODS
The four simulation-based workshops was conducted in 2010-2012 in the Carmel Medical Center, Israel, for 82 novice nurses. Six scenarios were prepared by the researchers and validated by expert judgment. Each of the scenarios depicted both routine and adverse events which are common in shift management. Also, these scenarios require fast decision making and the use of knowledge and skills in new situations. Each participant was exposed to all scenarios. Each scenario was analyzed and feedback was provided to each participant by the supervising staff. Immediately after the workshop and again six months after commencing shift management, the participants rated the usefulness of the workshop by the questionnaire developed by the researchers and validated by the expert judgment. It is assumed that the immediate ratings expressed satisfaction with the workshop, while the later mirrored its usefulness.

RESULTS
The average ratings were in range between 3.5 to 3.85 (out of 4). There wasn`t found any significant difference neither between both questionnaires nor between the workshops.

CONCLUSIONS
The results show high level of participants' satisfaction as well as their rating of usefulness of the workshop. Simulation techniques provide a realistic yet safe learning environment that more closely represents clinical care, efficiently prepare novice nurses for shift management tasks and reduce their anxiety. It`s suggested to provide an additional study in order to check the quality of shift managers' performance as a function of their preparation by measurable criteria.

Does Adding Simulation-Based Deliberate Practice Teaching of Informed Consent and Spinal Anesthesia To A Baseline Curriculum Improve Resident Learning and Retention?

Ankeet Udani, MD, Alex Macario, MD, MBA, Maria Tanaka, MD, Pedro Tanaka, MD, PhD
Stanford University Medical Center, Department of Anesthesia

Presentation Time: 2/23/2013, 1:40 – 3:10 pm

BACKGROUND AND INTRODUCTION
Properly obtaining informed consent for spinal anesthesia and correctly performing the technical aspects of the spinal are two competencies expected of anesthesia residents. PGY2 anesthesia residents completed a survey before their start orthopedic rotation informing their experience with the spinals. The primary goal of our study was randomize residents to determine if adding deliberate practice (DP) teaching further improved performance of these two tasks.

METHODS
After IRB approval, nine residents in a base curriculum consisting of one hour's review of written instructional materials and video materials to reinforce the procedural checklist. Participating residents were randomized so that five received in addition to the base curriculum, individual, faculty-led, DP teaching during their module. This teaching session used an iterative process requiring mastery of each step before proceeding to the next for obtaining informed consent and performing spinal anesthesia on a standardized patient and spinal simulator, respectively. All residents had a pre and post-module test for informed consent and spinal anesthetic technique. To evaluate retention and clinical application, each resident's next three patient informed consents and spinal anesthetics were scored.

RESULTS
Residents in the CBG had performed an average of 30 spinal blocks prior to enrollment in our study compared to 10 in the DPG (p The base curriculum group (BCG; N=4) increased their informed consent test score from 50% pre-module to 82% post-module (p<0.001). The group additionally receiving deliberate practice teaching (DPG; N=5) increased their informed consent test score from 53% to 93% (p<0.001). An average of 3.2 days later, the BCG scored 86% obtaining informed consent on actual patients versus 87% for the DPG (p=0.75).
The BCG increased their spinal anesthetic technique test score from 76% pre-module to 85% post-module (p=0.21). The DPG increased their baseline spinal anesthesia test score from 69% to 95% (p<0.04). The BCG scored 81% performing spinals on actual patients versus 85% for the DPG (p=0.47). The average total operating room time performing a spinal block for the BCG was 788s versus 807s for the DPG (p=0.89).=0.06). Performance was capture in video. Two physicians rated assessment independently. Scores were compared and a common score was given.

CONCLUSIONS
In this pilot study, the base teaching curriculum significantly improved residents' performance of obtaining informed consent and spinal anesthesia. Adding DP teaching did not appear to show an independent incremental benefit. To better understand the role of DP to improve medical education, we are increasing our sample size and focusing on more novice residents.

The Association Between Integrating Simulation Into Nursing Education, Students' Performance Level and Approaches During Their First Clinical Rotation

Igal Zlatkin, RN,MA (1); Dan Benor, MD, Prof.(2); Ilana Livshitz-Riven, RN, PHD(2)
(1)-Carmel Medical Center, Haifa, Israel; (2)-Ben-Gurion University of Negev, Beer-Sheba, Israel

Presentation time: 2/23/2013, 1:40 - 3:10 pm

INTRODUCTION/EVIDENCE OF NEED
Preparing students for professional performance in the "real world" is the main trust of the nursing education. Appropriate instructional methods are required in order to alleviate anxiety and uncertainty of the novice nursing students during their transition from theory to practice. Simulation enables reconstruction of reality and allow to practice in controllable and safe environment. Integrating simulation into the curriculum may strengthen knowledge, integrate between learned subjects, develop motor skills and improve students' self-efficacy and self-confidence. Yet, only a handful of studies measured the effectiveness of this method. /

PURPOSE STATEMENT
The purpose of the present study is to examine the effect of integrating simulations into nursing curriculum by comparing the performance, attitudes and anxiety level of students that have been learning basic nursing by simulations with those of students that learned by lectures, discussion groups and role playing without simulations.

SUBJECT/SETTING
The present study is a prospective and comparative with a convenience sample of 42 nursing students during their first clinical rotation in a medical center in Israel. For 18 of them simulation was integrated into the curriculum, while for the others it wasn`t. Both the groups were comparable in regard to age, gender and ethnicity. Psychometric test grades of the simulation group were significantly lower than those of the comparison group.

METHODS
The study was based upon observations on the second and on the last week of the first clinical rotation on students' performance of basic nursing activities (bathing patients, measuring blood pressure, pulse and temperature). Each observation was scored by checklists that were developed and validated by the researchers. The situational anxiety level was measured by Spielberger questionnaire. Students' professional satisfaction was measured by a questionnaire designed by the researchers.

RESULTS
The results indicate significantly higher performance levels of all the three basic activities of students trained by simulations both at beginning and the end of the rotation. Multiple regression analysis proved that simulation is the only predictive variable of performance while age, gender, ethnicity and psychometric test grades are not. Levels of job satisfaction and choosing nursing as a career are significantly higher amongst simulation group. No difference in the situational anxiety was detected between the groups.

CONCLUSIONS
Simulation is an effective preparation of nursing students for clinical rotations. It is suggested to repeat this study within a larger population and for a longer period of time.

Workshop

<u>**Session 10 – LG 503**</u>   <u>**1:40 – 3:10 pm**</u>

Certificate Workshop

Providing Educational Feedback To Improve Performance– An Interactive Skills Development Workshop

Win May, MD, PhD; Denise Souder, EdD; Chi-Chi Fung, PhD
USC Keck School of Medicine

Presentation time: Saturday, 2/23/2013, 1:40 – 3:10 pm

Target Audience:
Faculty members who are called upon to give feedback to medical students on deficiencies in clinical or interpersonal and communication skills.

Workshop Goals:
To train faculty members to provide effective feedback to medical students to improve their performance.

Session Objectives:
At the end of this workshop, participant will be able to:
- Define feedback
- Differentiate between feedback and evaluation
- Identify reasons why feedback is not provided
- Describe the principles of feedback
- Describe levels of feedback
- Incorporate strategies for providing feedback to millenials
- Demonstrate ways to integrate feedback into clinical teaching
- Explore the receiving of feedback by learners

Activities Description:
This is an interactive skills development workshop. There will be a brief review of the literature on the importance of feedback, the three levels of feedback, and the theoretical rationale. With more of the millennial generation in our student population, focus will be given to strategies that would allow participants to provide effective feedback to learners. A model that has been used to provide effective feedback to learners will be presented. Workshop participants will divide into groups and practice the skill of giving as well as receiving feedback through role play. Debriefing of the session will explore what strategies were successful and what could be improved upon.

Pre-workshop preparation requested
None

Workshop

<u>Session 11 – LG 504</u>   <u>1:40 – 3:10 pm</u>

WORKSHOP: REFLECTING ON REFLECTIONS: THE HOW AND WHY OF FOSTERING REFLECTIVE CAPACITY IN YOUR LEARNERS
Lavjay Butani, Albina Gogo, Rebecca Blankenburg, Michele Long
UC Davis, UC Davis, Lucile Packard Children's Hospital, UC san Francisco
Saturday, 2/23/2013, 1:40 – 3:10 pm

Rationale:
The ability of learners to reflect critically on experiences remains poor. The literature supports that professional formation, empathy and diagnostic accuracy can all be aided by using a reflective as opposed to a reflexive approach. This workshop will a) review the concept of reflective capacity and the 3 domains of reflection and b) guide clinicians and educators on how to incorporate reflection-promoting strategies within existing clinical activities for learners.

Objective:
1. Define the terms reflection and critical reflection as they apply to an educational context
2. Design and implement educational interventions to foster reflective capacity in learners in their own settings
3. Explain the value of providing formative feedback on learner reflections

Description of activities:
The workshop will start with a discussion on the meaning of reflection and on the reflective domain of doctor as a person. Using a video clip, a group discussion will review the importance of empathy and the reasons for its decline. Participants will engage in a brief reflective writing exercise to promote personal reflection. After a debriefing that addresses the benefits of narrative writing, we will address the definition of reflective practice and its role in promoting empathy. Two strategies to stimulate reflection will be introduced followed by a discussion on the role of feedback on reflections to stretch learners to a critical level. A guided small group discussion will then explore additional strategies to promote reflection in the participants own settings. The workshop will then focus on the other two domains of reflection- reflection in the role of doctor as scholar and reflection in the role of doctor as expert. In small groups, participants will work through scenarios to articulate feedback for the learner with difficulty. After a report back, a brief discussion will follow on how to use a reflective approach (emphasizing the loops of learning concept) as an alternative strategy to provide feedback and help learners develop a more impactful learning plan. The session will end with a commitment to act.

Take Home Tools:
Tool box of strategies and activities that can be used to effectively and easily stimulate relfection amongst learners

Pre-workshop preparation: None

Best of Cool Ideas

Session 12 – Aresty Auditorium   3:30 – 5:00 pm

Moderator: Julie Nyquist, PhD

Enhancing Consultations using the "evaluate, educate, relate" Model

Sarah Badran, MD; Julie Nyquist, PhD
Keck School of Medicine of the University of Southern California

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

IDEA
Use of an interactive telephone consultation curriculum based on the model "evaluate- educate- relate" to improve quality of consultations provided by pediatric cardiology fellows.

EVIDENCE OF NEED AND IMPORTANCE
Telephone consultations are a key method of communication among health care providers (Sarvet 2011, Stille 2003, Chatterjee 2001, Forrest 1999). Inter-physician communication has been identified as a key component to improving the referral-consultation process between general practitioners and subspecialists (Gandi 2000, Stille 2006, Forrest 2000, O'Malley 2011, Stille 2009). With no formal training, fellows may not learn how to conduct optimal consultations, which can result in tense inter-physician interactions (Wadha 2006) and inferior patient care (O'Malley 2011).   The proposed study will implement a training program using a newly designed model called "Evaluate, educate, relate" to relay to the trainees these three key purposes of the telephone consultation.

DESCRIPTION OF PROJECTS
The three first year and three third year fellows in pediatric cardiology will be paired. Each pair will undergo the training, which will take place for one hour a day for two consecutive weeks. Once a month, the session will include all nine fellows. Methods used in the training will include, video demonstration or poor and excellent consultation, direct instruction in the model, use of 'mock' phone calls to practice skills, analysis of actual consultations for accuracy, promptness, education provided and communication skills. The monthly session will serve as a 'refresher' for all nine fellows. By the end of the initial training the fellows should be able to: 1) follow guidelines to collect key data within a telephone consultation (Evaluate); 2) reframe the question if needed and provide appropriate limited education to the provider (educate); and 3) demonstrate appropriate interaction in telephone conversation (relate).

QUESTIONS OR DESIRED OUTCOMES
Data will be collected in relation to Kirkpatrick levels 1-3; 1) trainee reaction to the new telephone consultation curriculum 2) trainee knowledge and attitude will be measured using a retrospective pre-post questionnaire; 3) Trainee 'on the job' behavior will be assessed using (a) direct observation of their consults pre and post intervention using a standard rating form and (b) pre and post satisfaction survey of physicians calling for consultation.

DEVELOPMENT PROGRESS
The concept of formally teaching consultation has been accepted by relevant faculty / What is needed (aspects seeking audience feedback and/or collaboration): If the 'Evaluate- educate- relate' model can be proved effective in pediatric cardiology, it can be used in other medical specialties to improve the consultation process, inter-disciplinary cooperation and patient care outcomes.

Validation test of an Interactive Computer-Based Laparoscopic Hysterectomy Trainer: A New Educational Tool

Allan S. Lichtman, M.D. University of Southern California Keck School of Medicine, Department of Obstetrics and Gynecology Henk W.R. Schreuder, M.D., Ph.D., University Medical Center Utrecht, The Netherlands, John P. Lenihan Jr, M.D. University Of Washing

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

In today's medical education environment, surgical training is severely compromised by several issues including: fewer surgeries performed; shorter work hours; fewer years of clinical experience. Currently, learning to perform surgery utilizes: non-surgical laparoscopic skills exercises, simulation and actual operating room experience. Clearly, additional innovative educational tools are required to augment surgical training.[1] We have created a unique interactive laparoscopic hysterectomy trainer that provides a new method to improve cognitive proficiency and enhance the mastery of pelvic anatomy. This is achieved prior to performing live surgery, on a patient, in the operating room. Figure 1 is one frame from the trainer demonstrating an example of an interactive step. The student, in this frame, is challenged to find and place the correct instrument with which to cauterize the round ligament.   The trainer uses multiple didactic modalities: interactive learning; high definition video; animations; annotated stills, written and auditory instructional material. These provide a consistent, iterative and coordinated building-block approach to teaching the details of anatomy and surgery, including errors and complications. Each surgical step has an overview that is then divided into its component segments. To proceed to the next step, the learner: selects the appropriate instrument; assigns the correct surgeon; places the instrument into the proper port and then is required to designate the accurate anatomic site. The video of the actual surgical step is then shown with audible and written instructions detailing the correct surgical technique. Each step is then followed by an interactive quiz to further enhance anatomic and surgical learning. The trainer also provides formative and summative feedback to the learner and, at the conclusion of the program is available as a printout to the supervising faculty. We hypothesize that completion of this training program will assure a high and consistent level of knowledge for residents before they perform their first hysterectomy of any type. This allows the surgical learner, in the operating room, to concentrate on improving surgical skills having already mastered the cognitive material. Adaptations of the Trainer may be useful for teaching anatomy to medical students as well as a tool for teaching continuing education courses for practicing gynecologists. Testing the validity of this hypothesis is required. Residents are required to learn practical academic information, such as pelvic anatomy, surgical steps, complications and avoidance of errors. We have developed an evaluation instrument that uses still frame and video material to establish a "hysterectomy knowledge curve." Test question design includes multiple-choice, fill-in-the-blank, matching and interactive identification of anatomy and surgical steps on surgical photos. Faculty, fellows and residents of six academic institutions will take the pre-test to establish a "knowledge curve." PGY 1 and 2 residents from those institutions will then utilize the trainer and take a comparable post-test. A control group of residents will take both tests without using the trainer.

STUDY GOAL
Evaluate the ability of the Hysterectomy Trainer to enhance surgical cognitive knowledge for PGY 1and 2 Gynecology Residents.

REFERENCE
1. Malcolm G. Munro, MD, FRCS; Surgical Simulation: Where Have We Come From? Where Are We Now? Where Are We Going?; Journal Of Minimally Invasive Gynecology (2012) 19, 272-283 .

Use of Mentored Residency Teams to Enhance Addiction Medicine Education

Kenneth Saffier, MD (1), Julie Nyquist, PhD (2), Steven Eickelberg, MD (3), Maureen Strohm, MD (4)
(1) Contra Costa Regional Medical Center, (2) Division of Medical Education, University of Southern California, (3) Medical Education and Research Foundation for the Treatment of Alcoholism and Other Drug Dependencies, (4) Eisenhower Medical Center

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

IDEA
Mentored faculty and resident teams will integrate addiction medicine education into primary care residencies, ensuring future practitioners who can competently address these issues.

RATIONALE/NEEDED
Addiction and harmful use of alcohol, drugs and tobacco affects 120 million Americans, more than all persons with heart disease, diabetes and cancer combined (1). Effective screening tools exist to identify those at risk or affected with the chronic disease of addiction but due to societal stigma and limited training, residents are often unprepared to deliver essential preventive care and treatment of substance use disorders (SUDs) (2). A national survey of residency directors and leaders in medical education calls for increased training and integration of SUDs into physician training (3,4). The Medical Education and Research Foundation's Champions Project seeks to advocate for and integrate SUD education into family medicine and pediatrics residencies ensuring that future practitioners can competently address SUDs, especially within adolescence, when most addiction begins.

METHODS
Two faculty members and one resident from five primary care residencies applied and were accepted as "Champions" for this 22-month project (8/2012- 6/2014); encompassing a total of 240 residents; 120 family medicine, four programs and 120 pediatrics, one program. The project includes the following: 1) completion of personal and program needs assessments; 2) 10 hours of onsite training in curriculum development combining didactics with structured small group exercises; 3) 25 hours of onsite education in SUDs including extensive use of case discussion; 4) mentored meetings online every one-two months to plan interventions and track progress; 5) 12 hours of additional onsite education and learner evaluation in 2013; and 6) evaluation of the project and all local curricular innovations.

EVALUATION
The evaluation includes: 1) assessment of educational sessions using rating forms; 2) assessment of learning of the "champions" through pre-post knowledge assessment using a validated tool - the Physicians' Competence Substance Abuse Test (P-CSAT); and pre-post attitude and experience assessment using an Attitude/Experience questionnaire; 3) assessment of champions behaviors through ongoing tracking of new SUDS educational activities; and through use of commitments to act with follow-up. Impact on resident knowledge and attitudes is being tracked through use of the P-CSAT and Attitude/Experience questionnaire pre-post project in all participating programs.

IMPACT ON FIELD
The MERF Champions' Project can serve as a model for successful integration of SUD education into residencies in order to eliminate the current educational and practice gap and enhance prevention, screening, diagnosis and treatment of SUDs.

REFERENCES
1. The National Center on Addiction and Substance Abuse at Columbia University, Addiction Medicine: Closing the Gap between Science and Practice, June 2012. www.casacolumbia.org (accessed 11/19/12).
2. Blumenthal,D; et al., Preparedness for clinical practice: reports of graduating residents at academic health centers. JAMA. 2001;286(9):1027-1034 (doi:10.1001/jama.286.9.1027) http://jama.ama-assn.org/cgi/content/full/286/9/1027 (accessed 11/19/12)
3. Isaacson, J.H., Fleming, M., Kraus, M., Kahn, R., Mundt, M. (2000). A national survey of training in / substance use disorders in residency programs. J. Stud. Alcohol, 61, 912-915
4. O'Connor, PG, Nyquist, JG, MsLellan, AT, Integrating Addiction Medicine Into Graduate Medical Education in Primary Care: The Time Has Come. Ann Intern Med. 2011;154:56-59

Improving Preoperative Consultation in an Internal Medicine Residency Program

Lisa Willett, Julie Nyquist
Department of Medicine, University of Alabama at Birmingham, Keck MACM Program, University of Southern California

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

IDEA
Use of simulated cases to enhance preoperative consultation knowledge and communication skills of internal medicine residents.

RATIONALE
Perioperative consultations have important implications for patient outcomes (Wijeysundera, Curr Opinion in Anaesth 2011). The Alliance for Academic Internal Medicine (AAIM) Education Redesign Committee cited Providing Perioperative Assessment and Care as an end-of-training Entrustable Professional Activity (EPA) for Internal Medicine (IM) residents. However, national standardized testing shows poor performance of preoperative risk assessment by IM residents (2010 In-Training Examination®, question B0077, mean % correct: 47% nationally, 57% my program). Published literature about physicians in practice further supports the need for improved preoperative communication (Lubarsky, Cleve Clin J of Med 2009). This curriculum will use simulated cases to provide IM residents with tools to improve their knowledge and consultation communication.

METHODS
This pilot study will involve 4-6 residents/month assigned to cardiology and general medicine consults for a 6-month period (n=30 residents). The curriculum will consist of 4 one hour interactive small group sessions, held weekly over the one-month rotation, supplemented with independent reading materials. In the small group sessions, residents will use simulated cases to: (week 1) apply an evidence based cardiac risk assessment tool; (week 2) compare consult notes of varying quality; and (week 3) work with a checklist of items essential for a consult note. Week 4, residents will apply the components learned in prior sessions to a simulated preoperative consultation case. They will write the note and present the consult note to their peers for review and critique. By the end of the course, residents will be able to: 1) Use evidence based tools for patients' preoperative cardiac risk assessment, and 2) create a consult note using a standardized template.

EVALUATION
The intervention will be assessed using multiple methods: 1) A rating scale to record residents opinions on the quality and usefulness of the instruction; 2) a pre-post questionnaire examining knowledge of preoperative cardiac risk, essential components of a consultation, and a self-perceived comfort level in preparing a consultation note; and 3) a review form for blind faculty assessment of the consult notes to determine quality (pre versus post). Performance on the In-Training Examination® for preoperative risk assessment will be monitored annually.

IIMPACT ON THE FIELD
This curriculum could serve as a model for other primary care residency programs to demonstrate achievement of key elements of the perioperative assessment and care EPA.

Workshop

<u>**Session 13 – LG 503**</u>   **3:30 – 5:00 pm**

ADVANCE CONCEPTS IN MEDICAL EDUCATION CERTIFICATE WORKSHOP SERIES

Assessment of Professional Behaviors: Giving Feedback to Struggling Learners

Janet Trial EdD; Stephanie Zia MD
USC Keck School of Medicine

Presentation time: Saturday, 2/23/2013, 3:30 – 5:00 pm

Workshop Rationale:
Over the past decade, medical schools have struggled to design curricula to instruct learners in professionalism.[1] Mechanisms for assessment and providing learner feedback are a necessary component of this curricular phenomenon.[2] Historically, without specific evaluation tools and instruction, medical educators' preparation for providing feedback on professional behaviors has taken the form of "on-the-job training," and thus this kind of feedback often takes place—if it takes place—in a haphazard manner. As assessment tools for professional behaviors are developed, faculty will need to become skilled at providing constructive feedback on these behaviors. Nowhere is this more essential than with learners having difficulty. This workshop is designed to provide a forum to better prepare medical educators to give meaningful feedback on professional behaviors to learners demonstrating unprofessional behaviors.

Intended workshop participants:
Faculty members, responsible for giving feedback to learners at both UGME and GME levels.

Learner Objectives
1. Faculty participant's competence and confidence to provide constructive learner feedback on professional behaviors will increase significantly.
2. Medical Educators will be prepared to develop a curriculum to provide faculty training in giving constructive feedback on professional issues at their home institutions.
3. Participants will gain awareness of the types of behaviors assessed and of useful approaches that evaluators can use when giving constructive professional behavior feedback

Description of Activities:
Utilizing the assessment tools provided, participants will have the opportunity to practice, discuss and reflect with peer colleagues, on giving verbal feedback on professional issues to learners.

References:
1. Baernstein, A, Oelschlager, AA-MEA, Chang TA, Wenrich, MD. Learning Professionalism: Perspectives of Pre-Clinical Medical Students. Academic Medicine, 2009;84 574-581
2. Wilkinson, TJ, Wade, W B, Knock, LD, A Blueprint to Assess Professionalism: Results of a Systemic Review. Academic Medicine, 2009;84:551

Saturday, February 23, 2013

Workshop

<u>**Session 14 – LG 504**</u>   **3:30 – 5:00 pm**

Great Precepting: Three Essential Tools For Outstanding Teaching Moments.

Belinda Fu, MD
Valley Medical Center, Family Medicine Residency

Saturday, 2/23/2013, 3:30 – 5:00 pm

Workshop rationale:
Precepting is the most frequent teaching scenario for a family medicine educator, yet we are infrequently taught how to precept. This seminar will familiarize educators with three established models about student learning and clinical teaching, and then immediately give participants the opportunity to transform them into applied skills, practicing them during the seminar. Participants will learn how these three teaching theories – PRIME, "SOAP Bucket," and Teaching Microskills -- are easily adoptable teaching tools that can be used immediately in a variety of teaching settings. The seminar will set the stage for participants to continue developing these skills at their own residency, and will enable participants to model and teach these skills to their own learners and colleagues.

Targeted audience: Residency faculty, clinical faculty, fellows, residents

Learner Outcome Objectives:
By the end of this seminar, participants will be able to:
1) Quickly assess a learner's clinical skills level by applying the PRIME model
2) Structure a learner's presentation skills by applying the "SOAP bucket" model, using the technique of "backtranslation"
3) Provide efficient and effective clinical instruction by selectively applying "Teaching Microskills"
4) Develop a personal language to apply these tools in their practice

Description of activities:
Part 1: Interactive lecture (50min) – The interactive lecture begins with a series of short scenes, transcribed from actual precepting encounters, which are used to initiate a discussion of precepting challenges. The lecture then discusses the three teaching tools, including fundamental principles, methods for application, and examples. Participants will be encouraged to ask questions, provide context, and offer comments throughout the lecture. Powerpoint slides will be used as visual aids.
Part 2: Skills acquisition (40 min) - Participants will be divided up into pairs in order to practice their new clinical teaching skills. Taking turns, each partner will present a fictional patient to the other partner, as though they are the learner coming to the preceptor for teaching. The partner playing the role of preceptor will practice implementing his or her choice of the three tools presented in the lecture. After each role-play, the pair will debrief and provide feedback, and then we will return to the large group for collective observations, summary, and discussion of future tool development.

Take home tools:
A review sheet summarizing the following models and relevant references:
1) The PRIME model
2) The "SOAP bucket" model
3) "Teaching Microskills"

Pre-workshop preparation requested: None

Collaborator's Corner – Poster Session I

<u>Session 15 – Broad Conference Room</u>   5:00 – 6:00 pm

High Fidelity Simulation to Improve Faculty Teaching Skills: A Pilot Scenario

Cynthia Anderson, MD, Jody Chou, MD, Levina Tran MD, C Canales MPH, Suzanne Strom MD
University of California at Irvine

Presentation time: 2/23/2013, 5:00 – 6:00 pm

BACKGROUND/NEED:
A recent survey of UCI anesthesia faculty revealed that 95% felt that their role as educators was important or very important. Yet many clinical faculty members receive little or no training in how to be excellent clinical teachers, despite the fact that the medical community recognizes teaching as a skill associated with, but separate from, content expertise (Srinivasan 2011). Despite the fact that the ACGME expects programs to provide training *as educators* for clinicians, faculty development in this area is inconsistent and infrequent. High fidelity simulation has been shown to be superior for learning clinical skills (McGaghie 2011). The advantages of realism, practice opportunities and debriefing may prove useful in learning teaching skills.

PROJECT DESCRIPTION, QUESTIONS AND DEVELOPMENT
The study purpose is to assess whether high fidelity simulation is a useful tool to help anesthesia faculty develop clinical teaching skills. Subjects are clinical faculty in the Department of Anesthesiology and Perioperative Care at the University of California, Irvine (N=30). This study has IRB approval through a Simulation Education Grant and written consent is obtained.

A focus group (2 residents, three faculty) have developed a simulation scenario in which a faculty supervises a standardized resident during an anesthetic. The scenario includes a preoperative discussion with the "resident;" supervision of an anesthetic induction; and a feedback session between faculty and "resident."

Anesthesia faculty attend annual clinical simulations in groups of four. Each takes turn performing a clinical scenario while the other 3 observe. A debrief follows each simulation and includes the entire group. During the study period, one faculty in each group receives the test "teaching scenario." The group debrief (with a trained facilitator and the "resident") focuses on exploring techniques that maximize adult learning: prior knowledge assessment, collaboration, clear goal-setting, scaffolding, respect, focused feedback. Following the session, the observing and participating faculty complete an evaluation of the experience's effectiveness and efficacy.

RESULTS
We have conducted the scenario for two groups of faculty in our program (N=8). When asked whether knowledge and skills were increased, the response was:

Area	Knowledge	Skills
Creating Effective Learning Environment	50% Strongly Agree 50% Agree	50% Strongly Agree 37.5% Agree 12.5% Neutral
Creating a Professional Learning Environment	37.5% Strongly Agree 62.5% Agree	37.5% Strongly Agree 50% Agree 12.5% Neutral

Area	Knowledge	Skills
Providing Feedback	50% Strongly Agree 37.5% Agree 12.5% Neutral	50% Strongly Agree 37.5% Agree 12.5% Neutral

100% participants responded that they agreed or strongly agreed that addition of simulation was superior to a lecture/traditional workshop alone (57% agree, 43% strongly agree).   All faculty responded that they would like to participate in more difficult teaching scenarios (62.5% strongly agree, 37.5% agree) and also that this would be a good modality for orienting new faculty to clinical teaching (62.5% strongly agree, 37.5% agree).

CONCLUSION/COLLABORATION
Our experience is currently limited due to the small number who have participated. Also, the evaluation is only a self-assessment. However the initial response has been very positive. We plan to continue this pilot. Based on participant feedback, future observing faculty will complete a written Resident Evaluation Form. Discussion of quality "written feedback" will be included in debrief. As more faculty participate, we will also review Department faculty evaluations by residents pre and post program as an outcome measurement. Simulation based training has potential benefits. A "library" of scenarios addressing different learning issues could be created. Faculty could then pursue individualized practice on a flexible schedule that is not dependent on an infrequent formal class/workshop.

KP Community Medicine Fellowship Faculty Development Curriculum

Jose Avalos MD
Kaiser Permanente Los Angeles

Presentation time: 2/23/2013, 5:00 – 6:00 pm

RATIONALE

Every year the department of Family Medicine at the Kaiser Permanente (KP) Los Angeles Medical Center (LAMC) Family Medicine Residency Program (FMRP) has one junior faculty (PGY-4) position for a fellow in community medicine. While its core objective is to teach the principles of community medicine, a secondary goal is to inspire the pursuit of academic medicine and faculty development. While almost all structured clinical activities have the fellow supervising medical students and residents, there is limited formal curriculum on teaching and faculty development. The goal of this project was to serve as a pilot on instituting such a curriculum to our fellowship and possibly to the other 5 community medicine fellows in the KP system.

METHODS

A 10-week curriculum was devised consisting of 10 topics in clinical teaching, faculty development, and learning theory.[1-6] Each week a reading assignment was given to the fellow and then a small group, fellow and one fellowship faculty, met to discuss and reflect on the topic, emphasizing learner participation and active learning. Prior to each discussion the fellow highlighted two key learning points they particularly enjoyed, which served as a springboard into discussion, and one "Commitment to Act" with respect to that learning topic. During the subsequent weeks, the fellow was supervised by the same faculty member as the pair attempted to implement the commitment to "act" within the teaching session

EVALUATION

This is a pilot study with a single learner, thus the data is mostly qualitative. Data are being collected in relation to the attainment of the weekly commitments to act through direct observation by the attending of the fellow. Data will be collected in relation to the learner's reaction to the experience and personal growth using structured reflection and a final reflection that includes the learner's knowledge, attitudes towards, and plans for the future in relation to teaching and academic medicine.

IMPACT ON FIELD

The goal for the pilot is to grow the curriculum, hopefully expand it to the other 5 community medicine fellows and possibly to family medicine residents within the Kaiser system, and ultimately develop a model that inspires fellows to continue a career in academic family medicine or at least incorporate some teaching into their future clinical practice.

The IR Wiki: A tool for communication, education, and quality assurance

Peter R. Bream, Jr.
Vanderbilt University Medical Center

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE (NEEDS ASSESSMENT/LITERATURE REVIEW)

Interventional Radiology is a vast field, encompassing all patient ages and virtually all organs systems. An interventional radiologist is a sub-specialist who performs minimally invasive image guided surgery. Performance of each procedure requires a team of specialists including radiologic technologists, nurses, and physicians. Each member of this team has a set role, with the physician as the leader. Although there are many cases that are done routinely, the breadth of this field leads to many procedures being performed infrequently. There is, to date, no central repository of information to assist each team member in their role in the procedure, which is specifically helpful for infrequent procedures or for training purposes. Although medical based wiki pages are relatively new, there are several databases in existence. Their assistance in education and dissemination of information has been reported for use in cancer information with patients (Rajagopalan et al., 2011), educational information with nurses (Haigh, 2011), and lecture information with medical students(Thompson, Schulz, & Terrence, 2011). There is no such informational database for Interventional Radiology reported on PubMed.

DESCRIPTION OF PROJECT

Because there is no central repository of information, communication for each procedure follows a "top down" approach where the information originates with the attending physician. This leads to many issues as that single person is responsible for informing each team member about their specific role in the procedure. /   This potential knowledge deficit problem is intensified with the addition of trainees, specifically fellows, residents, and medical students. During their brief time on service, it is impossible to gain the information needed to work up the patient, perform the procedure, and to coordinate with the other members of the team. In addition, there are procedures that require unique medications, before, during and after the procedure, and unique instruments that have to be located before the procedure. Currently, this information is disseminated in the morning during a formal "rounds" where each case and the nuances associated with each case are discussed. Although this system works, there is a tremendous amount of redundancy between the data gathering of each team member, with the associated wasted resources of time and effort. This project is designed to collate all of this information into a secure database in which the procedure is the core identifier. This database will be organized by procedure; will be fully searchable, and fully editable, just like Wikipedia. Within each procedure data entry, information pertinent to the Physicians, Nurses, and Technologists is stored and retrievable. The design of the database will allow a separate access page for each type of team member, to allow for efficient information gathering. For example, for each procedure, there is information, such as indications, contraindications, and complications, that is specifically intended for the physician who will be consenting the patient. Likewise, there is information describing patient position or specific catheters that is crucial for the technologist or medications that are specific for the nurse. Having all of this information linked and accessible will reduce medical errors, increase efficiency, and ultimately benefit the patient. The team taking care of the patient will literally all be "on the same page." In addition to information for each case being provided to the team members, each procedure database entry could also contain illustrations and descriptions of the procedure designed to educate the patient about the procedure they are about to undergo. This information could be reviewed by the patient in advance to the procedure, helping alleviate any misunderstandings that may arise the day of the procedure. This information will also enhance the informed consent process. The final piece of this database will help educate referring physicians so that they have a better understanding not only of the procedure itself, but also the preparation and follow-up necessary. This information will allow referring physicians to "virtually consult" with Interventional Radiology to better choose if the procedure is indicated for their patient. As this is a rapidly changing field as well, this information can help keep physicians up to speed with the latest developments that may benefit their patients.

QUESTIONS OR DESIRED OUTCOMES (MEASURABLE)
True outcomes research would be difficult to measure with such a database. Surveys will be periodically sent to all of the users with basic outcomes measures such as usages statistics and an evaluation of its worth as an information tool. These surveys will be used to value its integration into the workflow and to adjust the content accordingly. As trainees enter data into the database, the quality of the entry can also serve as an objective measurement of performance.

DEVELOPMENT PROGRESS (WHAT HAS BEEN DONE))
To date, the database structure has been created and several sample entries have been outlined. A mock up of the website interface has also been created. We are in the process of applying for grants to support the development of this database. What is needed (aspects seeking audience feedback and/or collaboration). We need feedback about the structure of such a database, whether anyone has done something like this on a small or large scale, and steps to take from here. In addition, help with assessment of outcomes, specifically ideas about quality assurance, will be sought.

An Interprofessional High Fidelity Simulation Experience in a Pediatric Core Clerkship
Madeleine D Bruning EdD CPNP
Keck School of Medicine of the University of California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

The Council on Medical Student Education in Pediatrics (COMSEP) defines the competencies expected of a Year III student upon completion of the rotation. The goal of the Pediatric Core Clerkship is to ensure that students receive a broad based general pediatric experience and that all sites provide equitable opportunities to achieve these competencies. The manner in which the experiences are attained may vary among sites and the ability to determine that students have acquired specific knowledge and skills is a critical to both clinical and academic performance (LCME, ED-2). Additionally, the AAMC has urged medical schools to evaluate and create curricula that recognizes learning as a developmental trajectory into graduate medical education. Since physicians provide care in multidisciplinary settings, the AAMC in conjunction with the AACN and other professional collaborators, developed a report addressing inter-professional core competencies that echoes the call to action by the WHO and IOM for interdisciplinary, collaborative education of health care and behavioral health professionals. High- fidelity simulation experiences provide an excellent venue and leaning milieu to achieve these performance goals across disciplines and learning domains.

There are extensive evidence-based studies that strongly support the use of high fidelity simulation for experiential learning. Although outcomes include improved and sustained knowledge and skills, this teaching strategy has added value of providing an opportunity for interdisciplinary communication, problem solving, and timely feedback. While the knowledge and skills for successful cardiopulmonary resuscitation are critical, of equal importance is the ability of the team to accurately and efficiently communicate in a time of crisis. High fidelity simulation immerses the student into the event, simulating the patient's condition and environment, requiring an assessment and decision, receiving immediate response from the simulator and prompting the student to continually assess, evaluate and intervene.

The elements of learning in this arena pull upon all of the learning domains and adult learning pedagogy. Inherent to experiencing a critical patient event is the ability to draw upon knowledge (cognitive) apply learned skills (psycho-motor) and retain clarity in communication.

Health profession students work together as part of the learning process so they are able to enter the workforce ready to practice effective teamwork and team-based care. Inherent to experiential learning is feedback and reflection within among the "team" and supportive guidance and evaluation faculty mentors, therefore addressing the affective learning domain.

With two local campuses and multiple community partnerships, Keck School of Medicine of USC is uniquely situated to develop an inter-professional, interdepartmental and inter-collegiate high fidelity simulation. Medical and pharmacy students would be incorporated into a high fidelity, standardized learning experience and an academic nursing program would be engaged to collaborate in the strategic planning and implementation of the curriculum. Funding is required to support the development, implementation and evaluation of this curriculum innovation.

A long term goal would include a longitudinal component to evaluate knowledge and skill sustenance in post-graduate pediatric residents with existing community service partners.

Clinical Faculty, Resident and Medical Student Awareness and Utilization of Social Media and Technology

Janice Carter-Lourensz MD, John Ayvazian PhD, Ernie Guzman MD
WMMC Pediatric Department

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE

Digital Natives, Generation X and Y physicians born 1964 onward, were raised in concert with the internet, social media, and rapid-interface computing power – unlike their Digital Immigrant forbearers. Research on Digital Native students confirms their preference for immediate feedback/research using social media[1]. Social media has grown to encompass texting, messaging, Google, Facebook, Twitter and other internet applications[2]. Research evaluations from multiple medical specialties agree electronic media is ever more integrated in medical decision-making, insurance determinations and research. Today's students and residents may be more apt to read an online article than one on a printed page and have unprecedented access to evidential bases for medical decision-making. There is little research on the patterns of social media use by medical students, residents or faculty for education and patient care or best practices and even fewer studies on the ethical issues these new communication strategies may engender.[3] [4]

DESCRIPTION OF PROJECT

This project was designed to survey a group of residents and faculty regarding their internet habits, their understanding of security and confidentiality, their social media communication preferences and their habits for use of websites providing medical information. The internet habits data will also be studied to determine differences in patterns by age, gender, ethnicity and years of medical training. Based on these findings the authors intend to develop an educational intervention and guidebook for effective, ethical integration of internet and social media for medical students and resident physicians.

QUESTIONS OR DESIRED OUTCOMES

The initial sample was comprised of 25 attending staff and residents for this project. Survey data was collected before and several months after (via Survey Monkey) a CME lecture on the comprehensive uses and pitfalls of social media and the electronic medical health record. Data was collected on age range of responders, clinical years of practice, experience using social media, familiarity with technology safeguards and the practice of sharing medical data with patients and colleagues via social media. Data were examined using descriptive statistics and correlations among factors were explored.

DEVELOPMENT PROGRESS

The initial pretest format (written questionnaire) revealed no relationship between ethnicity or gender, but only a small subset of Digital Immigrants responded and no Digital Natives. The follow-up survey in digital form was a highly preferred format across all age groups. Respondents of all ages were often unaware of internet security and had little knowledge of secure sites or the hazards and permanence of data once put onto the web. Data collection is ongoing; updated analysis confirms earlier findings and are presented below.

WHAT IS NEEDED

1. Social media policy and skills training should become a regular, ongoing component of medical school and residency curricula.
2. On-going assessment of medical students, residents and faculty to ensure competence in the ever changing landscape of social media and technology
3. Develop policies and guidelines for all medical schools and healthcare institutions for the proper use of Social Media and Technology
4. Instruct healthcare workers on said policies and guidelines and hold accountable those who are not in compliance

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[1] http://pewinternet.org/Reports/2010/Generations-2010.aspx

[2] JAMA. 2012 Nov 28;308(20):2091-2. doi: 10.1001/jama.2012.14849

[3] JAMA. 2009 Sep 23;302(12):1309-15. doi: 10.1001/jama.2009.1387

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Culturally Responsive Care Faculty Assessment and Development
Francis Chu MD
Kaiser Permanente Riverside Family Medicine Residency Program

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

The aim of this project is to increase faculty knowledge of Culturally Responsive Care (CRC) using a CRC training curriculum, with the goal of increased faculty CRC teaching.

RATIONALE

CRC is a significant component of delivering patient-centered health care and building rapport with patients.[1] Traditionally in our program, CRC instruction has been disseminated through a few didactic sessions within the formal curriculum. However, in the informal curriculum (bedside/clinic mentoring) it has been left to the discretion of individual faculty, which results in significant variation of CRC teaching dependent on the faculty member's training. In reviewing the literature, CULTURE is not just the collection of information regarding various groups of people, rather, it involves the interaction between individuals and their environment in a multitude of facets.[2] The first step in realizing an interactive model of teaching and presenting culture in a comprehensive way is by preparation of the faculty. We hope to stimulate faculty learning, improve the faculty's knowledge, skills, and attitudes around CRC, and increase the quantity and improve the quality of CRC teaching with resident learners; with the ultimate goal being improved care of Kaiser Permanente members (patients).

METHODS

This will be accomplished through the following steps: 1) needs assessment; 2) faculty training; 3) evaluation of the impact of training. In the needs assessment we plan to collect demographic data and evaluate CRC knowledge of Family Medicine faculty (approximately 25 faculty members) using the Cultural Medicine Questionnaire from the Curriculum for Culturally Responsive Health Care.[3] The key element of faculty training will be to develop and deliver two workshops in person (kick off and wrap up) and three workshops via teleconference – due to limited face-to-face meeting times with faculty. Sessions will be taken from the Curriculum for Culturally Responsive Health Care. We will tailor the specific focus of each session based on the findings from our needs assessment.

EVALUATION

The evaluation will incorporate data by assessment related to each level of the Kirkpatrick model[4]: 1) Reaction – using a rating form to assess quality of the sessions; 2) Learning – using pre- and post-training questionnaires of faculty knowledge, skills, attitudes and teaching behaviors, with timed reinforcement of key teaching content; 3) Faculty Behavior – using self reported commitment to change statements regarding teaching methods and follow-up surveys of faculty at 3, 6, and 12 months.

IMPACT

Our program's experience could provide a model for other programs in any medical specialty that seek to target culturally responsive care of patients.[5] We hope to expand this to all teaching faculty in our facility as a first step.

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3. Curriculum for Culturally Responsive Health Care: The Step-by-step Guide for Cultural Competence Training (Radcliffe, 2008) Jeffrey M. Ring, Julie G. Nyquist and Suzanne Mitchell
4. Evaluating Training Programs (Berrett-Koehler 2006) D.L. Kirkpatrick, and J.D. Kirkpatrick J.D.
5. STFM Core Curriculum Guidelines: Recommended Core Curriculum Guidelines on Culturally Sensitive and Competent Health Care **http://www.stfm.org/group/minority/guidelines.cfm**

(All 6 ACGME Core Competencies are addressed by this project, including: Patient Care, Medical Knowledge, Practice Based Learning and Improvement, Interpersonal and Communication Skills, Systems Based Practice and Professionalism.)

A Curriculum to Teach Intraoperative Decision Making

William Cloud[1] MD MACM, Maura Sullivan[2] PhD, Ross Willis[3] PhD
[1]Virginia College of Osteopathic Medicine at Virginia Tech; [2]Keck School of Medicine of the University of Southern California; [3]University of Texas San Antonio

Presentation time: 2/23/2013, 5:00 – 6:00 pm

NEED

Several authors have stated that a surgical procedure is 75% cognitive skill and 25% technical skill[1-3]. Factors such as managed care, technological changes, duty hours restrictions, training at multiple sites, and the changing structure of the surgical residency have resulted in fewer opportunities for residents to learn decision making skills.

PROJECT

Some educators feel that this gap in surgical education should be addressed through the development of a structured curriculum to teach intraoperative decision making(IODM).[4] A collaborative effort was undertaken to address this educational need. The theoretical concepts of decision theory, artificial intelligence, complexity theory, the neuroscience of learning, and workplace based assessment lay the foundation for a curriculum to teach IODM by developing an explicit cognitive apprenticeship through the use of simulation and cognitive task analysis.

QUESTIONS/DESIRED OUTCOMES

The curriculum is based on the practical application of theoretical principles to answer questions of pragmatic significance with respect to content, methodology, and assessment:

> What do we teach about intraoperative decision making?
> How do we teach intraoperative decision making?
> How do we assess intraoperative decision making?

The desired outcomes are measurable improvement in the behavioral correlates of IODM[5] and residents' perception of their level of readiness to engage in independent surgical practice.

DEVLOPMENT PROGRESS

A brief description of how the underlying concepts were used to develop the curriculum will be presented along with 2 handouts: a comprehensive list of references and overview of the curriculum. The curriculum progression proceeds from online modules, to sim lab experiences reinforced with online deliberate practice, followed by guided observation instruction, graded OR participation, focused usage of the NOTSS assessment system[5], exposure to state diversity, and resident teaching. Content, instructional methods, assessment, and goals have been developed for each successive element of the curriculum.

WHAT IS NEEDED

The purpose of the presentation would be to generate interest in a multi-institutional collaboration to continue curriculum development to answer the questions and achieve the desired outcomes.

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Introduce Personal Learning Plans in a Geriatrics Rotation Curriculum

Deborah Villarreal MD
University of Texas Health Science Center

Presentation time: 2/23/2013; 5:00 – 6:00 pm

IDEA
Introduce personal learning plans (PLPs) in the UT-HSC geriatrics internal medicine one-month rotation curriculum that guides residents in meeting their own personal objectives in addition to accreditation and certification requirements.

RATIONALE
Older adults currently make up about 12% of the US population yet account for 26% of all physician office visits, 35% of all hospital visits, and 38% of all emergency medical service responses (Williams 2010). The Institute of Medicine identified a critical need to expand geriatrics competence among all physicians. The UT-HSC residents have been resistant to expanding their geriatric competence because of their perceived negative values of geriatrics education. Personalized approaches to geriatric education have been shown to work to enhance learning (Golden 2010). As a way to enhance the geriatric rotation experience at UT-HSC the core geriatrics faculty (N=3) plans to introduce PLPs where each resident will incorporates content important to them along with the required content.

METHODS
Two residents per month will complete the pilot rotation (n=12). Results will be compared to the control group (n=12) from the prior six months. Each PLPs will consist of clear objectives and expectations for learning activities, which might include: selected readings, web-based modules and literature review of one geriatric issue related to the specialty topic of their choice or what they believed is important to learn. Each resident will complete a report on what they have learned and provide evidence that they have met their own objectives. By the end of the rotation learners will be able to demonstrate knowledge, attitudes and skills (KSA) in provision of safe care for geriatric patients. The core faculty will mentor and evaluate the PLPs or the elements each learner chooses.

EVALUTATION
Evaluation is focused on learner reaction and KSA will use the current evaluation form. The results of the pilot will be compared to the evaluation of the rotation for the prior six months (standard rotation). The evaluation will also incorporate, review of PLPs and post-participation reports to document the learner has met stated objectives or learning criteria. This will supplement the standard post-rotation evaluation of resident performance. These results can be compared for the study group (n=12) versus the control group (n=12).

IMPACT
If the model works it could be used to enhance resident KSA in provision of safe care for geriatric patients in any health profession.

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Helping Residents Learn to Manage Patient Aggression
Emily Doyle MD
University of Texas Southwestern Medical Center
Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

"Management of Patient Aggression" is a curriculum targeting UT Southwestern Austin psychiatry residents to improve their competence and confidence in managing violent patients. Through interactive case simulations and practice with feedback, residents will improve their assessments of risk of violence, interventions to reduce risk of violence, and ability to protect themselves and others should they be faced with violence.

RATIONALE/NEED

Healthcare professionals, in particular mental health workers, are at heightened risk for becoming victims of violence. The annual rate of nonfatal violent crime for all occupations is 12.6 per 1000 workers (Simon). For physicians, the rate is 16.2. For psychiatrists, the rate is 68.2 with an average rate of 40% over the course of their careers. Most violent attacks occur early in a clinician's career (Anderson). In a recently published survey 86% of psychiatry residents responded that they had been threatened and 25% responded that they had been assaulted (Dvie). The victims suffer physical and psychological sequlae, with symptoms of PTSD such as anxiety, hypervigilence and avoidance (Anderson, Dvie). The majority of psychiatric residents report that their training in the management of violent patients is inadequate (Dvie, Schwartz).

METHODS

At orientation, PGY1 residents receive 8 hours of training in (1) development of communication skills to de-escalate agitated patients, (2) performance of self-defense maneuvers using the Satori Alternative for Management of Aggression (SAMA) method, and (3) demonstration of safe physical restraint procedures before seeing their first patients. These skills are revisited every six months throughout the four-year residency training program with hands-on practice in simulated cases in order to ensure fluency in an emergency. Additionally, there are 6 one-hour sessions in which the residents learn how to identify risk/protective factors for becoming a perpetrator or victim of violence, how to formulate a violence risk assessment, how to devise an safety plan for patients at risk, and how to implement guideline strategies to optimize safety in clinical settings. Residents learn through assigned reading, presentations, writing exercises, and reflection. Senior residents are responsible for teaching junior residents and developing cases to be used in the simulation exercises.

EVALUATION

A SAMA certified instructor would ensure each PGY1 completes the initial 8-hour session with basic competency using a checklist of skills. The effectiveness of the training would also be measured by residents' self-assessment of confidence in managing high risk patients as well as by the resident instructors' assessment of residents' skills exhibited during the case simulations. A tool to be used in assessing case simulation skills would need to be designed. A control group at another similarly sized institution would be desirable.

IMPACT ON FIELD

This curriculum could be taught in other psychiatric residency programs interested in providing a more robust experience in this area.

Smoothing the Transition to Practice

Jordana Haber
Maimonides Medical Center

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED
The transition from resident physician to an independent specialist requires a challenging adjustment to a new environment, responsibilities, and expectations. Learners in transition often report feeling overwhelmed, and uncertain (Ringsted 2011). While under training, the post-graduates' clinical work is monitored, and their learning structured and evaluated periodically. Once they make the transition to independent clinicians, they are now responsible for their own learning, and assessment. The development of professional expertise requires a certain skill set relying heavily on metacognitive abilities (Sanders 2009) Flavell in 1976, defined metacognition as "one's knowledge concerning one's own cognitive processes (Flavell 1979)." Reflection, a form of metacognition, is a skill that can be taught and developed (Bernard 2012), and is the focus of the planned intervention. While, the content of this curriculum is specific for Emergency Medicine (EM), all those in graduate medical education ultimately transition to practice and this curriculum could be a model for other programs.

DESCRIPTION OF PROJECT
Learners will consist of 10-12 emergency medicine residents in their final year of training. Three-one hour long session will be held over the course of 3 months. The focus will be on teaching metacognition and reflection in practice, on practice and for practice using the Dreyfus model as a tool to understand where they fit on the learning spectrum. In session 1, the principles of effective reflection in, on and for practice would be discussed using mini-cases to stimulate discussion of these three levels. In session 2, the residents would bring their own clinical cases for discussion of the levels of reflection. In the final session they would discuss varied EM settings and the tools they want to take with them to allow them to continue to develop from a competent to an expert emergency physician. Each would leave with their own transition plan toward independent practice.

QUESTIONS OR OUTCOMES
Data will be collected in 3 forms: 1) learner satisfaction, through use of surveys 2) learner knowledge as measured by review of the quality of their transition plans; and 3) learner behavior, using self-reported commitment to act as an initial indicator, followed up after graduation to determine what was used and what was not.

DEVELOPMENT PROGRESS
A needs assessment among current senior residents reveals concern with different aspects of transition. Junior faculty report that the transition to practice was marked with new challenges, and uncertainty. The majority of senior faculty were never educated on reflective practice. This curriculum is intended to give graduating residents skills in the three levels of reflective practice using cases as examples for discussion, the Dreyfus model as a tool to improve their accuracy in self-assessment, and will conclude with each learner completing an individual transition plan to smooth their transition to employment.

WHAT IS NEEDED
Reflection and self-assessment play a key role in making the transition to independent practice. Teaching learners to value these techniques however can be challenging, requires adequate preparation, time, proper feedback, and a supportive environment. As a novice to teaching this technique, areas of consideration include: tools for providing feedback on reflective pieces, assessment and measurement standards for reflection quality.

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Evidence in 5 Minutes or it's Free! (Just-in-Time-Evidence)

J R Hartig[1] MD, Julie Nyquist[2] PhD
[1]University of Alabama at Birmingham; [2]Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA
Using tablets with primary care residents to improve acquisition and analysis of evidence related to patient care.

RATIONALE
Resident physicians may locate answers to as few as 14% of their clinical questions related to patient care. (Green, AM J Med 2000; McCord, Acad Med 2007) Self-rating their application of evidence-based medicine (EBM) skills as average, residents frequently cite time, lack of skills and lack of knowledge of resources as barriers to searching for clinical questions. (Green, Acad Med 2005; McCord) Vogel demonstrated instructional workshops on MEDLINE searches improve resident skills. Additional studies have reported the use of PDAs by residents to improve delivery of evidence 'to the bedside,' but few interventions describe the use of newer, more powerful tablet computers. With the use of Wi-Fi capable tablets and basic search strategy instructions, residents may enhance their retrieval and implementation of EBM.

METHODS
Twenty-five Primary Care residency learners will participate in 3 two-hour sessions over the course of Ambulatory Block rotations. Learners will self-identify a relevant clinical question pertaining to a current need (gap in knowledge) regarding a patient from the continuity clinic. Through interactive presentations and active use exercises with tablet computers learners will enhance their skill and comfort using EBM. By the end of the series residents will be able to: 1) find a review article from a core clinical journal related to the identified problem in less than 5 minutes; 2) compose a properly formatted PICO-style question and 3) demonstrate an effective MEDLINE search strategy based upon the material presented in the sessions.

EVALUATION
Data will be collected in relation to Kirkpatrick Levels 1-3: 1) learner reaction to activities using a satisfaction survey; 2) learner knowledge measured by review of search strategy used and quality of PICO-style questions; and 3) learner behavior – self-reported commitment to act as an initial indicator; followed-up by survey 3 months later to determine frequency of use of strategies taught. Comparisons will be made to learners not enrolled in the intervention group. Faculty will evaluate learners' performance using standardized templates.

IMPACT ON FIELD
This innovation builds upon previous research and could demonstrate an effective, efficient model of implementing EBM education which is broadly applicable to residencies in the U. S.

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Use of Student-Focused Clinic to Enhance Knowledge and Attitudes in Relation to Interdisciplinary Training

Armaity Vaghaiwalla Austin MD, MPH, FAAFP; Kelly Jones, MD; Brian Prestwich, MD; Joseph Li; Michael Toboni, MPH; Brian Chou
University of Southern California Department of Family Medicine

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

The USC Department of Family Medicine is working with the Medical Student Based Clinic as a site for patient care using an Interprofessional Care (IPC) model. This model helps students enhance their knowledge, skill and attitudes in relation to Interprofessional Education (IPE) and patient care. There is good evidence that IPC is the best way for integrated delivery systems to achieve the Triple Aim (Better Patient Experience/Care Processes, Better Outcomes, Lower/Stabilized Cost). IPE is the educational model which is used to prepare the IPC teams of this decade, beginning at the start of their professional training. Use of IPC teams in caring for populations is a solution to the impending primary care physician shortage we are facing in the years ahead. Training primary care physicians with IPE/IPC can achieve the Triple Aim, provide financial support to effective care systems, and keep our populations healthier.

The purpose of this project is to study the IPE in the following six competencies: 1) Acquisition of knowledge and skills linked to IPC, 2) understanding of roles and responsibilities of other health and social care professionals, 3) development of teamwork and team leadership skills, 4) ethics and attitudes of working with other professions including conflict resolution, 5) patient/client/family/community-centered care and / 6) learning and reflection of the model of IPC Model. The subjects involved include students from the Schools of Medicine, Pharmacy, Physical Therapy, Occupational Therapy, Social Work and Physician Assistants.

The setting is the USC-Eisner Family Medicine Center, and occurs every other Saturday mornings. The methods include training students to work in collaboration with other disciplines, and to evaluate competencies learned during these patient care clinics.

Evaluation of current students will occur this fall and every six months following and will include the six competencies noted above. Evaluation will include: 1) Reaction of the student on working with interprofessional teams, 2) Learning—what they learned including: Knowledge—understanding roles of other professionals, Skills—interprofessional communication, reflection on role relative to others on the care team, and Attitudes—mutual respect, willingness to collaborate and openness, 3) Behavior—changes in how they perform their job within teams, and 4) Results—patient satisfaction and accountability data. Preliminary results from reflections of participating students are positive—the group of students made a presentation to a HRSA representative who wants to now promote this nationally. Our clinic experience could be a model for this national roll out for Interprofessional education.

Faculty Development Framework Across Specialties

Imad Kafilmout[1] MD, Ali Shakir[2] MD, Salvador Suau[3] MD, Julie Nyquist[4] PhD,
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Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA
To build a multi-specialty faculty development program to assist faculty in each program to gain the skills required for leading the "next accreditation system."

RATIONALE/NEED
Faculty development is one of the requirements for accreditation within the Accreditation Council for Graduate Medical Education (ACGME) system. The basic skills related to promoting and assessing learning are similar across all training program. Thus, a "generic" training program should be able to be developed that could have wide applicability and usage. Additionally, a jointly crafted model for faculty development helps the programs involved share scarce intellectual resources. The impending implementation of the next/new accreditation system (NAS) by the ACGME makes preparation of faculty to work with competencies, "milestones," and EPAs (entrustable professional activities) critical. Thus three programs, from three regions and three specialties have joined resources to develop and implement a unified framework for faculty development.

METHODS
The process began comparing the needs assessment conducted in each of the three programs, a family medicine residency in California; a cardiology fellowship in Michigan and the emergency medicine residency in New York. A core framework was then developed using a list of core principles in education where knowledge, skills and attitudes would be promoted: New Accreditation System, principles of learning, teaching in the classroom, clinical teaching, assessment of learners, learners in difficulty, assessing program elements and curriculum design. The next steps are to: develop joint plan for sessions on each topic, to design the evaluation tools, to pilot selected sessions in each site, to make any needed modifications, implement sessions at all three sites, evaluate, and disseminate.

EVALUATION
Data will be collected in relation to Levels 1-3 of the Kirkpatrick model: 1) reaction, 2) learning, and 3) behaviors. Faculty reaction to the new sessions will be assessed through use a satisfaction survey. Learning will be assessed using a retrospective pre-post assessment of knowledge and confidence and through review of faculty end of session reflections. Faculty behavior can be assessed in multiple ways: 1) self-reported commitment to act as an initial indicator with followed up to determine what was used and what was not; and 2) a comparison of resident evaluations of teaching before and after implementation of the faculty development program in each site.

IMPACT ON FIELD
A uniform framework for faculty development, with session plans and evaluation tools has the potential to enhance development across specialties though tailoring to individual program needs.

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Coordinating Care through Collaboration and Communication

Adrian C. Lawrence
David Grant Medical Center, Travis AFB

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

Idea:
Enhancing communication and collaboration skills in Family Medicine residents using multidisciplinary rounding and debriefing.

Rationale:
Ushered by quality improvement initiatives, multidisciplinary rounding has emerged as an integral part of care delivery in the ICU (Intensive Care Unit). Recent recommendations from the American College of Chest Physicians also focus on the importance "of skilled communication and true collaboration as essential elements for transforming work environments."[1] Furthermore, the results of a critical care consensus initiative identified "that improving communication among providers and formal training on the interdisciplinary team model are advocated to improve the management of ICU services."[2] This proposal seeks to supplement the resident-autonomous, case-based approach, with integration of the family medicine resident into daily ICU multidisciplinary rounds.

Methods:
For one week of their clinical ICU rotation, the resident will be integrated into the ICU multidisciplinary team, which consists of physicians, nurses, and allied health professionals. Under the guidance of the intensivist, the resident will present the patient's case to the team. Evidence-based practices and unit core measures will be discussed. Every team member gets a chance to provide his or her expertise and to bring up any new research or evidence-based practice. After presentation of the patient's case the team will enter the room and continue the rounds at the bedside where team members can see the patient and engage him or her and the family in the plan of care. Multidisciplinary rounds will be followed by a 30 minutes one-to-one debriefing session between the intensivist and resident. The key objective for this activity will be for the resident to be able to: appreciate and discuss the complex and integrated practice of ICU medicine at an urban community hospital, including the importance of a multidisciplinary team approach.

Evaluation:
The resident will complete a pre and post-test to assess their knowledge about multidisciplinary teams. The intensivist will record evidence of interprofessional teamwork by the resident during the entire rotation using a standardized observational instrument. In addition, the resident will complete a short reflective exercise at the end of the week intervention. The resident will complete a commitment to change with follow-up to ascertain whether the skills learned during the ICU rotation have been useful in practice.

Impact on the Field:
Integration of Family Medicine residents into multidisciplinary rounds could provide a paradigm that can be extended to other healthcare disciplines that train within the ICU.

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Cultural Competency Training for Health Plan Nurse Case Managers

Tao Le MD
Health Net of California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA
Improve awareness, knowledge and skills of nurse case managers in culturally responsive health care and ultimately improve the customer experience and health outcomes of patients.

RATIONALE/NEED
Research suggests that training focusing on culturally competent attitudes, knowledge and skills is effective in improving provider's understanding of the cultural aspects of health care and in building effective communication strategies (1,2). Our literature review has shown that nurse and physician educators are addressing the cultural competency training for their graduate students (3,4,5), however few training programs are available for nurses case managers who fulfill a critical role in patient care as advocate, coordinator of care and patient self management coach.

METHODS
This pilot study will provide education for 10 nurse case managers but could be expanded to 60 managers. A 4-hour-workshop on Cultural Competency incorporating interactive teaching strategies such as video clips, small group exercises, role play, reflective writing and commitment to change will be used to address prior knowledge, to motivate, and to provide a safe environment to practice new skills and receive feedback.

Course/workshop objectives: At the end of the course, learners should be able to:
   a. Define the main components of culturally responsive health care
   b. Analyze and evaluate own behavior through reflective writing
   c. Appropriately apply the components of culturally responsive health care in their daily work

EVALUATION
Within the program evaluation data will be collected at the Kirkpatrick levels 1-3 through the following mean: 1) participant reaction collected using standard CE evaluation form; 2) participant knowledge and attitudes through a retrospective pre-post questionnaire at the end of training and again six-months after the training; 3) participant behavior through selected pre-post patient assessments of care.

IMPACT ON FIELD
With changes in the health care the education of system nurse case managers can be a model for training other frontline providers in patient-centered care.

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Student Guide for Third Year Medical School Clinical Clerkships:
A Proposed Educational Intervention

Jessica D Mason MS, Rachel L Schwartz MS, Sajjad Yacoob MD, Pamela Schaff MD
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED

The transition in the medical school curriculum from the classroom based second-year to the hospital based third-year abruptly changes students academic, evaluative, and psychosocial environments.[1-5] This transition may lead to increased stress, which is postulated to play a role in erosion of empathy and changed views towards clinical duties.[6,7,8] Consequently, it is essential to devise interventions to ease this transition. Many institutions offer an orientation course, however, there is marked variability nationwide; they may either be static or recurring, brief or comprehensive, with an inconsistent reliance on upperclassmen peers.[1,9,10] Some schools additionally offer a student-written handbook of advice on navigating clerkships,[1] and while near-peer teaching has been shown to be well received and effective,[12,13] analysis of a survival guide as an educational intervention is not well described. Investigation of this resource may validate its importance in medical student education with the ultimate objective of encouraging a similar curricular intervention nationwide.

DESCRIPTION OF PROJECT

"Surviving and Thriving in the Third Year of Medical School" is a guide for incoming third year medical students written by fourth year medical students at their institution. Its primary purpose is to provide a single resource of important information that is otherwise difficult to acquire. Content covers general advice and resources, exam preparation suggestions, select guidelines and protocols, clerkship site information, example documents and templates, commonly used abbreviations, and dedicated chapters for each required clerkship with the typical schedule, evaluation criteria, and clerkship specific advice. The guide provides diversity in student opinions, and is endorsed by each clerkship director. Two formats will be available, an all-inclusive digital version on the medical school's secure website, and a concise printed version which students can annotate.

QUESTIONS OR DESIRED OUTCOMES

Hypothesis: a clerkship survival guide will effectively deliver information that helps bridge the gap between the preclinical and clinical years of medical school.
Outcome measures:
1) Pre-survey of incoming third year medical students will establish if a need exists for a student-written guide by assessing students' perceived competence in routine clerkship duties.
2) Post-survey will assess the utility of the survival guide in acquiring these skills. Additional questions will address satisfaction with content to improve future editions.

DEVELOPMENT PROGRESS

The student guide and evaluative instruments are presently being finalized. Assessment measures will be complete before the distribution of the guide and surveys in late June 2013.

WHAT IS NEEDED

1) Feedback about the survey design to ensure:
   a. Objectivity
   b. Efficacy is adequately evaluated
   c. Student well-being is adequately evaluated
2) Feedback about the delivery of information in the guide
3) Feedback about content of the guide
4) Feedback about generalizing the guide for outside institutions

Learning Together: An In Process Evaluation of Resident Learning and Attending Perspectives on Being a PCMH

Gilberto Medina, MD
White Memoria Medical Center Family Practice Residency

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

Evidence of need and importance (needs assessment/literature review)
Many primary care professional organizations have endorsed the movement to redesign practices into Patient Centered Medical Homes (PCMH). Primary care residencies have followed suit and acknowledge the need to teach this practice model to residents. White Memorial Family Practice Residency program has acknowledged the need to transition into a PCMH and teach this practice model to our residents. In attempting to develop a curriculum, we found a lack of existing examples and a paucity of recommendations in the literature.

Description of project
WMFP has adopted the "learning together" approach to teaching our residents as we transition into a PCMH. We are teaching PCMH concepts using role modeling and focus on highlighting PCMH concepts as we implement system changes.

Questions or Desired outcomes (measurable)
Teaching using the "learning together" approach poses new challenges. This teaching style is alien to physicians who are used to teaching in a traditional supervisor-apprentice relationship. We will measure the effectiveness of our teaching strategy by surveying our resident's knowledge of working in a PCMH. We will also assess the faculty's perspectives on being a PCMH. We will also attempt to survey resident's from a residency not transitioning to a PCMH to compare resident knowledge.

Development progress (what has been done)
WMFP has been transitioning in to a PCMH over the past two years. The residents receive and introductory lecture on the joint principals and concepts of PCMH. We have developed panels for each resident and have grouped them into care teams. The residents are responsible for tracking all their labs and referrals. We have transitioned to an EMR and have begun focusing our Quality Improvement on data extracted from their records. At each juncture of system change we have had small orientations to introduce the change. A survey has been developed that has the residents self report their understanding of PCMH, challenge their knowledge, and measure their attitudes on the transition. The teaching faculty will also be surveyed on their attitudes on the transition.

What is needed (aspects seeking audience feedback and/or collaboration)
Our goal is to collaborate on developing a comprehensive PCMH curriculum. We would welcome discussion on pitfalls or recommendations others have faced in teaching PCMH concepts to residents.

Q2 Intervention in Family Medicine Residency Training to Enhance Cultural Competency in the Medical Encounter, Patient Satisfaction and Resident PBLI Learning

Maria Andrea Mendoza Mason MD

PIH/UCI Family Medicine Residency Program

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

Integration into the residents' continuity clinic of a brief interviewing tool intended to enhance residents' patient-centered care.

RATIONALE

Recently NRC Picker scores for our Family Practice center were very low in the areas of patients' participation in decisions about their health care and whether the resident physician listened to the patients' concerns. Training in patient-centered and culturally responsive care has been shown to improve patients' health status and increase efficiency of care (Stewart ET all, J of Family Practice 9/2000) thereby improving patient plan adherence. After gaining further local data an intervention was designed and is being assessed.

METHODS

A questionnaire was administered to assess cultural competency knowledge and attitudes among the family medicine residents (n=12). In our program 80% of respondents stated they almost never included patients' beliefs and traditions when developing patient care plans and that cultural competence was not relevant to their practice. Using two precepting sessions per week at our busy FP Center from October to January of 2012-2013, 18 residents were asked to utilize the Q2 mnemonic from Kleinman's model. They were observed during a patient encounter to determine how frequently residents asked the two questions: "what do you think made you sick" and "what do you think could help you get better?" They were also instructed to consider how they might negotiate a treatment plan incorporating both patient health beliefs and the medical perspective.

EVALUATION

The evaluation is incorporating three of the Kirkpatrick levels for program evaluation in the following manner: 1) learner reaction will be assessed at the end the intervention at the end of January 2013; 2) learner knowledge is being assessed pre and post using a questionnaire that addresses knowledge, attitude and self-reported behavior; while learner skills are being tracked through direct observation of learner performance with a brief observational rating scale; and 3) learner behavior will be tracked using a commitment to act form at the end of the "training" in January, with a follow-up in March to determine their views on their own changes and any barriers.

IMPACT ON FIELD

If this improves the quality of the medical encounter from the patient perspective it could provide a simple model for other programs.

Development of an Asynchronous Comprehensive Computer-Based Toxicology Training Program

Sean Patrick Nordt MD PharmD DABAT FAACT FAAEM
Keck School of Medicine, University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE

To become a board-certified emergency medicine physician an individual must complete an accredited residency in Emergency Medicine (EM). This is followed by a written certification examination and oral certification examination. The American Board of Emergency Medicine has a curriculum of "required knowledge" to successfully complete all portions of emergency medicine training. Toxicology-related topics comprise approximately five percent of the board certification exams. Similarly, the American Board of Internal Medicine has a similar percentage of toxicology-related questions for Critical Care Medicine board certification as do many other specialties in medicine.

Despite requiring a broad and deep knowledge of medical toxicology for EM physicians the training and education of EM physicians is not standardized and has a broad range particularly in post graduate residency training.

At present the vast majority of EM residents learn toxicology through reading textbooks only or lectures by non-toxicologists as many programs do not have a toxicology faculty member.

A number of residency programs do have an affiliation with a poison control center where a resident spends only two to four weeks to try to learn the breadth of toxicology. This is akin to a "cram session" where the knowledge is often learned but then soon forgotten.

Furthermore, there are currently over 150 ACGME accredited residencies in emergency medicine. However, there are only 57 poison control centers in the United States. This is down from 61 in 2009. In addition, these 57 poison centers lost 36 % of their federal funding percent in 2011. Further budget cuts at the state and federal level will make it difficult for poison centers to continue to operate. One of the first services to go with budget cuts is the education of residents as this is usually *pro bono*.

DESCRIPTION OF PROJECT

Asynchronous learning is an education technique that involves students being able to access education materials including lectures, tests, discussions, etc. at any time.

This is ideal for physician residents as they often are either pre-shift, post-shift, working a shift, or on "outside" rotations away from their home departments.

This program will be a self-paced curriculum to be completed over two-year period. Pre-Tests. Exciting lectures with breaks that generate questions. Board –style examination questions. Oral board simulations. Other open-ended question techniques. Discussion boards. Real case discussions that unfold similar to the actual management of a patient. Video clips of either simulated or real patients to solidify learning. Allow student feedback through as close to real time as possible. Periodic live video conferencing with toxicology faculty.

DEVELOPMENT PROGRESS

The curriculum is already developed. Already collaborating with online education company. Anticipate program will be up and running within one year.

WHAT IS NEEDED

Collaborate with other educators who have developed similar asynchronous-based medical education programs, particularly in the area of post-graduate medical education.Looking to also collaborate with faculty outside of medical schools specifically in the area of the computer sciences who have additional and unique expertise in online education programs.

Implementing a Social Determinants of Health History-taking Tool in a First-Year Medical Student Curriculum

Sharon Obadia DO
A.T. Still University School of Osteopathic Medicine in Arizona

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE

The mission of A.T. Still University School of Osteopathic Medicine (SOMA) in Mesa, Arizona is to produce primary care physicians driven to providing quality care to medically underserved populations in the United States. This mission cannot be fully realized if students do not understand and recognize how social determinants of health (SDH) impact access to healthcare and adherence to prescribed wellness plans. SDH are the social and environmental conditions in which a person is educated, nourished, and employed.

SOMA first year medical students have been traditionally taught to assess a patient's social situation by taking a social history focusing on marital status, employment, and use of tobacco, alcohol, and illicit drugs. This limited information puts student physicians at risk for missing barriers to adherence to their proposed health care plans.

DESCRIPTION OF PROJECT

The author created an SDH history-taking tool and introduced it to SOMA first-year medical students during the first session of the Medical Skills I course in July of 2012. Prior to introduction of the tool, students completed a survey at the initiation of Medical Skills I to determine their awareness of SDH and comfort level discussing SDH with patients.

Since then, during each weekly Medical Skills I class session, students have been practicing taking an SDH history from fellow students posing as mock patients. OSCEs are administered every 6-8 weeks. Weaknesses in obtaining an SDH history are assessed.

At the end of the first year, students will be surveyed again with the same survey instrument to determine if awareness of SDH and comfort level discussing SDH with patients has improved.

DESIRED OUTCOMES

Proficiency in using an SDH history-taking tool will enhance student awareness of SDH and student comfort level discussing SDH with patients. This will improve the students' ability to determine barriers to optimal health in their patients' lives and be better prepared to assist in reversing or correcting these barriers.

Diabetes Protocol

Luis Samaniego, Armando Pacheco
White Memorial Medical Center Family Medicine Residency Program

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

Idea:
Phase I is to enhance the White Memorial Medical Center Internal Medicine and Family Medicine resident's knowledge, skills, attitude and behavior in inpatient diabetic glycemic control by implementing a set of evidence based protocols. Root cause analysis is performed on all hypoglycemic (i.e. glucose < 69) events.
Phase II is to enhance patient outcomes, decrease length of stay (LOS) and decrease readmission rates through implementation of evidence based protocols for inpatient diabetic glycemic control for patients admitted by the WMMC Internal Medicine and Family Medicine residents.

Rationale:
Multiple studies have shown improved outcomes in patients with Diabetes as a result of effective glycemic control of patients in the acute hospital setting. The inpatient diabetic care will now be standardized with evidence based medicine guidelines which was recently codified in the consensus statement of the American Association of Clinical Endocrinologist and the American Diabetes Association. Note: This diabetic care procedure has not been adopted by White Memorial Medical Center prior to this project.

Methods:
Phase I will focus on residents. 1) Assess the resident's reaction to the use of standard order sets and glycemic control protocol. 2) Assess the resident's knowledge of the protocol and it's purpose for use in glycemic control in diabetic patients. 3) Determine the percent of resident's aware of the protocol and implementing it as well as the percent of patients placed on the protocol. 4) Determine the patients who became hypoglycemic on the protocol and perform a root cause analysis to ascertain quality improvement issues.
Phase II will focus on protocol influence on outcomes. 1) duplicate improved patient outcomes with strict glycemic control via the use of protocol 2) evaluate LOS on the patients who where placed on the protocol 3) ascertain readmission rates of these patients

Activities:
1) introduction of protocols by the endocrinologist and his diabetic team who are tracking the data 2) daily reminders by the inpatient teaching attending's 3) data collection on each patient, resident and inpatient team 4) knowledge quiz 5) attitude survey and 6) root cause analysis for hypoglycemic episodes

Evaluation:
Accountability: Documentation of activities are being collected by the diabetic team for review and analysis by the physicians
Reaction: Survey of resident opinions about using the protocol and evaluating the facilitating factors as well as the barriers.
Learning: Knowledge quiz for the residents
Behaviors: Chart review to determine percent of patients where standard protocol was applied

Impact:
Patient outcomes tracked over time in regards to glycemic control, hypoglycemic episodes, length of stay, and percent of readmissions. Data analysis will help determine if protocols can be easily implemented and utilized in the hospital setting to make diabetic glycemic control more attainable, and ultimately improve patient outcomes.

Simulation for Teaching Patient Safety in Anesthesiology

Sujatha Ramachandran MD
Montefiore Medical Center/Albert Einstein College of Medicine

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

Use of simulation with junior anesthesiology residents to promote knowledge about safe care, factors leading to errors and to help them minimize incidence of errors.

RATIONALE

Anesthesiology is a field that has been long focused on patient safety. While the incidence of errors in anesthesia is much lower than what it was 50 years ago, it is still significant (Gravenstein, 2002). Saubermann AJ et al. (2004) demonstrated that first year (CA1) anesthesiology residents have more errors and adverse outcomes than those more senior. Residents' confidence in themselves and their ability to provide efficient patient care is shaken when they have an adverse patient outcome secondary to an error committed by them. Simulation has been shown as an effective technique for teaching patient safety and communication in the peri-operative arena (Pian-Smith, 2009). Through simulation we can create critical events which when not recognized, will lead to errors and adverse outcomes.

METHODS

The subjects for this 12-hour module will be junior (CA1) anesthesiology residents divided into two groups of 8 residents each**.** Simulation will be used to create a critical event in the OR where multiple factors come into play. Scenarios requiring rapid response and critical thinking will be presented. Residents will be required to manage these critical situations under time pressure and simulated deterioration of hemodynamics. Potential system and human errors will be unmasked by this exercise. By the end of the patient safety curriculum module, the CA1 residents will identify factors contributing to errors, types of errors and recognize and adopt safe patient care. The method combines a) formal presentation, b) structured practice with simulated emergency situations and c) debriefing to help junior residents gain the skills and confidence needed to provide safe care and avoid common errors in the operating room.

EVALUATION

Each individual in the department of anesthesiology has a unique identifier to log into the department's QA website. The residents' near misses and errors can be tracked using this identifier with a comparison made between those completing the module first (n=8) and those in the second group (n=8). We will be able to compare the incidence of errors in group 1, between the two interventions, and after group 2 has completed this module. We plan to assess their skills as a normal part of the module and the projected changes in behavior through examination of their commitments to act or change.

IMPACT ON THE FIELD

Successful implementation of this curriculum could provide a model for other anesthesiology programs in enhancing safe anesthetic care**.** This exercise will also help junior residents understand their role in the occurrence and prevention of errors.

Teaching Care Coordination to Pediatric Residents: It Takes a Whole Village to Raise a Child

Sheela Rao, MD[1,2], Bethany Stafford, MD[2], Patrice Yasuda[1,2], Doug Vanderbilt, MD[1,2]
[1]University Center for Excellence in Developmental Disabilities (UCEDD)[, 2] University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

BACKGROUND/NEEDS
Care coordination is defined by the AAP as "a process that links children and youth with special health care needs (CYSHCN) and their families with appropriate services and resources in a coordinated effort to achieve good health." It is considered a defining principle of pediatric primary care, yet current residency programs provide very little structured curriculum to help residents build knowledge of nonmedical resources, collaborate with multiple professionals, and convey information appropriately to patients and families.

PURPOSE
The purpose of this intervention is twofold: for pediatric residents to learn communication skills relevant to working on multidisciplinary/interdisciplinary teams and care coordination skills essential for caring for children with special health care needs.

METHODS/IMPLEMENTATION
Residents will learn care coordination skills through a 3-step process: observation, incorporation of a tool to apply concepts, and then self-reflection. Residents will rotate through both multidisciplinary and interdisciplinary clinic settings as if they were patients or families to witness different aspects of care coordination being done by diverse disciplines on a team. They will answer a question set which help them probe the complex communication that takes place in these respective clinics. Residents will also apply a care coordination tracking tool to catalog efforts over next two months to coordinate care for their own patients with special health care needs in their continuity clinic panels. They will submit this tool for review. Finally, they submit a reflection after engaging with the multi- and interdisciplinary teams.

EVALUATION
Evaluation will involve a guided reflective exercise at the end of the experience where residents explore some of the challenges in interpersonal skills in these diverse environments and identify what is the role of the general pediatrician in relation to these teams. They will also articulate commitments to change for their future encounters with families.

IMPACT ON FIELD
Since care coordination is now regarded as essential to improve patient outcomes and contain costs in medical home models, it is critical to demonstrate feasible ways to teach these skills that integrate nearly all of the ACGME competencies.

Interactive training for novice standardized patient educators (SPEs)

Anita J. Richards
Keck School of Medicine of University of Southern California

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

IDEA
Interactive training for novice standardized patient educators (SPEs) to build skills in training SPs to accurately portray a case, record learner performance, and provide feedback.

RATIONALE
Medical schools use standardized patients (SPs) to partially satisfy Liaison Committee on Medical Education (LCME) standards for accreditation, as well as their own standards for graduation, particularly in the areas of communication and data gathering. When used for assessment purposes, SPs must be accurate and reliable in order to produce defensible data about learner performance and need specialized training to accomplish these goals. The people that train SPs are known as standardized patient educators (SPEs). They are the invisible element that can make the difference between excellent, reliable SP performance and evaluations and non-optimal results. Thus their preparation as SPEs is vitally important. No literature could be located on this topic. This proposed project is a beginning model for training SPEs

METHODS
The model that will be tested here is based on learning principles and on what is known about how to train SPs. A key element will be goal-directed practice coupled with targeted feedback, which has been shown to enhance learning (Ambrose et al., 2010; Friedlander, 2011). The SPEs will be participating in the training activities, not just talking about it. They will engage in a variety of activities including brief didactic sessions, case review exercises, experiential practice portraying cases and training actors, practice observing and rating learners and SPs. Finally they will get practice providing feedback to both learners and performers. In all of these activities they will be observed and provided with specific targeted feedback with the opportunity to repeat exercises. This intense 30-hour workshop will be conducted over 5 days for 10 novice SPEs.

EVALUATIONS
Program efficacy will be assessed in relation to Kirkpatrick Levels 1-3 (Kirkpatrick, 2006). Data will be collected regarding: 1) SPE reaction to the training and training elements; 2) SPE learning with a) self-efficacy measured using a retrospective pre-post questionnaire; b) knowledge measured by a pre-post multiple-choice quiz; c) skills through direct observation throughout the training; 3) SPE behavior will be assessed through a) observation/rating of SPEs in a "mock" training session; and b) through expert rating of the newly trained SP's performance in a "mock" clinical skills examination. / / Impact on the Field: This study of a training model could lead the way for future research in the unexplored arena of educating standardized patient trainers.

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Virtual Support Happy Hours for Minority Medical Students

Ron Ortiz, M.D. and Jeffrey Ring, Ph.D.
Arlanza Family Health Center and White Memorial Med Ctr

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

Idea
To provide minority medical students across the United States with a year-long series of virtual meetings for mentoring and peer support.

Rationale
Feelings of isolation, racial discrimination, and racial prejudice are some examples of how race/ethnicity adversely affected minority student's experience in medical school. These same students were more likely to have burnout, depressive symptoms, and low quality of life scores.[1] Minority students may have more difficulty establishing a peer network for support and finding same-race role models and mentors.[2] / Minority student struggle more academically than their non-minority counterparts.[3]

Methods
We have selected themes for monthly meetings (listed below) based on pilot interviews with medical students, and on what the literature highlights about key stressors for these students. An opening presentation will be followed by open discussion of the theme, questions and answers, along with simultaneous interaction of participants via the chatbox in the virtual classroom as well as spontaneous postings to the virtual classroom whiteboard. These sessions will also be recorded and stored for future access by students who may not have been able to attend the live session. Breakout sessions will allow for more intimate in-depth conversations in small virtual groups.
Our proposed topics for the ten virtual happy hours are as follows:
1. Dealing with race/fairness issues,
2. Well-being strategies: work/life balance; exercise; self-care,
3. Initiating and developing a purposeful relationship with your preceptor/mentor
4. Forming collaborative relationships
5. Study skills
6. Exam preparation
7. Giving and receiving feedback
8. Preparing for the clinical years
9. Choosing an ideal specialty and residency program
10. Essay writing and interviewing skills

Evaluation strategies
Medical students are very busy, and it is our intention to provide them with relevant and useful support, but not to drain their precious time or energies. As such, all outcome measures for our project will be collected passively, without specific questionnaires or surveys. As such we will monitor: 1) number of participants in each of ten virtual happy hours / 2) number of others who viewed these sessions but did not attend in real time

Impact
The United States is looking to increase the number of physicians, particularly in family medicine and primary care, from a full array of diverse backgrounds to serve many underserved patients and communities. It is our hope that this virtual happy hour intervention will foster successful completion of medical school among participants.

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Evaluation to Assess the Impact of the New High-fidelity Simulation Portion of 1st Year Anesthesiology Residents' Curriculum

Catherine Rodziewicz MD, Crisanjali Rajaratnam, Chelsia Varner MD, Julie G. Nyquist, PhD
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013 5:00 – 6:00 pm

IDEA

To build key crisis resource management (CRM) skills in first year Anesthesiology residents using role play, high-fidelity simulation and focused debriefing.

EVIDENCE OF NEED AND IMPORTANCE

Anesthesiology has been a leader in safety in healthcare initiatives.[1] Teamwork and communication are the critical elements in preventing human error. There is ongoing work required to improve patient safety. Increasing production pressure with diminishing resources may threaten previously won gains. We have to be particularly attentive to prevent basic preventable human errors[2.] To accomplish this we need to develop team skills in our residents. This has been recognized by the ACGME; beginning in July of 2012, all anesthesia residents are required to participate in one simulated clinical experience per year. Realistic simulation offers a potential advantage for motivating a demanding audience to learn about teamwork principles and to alter their behaviors, both intended to reduce the risk of adverse events". [3]

DESCRIPTION OF PROJECT

All 1st year anesthesia residents will participate in the team building workshops (total n=18). There will be a maximum of 6 residents per session. The learners will take a pre and posttest of the CRM key points[4] to assess knowledge, and then practice these skills through experiential learning during three live exercises in simulated operating room scenarios, using a high fidelity simulator. Faculty will act as confederate operating room personnel. Trained faculty instructors will debrief the residents using the advocacy inquiry method[5]. Five teamwork skills will be assessed by both observers and participants using a 7-point team behavioral rating scale. Residents will also self evaluate the impact of their training using a 5 point scale and self-reporting comments. The residents will commit to a practice improvement plan by choosing three CRM key points and follow up in 30 days by submitting documentation of the application in actual clinical practice.

QUESTIONS OR DESIRED OUTCOMES

The residents will be assessed on their knowledge of the 15 key concepts in Crisis Resource Management before and after the simulation experiences. They will be assessed on their application of these skills after the simulations during debriefing. The clinical significance of their training will be assessed by self-reporting of clinical experiences. This data will assist in optimizing curriculum development for knowledge and application of CRM principles.

DEVELOPMENT PROGRESS

All first year anesthesiology residents have completed their simulation training and evaluations, and simulation program is being revised to accomplish improved knowledge of CRM principles.

WHAT IS NEEDED

Collaboration is sought from similar simulation start-up programs seeking to fulfill ACGME requirements of one simulated clinical experience per year focusing on team building using CRM principles.

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Augmenting Resident Education with E-learning Modules
to Improve Satisfaction, Knowledge and Confidence in a Pediatric Oncology Rotation

Shira Rosenberg MD, Todd Chang MD
Childrens Hospital of Los Angeles

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE
Recent changes in ACGME requirements for residency training include more restricted duty hours. This has forced a change in resident education away from unrestricted clinical rounds and daily bedside rounds to more time-efficient educational strategies. Additionally, many training programs are transitioning to shift-work schedules. Teaching residents working night shifts presents another unique challenge. E-learning technology can provide residents with high quality, standardized education that is accessible day and night. While many studies have shown that e-learning increases knowledge compared to no education, there remain significant gaps in the literature. Specifically, most e-learning studies involve medical students, supplement basic science courses, feature post-tests delivered immediately after the intervention, and test only satisfaction and knowledge. A needs assessment conducted with current Children's Hospital Los Angeles (CHLA) residents, recent residency graduates and oncology attending physicians suggests a significant need for supplemental oncology education. An overwhelming 92% of attending physicians agreed that they have less time to teach now than they did five years ago. Almost every resident (93%) reported feeling less comfortable caring for oncology patients than children with other diseases.

DESCRIPTION OF PROJECT
I will create six 15 minute online educational modules, each of which will provide an overview of a pediatric oncology topic. The specific subjects were selected by CHLA residents and include abdominal mass work-up, brain tumors, fever and neutropenia, new diagnosis leukemia, oncologic emergencies and tumor lysis syndrome. Each module will include learning objectives, formative questions, and key summary points. Modules will be engaging, and will contain audio, video, graphics, animation, text and pictures. Module assignment will be done in sequential alternating A-B-A-B fashion. The four residents who are on Team Cancer in the first 4 weeks of the study will take modules #1-3. The second cohort of residents will be given Modules #4-6. The third, #1-3, the fourth, #4-6, etc. This block design prevents the contamination that would occur with a truly randomized design, while also circumventing maturation bias.

DESIRED OUTCOMES
There are three outcome measures that will be examined: satisfaction, knowledge and confidence. Satisfaction and confidence in treatment patients with these conditions will be evaluated by a Likert scale. Knowledge will be assessed by multiple choice questions featuring clinical vignettes. Satisfaction will be surveyed at the end of the Team Cancer rotation, while confidence and knowledge will be evaluated at three time points: the start and end of the Team Cancer rotation, and two months later. Knowledge tests will be beta-tested among non-participating clinicians, and adjusted to optimize difficulty and reliability. Results will be analyzed used paired t-tests, and final results should be available by June 2014.

DEVELOPMENT PROGRESS
The knowledge questions have been created and beta-tested. The module topics have been determined and are beginning to be created.

WHAT IS NEEDED
Any e-learning modules created to complementing residents' clinical rotations.
Any improvements to the experimental design.
Other published educational studies that have used a similar experimental design.
Studies that measure learner confidence and tied that outcome to learner knowledge

Anesthesiology Residents as Practitioners: Evaluating the Impact of a Transition to Practice Rotation

Jean Simonson MD
University of Nebraska Medical Center Department of Anesthesiology

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

Using mentored experience in "running" an anesthesiology service to help senior residents transition smoothly from residency to practice as an independent anesthesiologist.

RATIONALE

Anesthesiology transition to practice (TTP) rotations have reported new knowledge and skill acquisition related to teaching practice management concepts. (Cooper 2010, Zheung 2010) While TTP rotations facilitate autonomy, preparation for practice, and meet multiple ACGME requirements, they are not universally used. Anecdotally our residents have expressed the desire to "practice" independently while still a resident and have suggested adding a TTP rotation to their education. Although there is no literature comparing the immediate and long-term impact of TTP rotations on the skills and perceptions of individual senior anesthesiology residents, it is hypothesized that such a rotation would increase resident confidence in performing independent clinical practice and operating room management skills. A secondary hypothesis is that as a result of this rotation, the resident will have increased confidence in their abilities when applying for and performing their initial employment.

METHODS

One senior (CA-3) anesthesiology resident per month at the Omaha-Western Iowa Veterans Affairs Medical Center will participate in a TTP rotation (12 residents per year). Structured practice opportunities will be provided with mentoring by faculty anesthesiologists. Resident assignments will include two weeks as operating room clinical director and two weeks as a clinically independent (conditional) anesthesiology consultant providing perioperative patient care. Professional society educational materials, reading assignments with follow-up discussions, and guided practice with one-on-one coaching by anesthesiology faculty will be incorporated. The learning objectives include: 1) describe practice management concepts involved in perioperative care and factors that positively/negatively impact that management; 2) describe at least one improvement in the current system of operating room management; and 3) function as an independent practitioner including identifying strengths and one area for improvement within own practice.

EVALUATION

Data will be collected in relation to Kirkpatrick Levels 1-3 (Kirkpatrick 2006): 1) resident reaction to the new rotation and its elements; 2) resident knowledge and confidence as measured using a quiz and questionnaire; 3) resident on-the-job behavior through review of self-reported commitments to change in regard to their future activities using follow-up questionnaires with residents and with their initial employers. The 2012 graduates will also be surveyed as a control group to compare the transition experience.

IMPACT ON FIELD

This intervention could easily serve as a model rotation for other anesthesiology residency programs seeking to provide or enhance a transition to practice experience.

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Implementation Of An Ultrasound Curriculum For Obstetrics And Gynecology Residents

Rachel Steward MD MSC, Samantha Spragg
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

EVIDENCE OF NEED AND IMPORTANCE

At LAC-USC medical center, there is currently no curriculum for ultrasound training for the OB/GYN residents. Lee et al. [1] conducted a nationwide survey of OB/GYN residents and found only 16.3% of respondents stated that their programs required them to perform and interpret diagnostic ultrasound exams. Calhoun et al. [2] found it possible to implement an ultrasound curriculum for OB/GYN and Radiology residents with subsequent improvement in evaluation scores. This study will analyze the implementation of an ultrasound curriculum and the effect that it has on resident performance in an obstetrics and gynecology (OB/GYN) residency program.

DESCRIPTION OF PROJECT

This will be a prospective, cross-over, descriptive study. Four out of eight residents will be selected to participate in a formal ultrasound curriculum, comprised of didactic modules and observed core-competency skills. At the end of the six-month curriculum, all eight residents will be evaluated and quantitatively graded by a blinded reviewer. In addition, residents will be administered a qualitative Academic Confidence Scale questionnaire, that has already been tested for acceptable internal validity and then modified to fit this clinical setting. The four remaining residents will then participate in the curriculum over the next six months. The same measures will be applied to all eight residents at the end of the year to determine retention of information and differences between the two groups.

QUESTIONS AND DESIRED OUTCOMES

The quantitative results of the blinded reviewer and the qualitative results of the validated survey will be analyzed for differences. Since this study is not powered to detect a statistical difference, descriptive techniques will be employed. We anticipate that this educational intervention will improve subjective resident confidence and objective performance as measured on a quantitative scale by a blinded reviewer.

DEVELOPMENTAL PROGRESS

We have not yet started collecting data and are currently working on obtaining IRB approval.

WHAT IS NEEDED

Any feedback on implementing evaluation of a training curriculum would be appreciated. We are specifically interested in avoiding false positive results with the realization that any formalized curriculum will result in better performance, but seek to specifically measure the degree of improvement beyond that which would be achieved by drawing attention to the skill.

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Wy-Mii at USC

Jen Talbot, BA; Dixie Fisher, PhD; Kelly Jones, MD
University of Southern California

Session time: Saturday, 2/23/2013, 5:00 – 6:00 pm

INTRODUCTION/EVIDENCE OF NEED

Communication is a very important part of patient care and education of future physicians.1 According to the ACGME Common Program Requirements for Family Medicine, Section IV.A.5.d, "residents must demonstrate interpersonal and communication skills (ICS) that result in the effective exchange of information and collaboration with patients, their families, and health professionals.2 In order to determine whether a skill is effective and appropriate, residency programs must use validated tools for assessment.3 A popular tool that faculty have used for over 12 years for measuring communication skills is the SEGUE Framework, which stands for Set the stage, Elicit information, Give information, Understand patient's perspective, and End the encounter.4 Skillings, et al., however, found the SEGUE to not be an ideal instrument to measure either the quality or the process of medical interviewing. In fact, none of the instruments evaluated in the study exhibited the characteristics desired for effectively assessing medical interviews.5 To fill this gap, they developed a new tool, the Wayne State Medical Interviewing Inventory (Wy-Mii), a 27-item instrument designed to assess residents' communication and interpersonal skills.

PURPOSE STATEMENT

The principal aim of this investigation is to explore the usefulness and validity of the new Wy-Mii tool in the USC Family Medicine ambulatory care residency program, and to test the claims that the tool 1) makes it easier to teach and evaluate resident interview skills, 2) helps first-year residents feel less overwhelmed by the prospect of learning interviewing skills, 3) increases interest of senior residents to learn more advanced communication skills, and 4) increases faculty willingness to be involved.

SUBJECTS/SETTING

PGY1, PGY2, and PGY3 Family Medicine Residents from the USC Family Medicine Residency Program at California Hospital. All observation and administration will be conducted at the USC-Eisner Family Medicine Center in Downtown Los Angeles, California.

METHODS

In Phase 1, we will have faculty raters complete a Wy-Mii tool characteristics form to determine applicability and usability. For initial evidence of validity, PGY3 residents will complete a self-assessment of ICS skill, and we will determine how well Wy-Mii scores from a single clinical encounter correlate with their self-rated expertise in ICS. We will also compare (ICS question specific) results from the USC OSCE with Wy-Mii scores for current PGY3 residents. (Nov-Jan. 2013) / During data collection and analysis, we will consult with Wayne State University to make any necessary modifications to the tool for use at the Family Medicine Center and provide any additional faculty training if necessary. (Jan 2013) / In Phase 2, we will develop instruments to test Wy-Mii claims one to four listed above. After making necessary revisions and process improvement prior to administration, we will implement the Wy-Mii, with current PGY1 and PGY2 residents (following same steps as above), using two separate clinical encounters over a 4-month period (Feb-June 2013).

RESULTS

Preliminary results from PGY3 residents will be provided at IME.

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The Art of Bonsai Applied to Residents:
A New Curriculum for Scholarship and Professional Formation

Dale S Vincent MD
Tripler Army Medical Center, Honolulu, Hawaii

Presentation time: 2/23/2013, 5:00 – 6:00 pm

RATIONALE
In 2010, the Alliance for Academic Medicine's Education Redesign Task Force called for the medical profession to develop scholars with competencies in the domains of discovery and integration, application, and teaching. The Carnegie Foundation also recommended greater emphasis on developing skills for inquiry and improvement, while promoting broader professional roles as educators and investigators. The Next Accreditation System includes new metrics that track scholarly activities and outcomes research by individual residents.

DESCRIPTION
Professional formation has an aesthetic that is more than simply the implementation of a program or a curriculum. **Bonsai**. The art of bonsai extols effort, ingenuity, and contemplation within a traditional framework. The essence of bonsai is *wabi-sabi*, a Japanese word that describes the serenity, reflection, and wisdom of its practitioners. **Curriculum**. The proposed curriculum embodies the idea of scholarship and professional formation in medicine in the 21st Century. The foundation of the curriculum is the American College of Physicians (ACP) format for advancement to Fellowship, an achievement that recognizes membership, scholarship, and practice excellence. Using an ACP framework, residents can not only monitor their own progress, but also plan for their professional future.

PLAN
Bonsai. Success starts with tree selection (goals), pot selection (a foundation), a seasonal pruning and shaping plan (guided activities), and daily watering (incremental progress). **Curriculum**. This 36-month curriculum promotes, guides, and tracks resident competencies in the domains of core domains of scholarship. The curriculum takes the place of a traditional 2-4 week "research" block at each year of training.

EVALUATION
The curriculum engages residents on a seasonal basis during intern orientation, semi-annual evaluations, rotation blocks, and scheduled sessions using reflection and feedback about defined outcomes.

OUTCOMES
Resident motivation is explored and measured longitudinally. Why develop academically? To enhance an application for fellowship? To begin an academic career? To feel good about being an internist? Activities in the curriculum are designed to enhance a resident's professional CV, such as submission of a paper to a peer-reviewed open access journal that the residency has funded. Measured outcomes are resident-centric (changes to a CV) and program-centric (items for the inclusion in the Next Accreditation System, and personal reflections).

PROGRESS
Parts of the curriculum have been implemented, such as developing and submitting papers to an open access journal. Full implementation will occur pending IRB approval.

POTENTIAL FOR COLLABORATION
Interested programs are invited to collaborate with the author and share ideas about professional formation.

The Use of Social Media Policies in U.S. Allopathic Medical Schools

Amanda Xi, Jill Stefaniak
Oakland University William Beaumont School of Medicine

Presentation time: 2/23/2013, 5:00 – 6:00 pm

INTRODUCTION

As of 2012, PewInternet reports that 66% of online adults use social networking sites such as Facebook, Twitter, Google+ and LinkedIn - an increase of 37% since 2008 and a staggering 58% since 2005 (1). Social media use among medical students is even more significant - study conducted in 2010 reported that over 90% of medical students participated in online social networking (2). Although social media sites offer positive applications for the medical field, there is a very real risk for breaches of professionalism and HIPAA violations. In 2010, a study found that although 95% of U.S. medical schools had a Facebook presence, only 10% of those schools had explicit guidelines or policies concerning social networking site usage (3). In a time when many medical students report feeling unprepared in the realms of professionalism and ethics (4), the absence of formal guidelines is troubling and leaves the door wide open for violations in online professionalism and even the law. This research project is geared toward analysis of the current climate of social media policies in U.S. allopathic medical schools.

DESCRIPTION OF PROJECT

The websites of 133 U.S. allopathic medical schools were reviewed for a student handbook. 18 schools' handbooks were not available for analysis. 43 schools were identified to have an explicit social media/online networking policy included in their student handbook. Through analysis of key terms such as professionalism, HIPAA, violation, etc, that were identified as vital components of an effective social media policy, themes will be established with the goal of creating a database of policies applicable to medical students and a tool for school administration to create or update current policies.

QUESTIONS/DESIRED OUTCOMES

1. How many U.S. allopathic medical schools have explicit social media policies?
2. What components are included in each school's social media policy?
3. Is there consistency amongst school policies?
4. Is there an association between school characteristics and the inclusion of a policy?

DEVELOPMENT PROGRESS

The handbooks with social media policies have been collected and are currently being analyzed for key words. An analysis rubric has been developed to maintain consistency of policy reviews by key personnel. Additionally, the word count of the policy and the founding year for the school are being recorded to look for possible associations.

WHAT IS NEEDED

Although numerous key terms have been identified for analysis of the policies, additional variables could still be missing. Furthermore, collaboration on the creation of a database and eventually, an open-source tool that could assist medical schools in creating or updating their policies. Finally, additional feedback on possible future directions would be welcome. It is the intent of this study to establish guidelines and consistency for social media policies across all U.S. medical schools.

REFERNCES

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Health Literacy and the Physician's Role

Stephanie K. Zia MD, Julie G. Nyquist PhD, Desiree Lie MD MSEd
Keck School of Medicine of the University of Southern California

Presentation time: 2/23/2013, 5:00 – 6:00 pm

IDEA

An interactive, inter-professional, multi-modal curricular unit for second year medical students on health literacy and the physician's role.

RATIONALE/NEED

Health literacy, defined as "the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions"[1] is integral to patients' ability to adhere to treatment and achieve the best possible health outcomes.[2] Approximately 90 million people in the United States have limited health literacy skills.[1,2] Health care providers often overestimate literacy levels of their patients and patients fail to reveal their low health literacy levels; this communication gap can ultimately affect the patient-physician relationship.[3] Medical students have varied experiences in issues related to health literacy, with many unaware of the association between health literacy and its impact on the patient-physician relationship. Currently, no formal curriculum on health literacy exists for students enrolled at the Keck School of Medicine (KSOM).

METHODS

After an introductory two-hour session given to all first year students on health literacy during their Professionalism and Practice of Medicine course (PPM), twenty to twenty-five medical students can participate in the Health Literacy Selective (HLS) during their second year, integrated within PPM. After six interactive faculty and student-led sessions, learners will be better able to describe health literacy and its associated outcomes, discuss potential physician advocacy activities, assess patient health literacy, and provide patient education delivered at the appropriate level so that patients can successfully understand, utilize, and apply the health information provided to them. Interactive classroom techniques will be used including: film clips, facilitated discussion, small group case-based activities, role-play, student presentations, inter-professional activities, reflective writing, and commitments to act/change.

EVALUATION

The evaluation will include assessment of student reaction through an end of course evaluation, student learning, and planned changes in student patient care behaviors. Students participating in the HLS will complete a pre-test and post-test to assess learner changes in attitudes and knowledge. OSCE performance on a patient education case in KSOM's Clinical Performance Exam can be compared with that of students not participating in the HLS. Qualitative methods will be used to assess students' intent to change behaviors. Students will complete a reflection to encompass key concepts learned and a commitment to "act" in relation to applying these concepts in patient care. These will be collated and distributed to the students with a follow-up six months later to ascertain successful implementation and barriers.

IMPACT ON FIELD

This health literacy curriculum can be a model used in other medical schools, residency programs, and health professional fields.

2013 Innovations in Medical Education

SCHEDULE
Sunday, February 24, 2013

7:00 – 8:20 am	**Full Hot Buffet Breakfast and Registration (Broad Conference Room)**		
7:15 – 8:20 am	**Session 16: Poster Session II with full buffet breakfast— Meet the Authors (Broad Conference Room)**		
8:30 – 10:00 am	**Session 17: Oral Presentation – REFLECTION, PROFESSIONALISM & THE COMMUNITY** **Moderator: Janet Trial** **Location: Aresty Auditorium** **"Ethnic Differences in Perception of Professionalism by Medical Students: A Mixed-Methods Study"** *Butani* **"Reflecting On Life In Medicine: A Curricular Innovation For Internal Medicine Residents"** *Ben-Ari* **"Catch Them Early: Precepted OSCE Reviews Using Guided Self-Reflection with Faculty Feedback"** *Souder* **"Empathy Predicting Ratings By Standardized Patients On The Patient-Physician Interaction From Self-Reported Empathy By Medical Students"** *May*	**Session 18: Faculty Development Advanced Workshop**** **Location: LG 503** *Think Safety First: Ideas for Creating a Culture of Patient Safety in Your Learners* Julie Nyquist, Karen Lind, Michelle Rickard, Cynthia Anderson	**Session 19: Workshop** **Location: LG 504** *Mobile and Social Learning* Randy Schell and Amy DiLorenzo
10:00 – 10:20 am	**Break (Refreshments & snacks – Location Aresty Auditorium Foyer)**		
10:20 – 11:50 am	**Session 20: Oral Presentations – UGME** **Moderator: Jane Rosenthal** **Location: Aresty Auditorium** **"The Introduction of Nutrition Education into the Medical School Curriculum: Using an Elective Course to Teach Students the Fundamentals, the Science, and the Clinical Implications of Food"** *Ostrosky* **"Utility and efficacy of a peer-based anatomy tutoring program for first-year medical students"** *Escovedo* **"Medical Student Values Regarding Human Sexuality Over a 6 Year Period"** *House* **"A Health Policy Advocacy Case for Medical Students"** *Schapiro* **"Innovations Study: The KSOM Longitudinal Community Medicine Education Program (LCMEP)"**	**Session 21: Faculty Development Advanced Workshop**** **Location: LG 503** *Career Development* Kathy Besinque and Rima Jubran	**Session 22: Workshop** **Location: LG 504** *The Educational Portfolio Unplugged* Bill Cloud & Michelle Olson

	Reilly		
12:00 – 12:50 pm	*Location Aresty Auditorium*	**Session 23: PLENARY SESSION** ## Graduate Medical Education: "Fog, Focus, and Future" **Randall M. Schell,** MD, MACM Academic Vice-Chairman and Program Director, Department of Anesthesiology, University of Kentucky	
12:50 – 1:00 pm	**Conference Closing Comments** **Location: Aresty Auditorium** Dixie Fisher, Chair, Innovations in Medical Education Conference		
1:00 pm	**Boxed Lunches To Go** (Location Aresty Auditorium Foyer)		

* Completion of 6 workshops results in a Fundamentals in Medical Education certificate (FIME) presented by the Department of Medical Education

** Completion of 6 workshops results in an Advanced Concepts in Medical Education (ACIME) certificate presented by the Department of Medical Education

Professional Identity Formation among Medical Students Who Volunteer at a Medical Specialty Camp

Jimmy Beck[1] MD, Terry Kind[1] MD MPH, Katherine Chretien[2] MD, Craig DeWolfe[1] MD Med
[1]Children's National Medical Center; [2]Washington DC VA Medical Center
Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION
In 2010, the Carnegie Foundation issued a report emphasizing the importance of the "formation of the physician's professional identity" which involves deepening one's commitment to the values, actions, and aspirations of the profession. Yet there has been insufficient study on the impact of educational experiences on the development of professional identity in the pre-clinical student. While the notion of identity development is relatively unexplored in the medical literature, results from other fields (art therapy and teaching programs) suggest positive outcomes of service learning programs on professional identity.

PURPOSE STATEMENT
To examine how the professional identities of medical students may have been influenced by volunteering at a camp for children with chronic conditions.

SUBJECTS/SETTING
Medical students between their 1st and 2nd year of school served as counselors for 1 week at a condition specific camp (epilepsy, heart disease, or diabetes) sponsored by Children's National Medical Center (CNMC).

METHODS
Focus groups were held on the last day of camp for a total of 3 separate groups. Sample questions included: How do you think your experiences this week will affect your professional goals and how did participation in this experience affect you personally? Focus group data was audio taped, transcribed and assessed using the phenomenological tradition by two researchers trained in qualitative analysis. The trustworthiness of the data analysis was enhanced through the use of member checks. This study was IRB approved.

RESULTS
All 9 medical students agreed to participate in the study. Findings revealed parallels in what the medical students themselves experienced and what they perceived the campers to have gained, such as new leadership skills, communication skills, knowledge of chronic disease, and comfort. Medical students described the experience as motivating and career reinforcing, and it helped them "move beyond the textbook." They strengthened their professional identity formation by deepening their commitment to serving future patients with empathy, by seeing and talking to patients as people and not just diseases, and by wanting to help patients' live healthier lives.

CONCLUSIONS
A one week service learning experience at a medical specialty camp may influence and strengthen the early formative professional identity of medical students. There is potential that other medical schools could utilize camps as experiential elective sites. Our plans include conducting interviews with the students 6 months after their experience to explore the long-term effects of this program.

MS4s In Service-Learning Elective Provide A Unique Mentoring Role To MS1s In Student-Run Free Clinics

Noura Choudhury, Ashoke Khanwalkar, Jennifer Kraninger, Adam Vohra, Camil Correira, Jennifer Jones, Robert Sanchez, Kohar Jones, Shalini Reddy
Pritzker School of Medicine, University of Chicago

Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION/EVIDENCE OF NEED
Student-run free clinics provide valuable service-learning opportunities for medical students. However, they can be unstructured learning environments with variable teaching from attendings. Qualitative interviews with classmates and previous free clinic leaders at the University of Chicago Pritzker School of Medicine (PSOM) demonstrated that first-year medical students (MS1s) desire increased mentorship in free clinics to improve their acquisition of clinical knowledge and skills and their ability to deliver quality patient care. In response to this need, a novel elective was developed in 2010 at the PSOM that places fourth-year medical students (MS4s) longitudinally in the PSOM-affiliated free clinics. The SERVE elective aims to provide improved, consistent mentorship to MS1s while presenting unique teaching and service opportunities for graduating medical students in a service-learning curriculum. Through this elective, MS4s are assigned to volunteer at least eight times in one of four Pritzker student-run free clinics and attend monthly reflection sessions led by faculty members.

PURPOSE
Our study examined the perception of MS1s toward the mentorship offered by MS4s to investigate whether MS4s in SERVE augmented the clinic education MS1s receive in the free clinic setting. We predicted that in addition to general satisfaction with MS4 mentorship, MS1s would associate MS4s with a unique mentoring role in clinic that will facilitate interactions with attendings.

SUBJECT/SETTING
MS1s at PSOM were surveyed using an online tool approximately nine months post-matriculation.

METHODS
A fifty-five item questionnaire was developed based on qualitative interviews and focus groups of past free clinic leaders and administered to MS1s approximately nine months post-matriculation using an online survey tool (SurveyMonkey.com, LLC, Palo Alto). Questions used a five-point Likert or Likert-like scale and focused on MS1 perceptions of how MS4s affected their comfort in clinic, whether MS1s were satisfied with the level of mentorship provided by MS4s, and how MS4s affected MS1 interactions with attending physicians. Furthermore, questions assessed self-reported improvements in clinical skills. Results were analyzed using one-sample Wilcoxon sign-ranked median test to analyze deviation from neutral response and ordered logistic regression to analyze association of MS4 presence with improvement in clinical skills using STATA software. This study was determined to be exempt from ethical review by the University of Chicago's Institutional Review Board.

RESULTS
Fifty-five of 77 (71.4%) eligible students began the online survey, with 48 (62.3%) of these students completing it. Overall, MS4 presence improved MS1 comfort in clinic and improved interactions with attendings ($p<0.001$). MS1s were also satisfied with the level of MS4 mentorship and felt that MS4s had a distinct mentoring role from attendings ($p<0.001$). Ordinal logistic regression showed that presence of MS4s was significantly associated with self-reported improvements to physical exam skills ($p<0.005$) at one of the clinics.

CONCLUSIONS
At each clinic, MS4s in the SERVE elective were perceived by MS1s to provide a valuable mentoring role. At one clinic, presence of MS4s had a statistically significant impact on improving self-reported physical exam and case presentation skills. Finally, MS4s did not merely duplicate the role of attending physicians, but instead enhanced interactions between MS1s and physicians. Further investigation is required to assess how participation in the elective impacts the teaching skills and career opportunities of MS4s and how MS1s characterize the specific role MS4s hold in clinic. Given these results, the SERVE elective is an effective model for providing teaching and service opportunities for MS4s and bolstering the mentorship of MS1s in free clinics.

Introduction to Life-Long Learning

Kathleen Crapanzano MD, Richard Vath MA
LSU State University Health Sciences Center, New Orleans

*** Presentation time: 2/24/2013, 7:15 – 8:20 am***

INTRODUCTION

As new doctors make the transition from studying in response to external pressures to being internally motivated to learn for their personal and professional development, it is critical that they receive sufficient support. How, then, can we as graduate medical educators aide new residents in making this transition? Successful promotion of lifelong learning is one of the most important competencies a physician must possess (Collins, 2009). A physician needs to develop skills of self-reflection and self-assessment in order to successfully monitor and adjust one's approach to learning.

PURPOSE

To support the development of lifelong learning skills in residents through the use of a scaffolded-approach to individualized learning plans.

SUBJECTS/SETTING

This pilot study will reflect the experience of 6 Psychiatry interns throughout their first year of residency.

METHODS

To help residents successfully manage their transitions from medical school to residency while developing life-long learning skills, we engaged in the following activities:

1. Online self-assessments (perceived style of self-regulation; perceived abilities related to medical knowledge and skills) - pre-, mid- and post- intervention
2. Semi-structured interviews (perceptions of learning and studying) - pre-, mid- and post- intervention
3. Completion of individualized learning plans, in consultation with the program director prior to orientation and again at mid-year (includes written reflections from residents)
4. Introductory lecture on learning theory
5. Monthly review of progress, conducted informally with an educational psychologist
6. Meetings with the program director to assess progress and address successes and challenges, conducted quarterly

EVALUATION

We are currently at the mid-point of our pilot year. We have reviewed the pre- and mid-year survey data (described above) as well as conducted a thematic review of the pre- and mid-year semi-structured interviews and resident reflections. Though it would be premature to construct case reports on our work to date, we have arrived at some impressionistic observations that are described below.

RESULTS

As we continue to support residents' progress towards our study's purpose, we have observed:

1. By mid-year, the residents are demonstrating more realistic attitudes about their professional limitations and expectations for their learning plans moving forward.
2. The residents are demonstrating more confidence in their clinical ability, although not uniformly. There remains a disconnect between their confidence and feelings of efficacy in their clinical work and their confidence and feelings of preparedness regarding their medical knowledge. We believe this reflects the uneven nature of their current responsibilities: limited clinical independence coupled with full responsibility for preparing for upcoming licensing exams.

CONCLUSIONS

The transition from medical school to residency is a difficult one. Thus far, our experience in this pilot program suggests that residents benefit from regular, focused interactions with program leadership that keep them focused on the bigger picture of their learning rather than the smaller milestones of completing rotations. In addition, we have observed that first-year residents may need explicit support in managing the differential demands of graduated clinical autonomy and absolute responsibility for exam preparation.

Learning Outcomes of a Service Learning Curriculum: A Mixed-method Study Using Student Narratives and an Online Survey

Christopher P Forest MSHS DFAAPA PA-C, Désirée Lie MD MSED
Keck School of Medicine of the University of Southern California

Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION
Service learning is an important strategy in physician assistant (PA) education that meets curricular goals and learning objectives in diverse areas such as community health, public health, advocacy, cultural competence and patient care per ARC-PA accreditation standards. There is a paucity of studies examining both short and long-term outcomes of service learning curricula within PA training programs. This study explores what students recall one year after their experience and how strongly they recommend the experience to incoming students. It also demonstrates the value of using mixed-methods for evaluating learning.

PURPOSE
Information about physician assistant (PA) student learning outcomes from service learning curricula is needed to guide curriculum development. The goal of this study is to use themes from reflective writing assignments submitted after a service learning experience to solicit student input about teaching effectiveness.

METHODS
Students (3 successive cohorts, n=38, n=45, and n=50) were assigned in pairs to community sites after completing a baseline inventory identifying their learning needs. Each student was required to write a reflection that was coded in aggregate to derive relevant learning themes. They were surveyed online (using Qualtrics[©]) 1 to 3 years after the experience. Learning was evaluated using two methods: responses to a checklist of predetermined item on a questionnaire and identification of themes from free text entries by students on the same questionnaire.

RESULTS
The two dominant learning theme domains were "self-discovery" (41%) and "client/patient-centered experience" (23%) followed by "patient-provider relationship" and "community resources" across all populations. Preliminary data from 48 students (36% response rate) who completed the online survey demonstrates that 35 students (73%) now perceive that the main learning theme from their service learning was awareness of community resources. [Results of Qualtrics Survey in process]

DISCUSSION
Service learning early in PA training increases awareness of biases and stereotyping, and reinforces a patient-centered focus. Students continue to recall learning about community resources. Students perceive community service learning as increasing their cultural competence and cultural humility and recommend this experience to incoming PA students. Students continue to identify learning from an experiential curriculum 1-2 years later, but learning recall differs with the method of questioning.

CONCLUSION
Long-term impact is different from immediate impact on learning. There is a difference between what students consciously learned as measured by menu selection and by free text comments. Using multiple methods of evaluation has value in understanding learning impact on students.

Inside the Leader's Office

Maurice Hitchcock, Ed.D. (1), Denise Souder, Ed.D. (1), Sharon Obadia DO (2), Arianne Teherani (3)
Keck School of Medicine (1), AT Still University (2), University of San Francisco (3)

Session time: Sunday, 2/24/2013, 7:15 – 8:20 pm

INTRODUCTION/EVIDENCE OF NEED
There is increasing recognition of the need to prepare better leaders for medical education. This recognition of need is manifested in the growing number of professional associations and schools who are instituting educational leadership programs We do not, however, have any established methods for teaching leadership to this cohort.

PURPOSE
The purpose of this study is to describe an innovative method of teaching leadership using stories embedded in live interviews "Inside the Leader's Office" and to explore how former fellows perceived the method as an educational too.

SUBJECTS/SETTING
Twenty-four former participants in the USC/Keck Educational Leadership Fellowship program (2010-2012) will serve as subjects i this study.

METHODS
Subjects (24) are being asked 3 open-ended questions: 1) How has your leadership changed since you graduated from the fellowship?; 2) Comment on your experience with "Inside the Leader's Office" interviews as an educational tool; 3) Give examples of how you have used or what you learned from "Inside the Leader's Office" stories. Analysis of the data will be done using qualitative methods by identifying themes and conclusions from fellows' responses.

RESULTS AND CONCLUSIONS
Data is currently being collected. This study will be completed and ready for presentation at the conference.

Multidisciplinary Obstetrics Drills in the Emergency Department

Andrew Thomas MD, Doerthe Brueggmann MD, Judy H Chen, N Bender, Win May MD PhD,
Madhu Hardasmalani MD, Jenny Jaque MD
University of Southern California

Presentation time: 2/24/2013, 7:15 – 8:20 am

BACKGROUND

Los Angeles County-University of Southern California (LAC+USC) Hospital is one of the largest acute care hospitals and residency training institutions in the United States. At LAC+ USC residents face rare, complex emergency situations requiring teamwork for safe and efficient treatment on a daily basis. These settings require residents to communicate effectively with members on various teams, demonstrate good clinical judgment and medical knowledge as well as utilize leadership skills to orchestrate a multidisciplinary event. Emergency Medicine, Trauma Surgery, Pediatrics and Obstetrics and Gynecology are four disciplines that are challenged on a regular basis to work as a team. Obstetric emergencies may occur at any time and in any setting. Published literature describes obstetrics drills on labor and delivery units, but less focus has been placed on training in other hospital locations.

OBJECTIVES

To create a clinical multidisciplinary curriculum using simulated drills of obstetric emergencies in the Emergency Department (ED) that residents in training will enjoy while improving medical knowledge and communication skills.

METHODS •

A simulation drill was created of a pregnant patient who presented to the ED with multiple gunshot wounds and conducted using a NOELLE simulator which displayed relevant findings such as decreased breathing sounds, vaginal bleeding and vital signs.

Participants were guided through a scenario of assessing and stabilizing a pregnant trauma patient. A "code OB" was activated to begin the multidisciplinary event requesting the need for obstetrics (OB), pediatrics (NICU) and trauma surgery teams. A pre-determined clinical pathway necessitated emergency delivery of the fetus. The event was video recorded to use as a teaching tool.
Participants were evaluated regarding team-performance, leadership and communication skills. Medical knowledge and clinical judgment were assessed using standardized checklists.

RESULTS

In these drills, we identified three key issues:
1. Senior team members took no clear leadership roles, so no roles of fellow physicians or nurses were assigned and no tasks were delegated.
2. Commands were verbalized in general but the tasks were not assigned to a designated person. Therefore, no reassurance was given that the command was understood and the task achieved leading to confusion of the participants and to a time delay until completion of the tasks.
3. Communication regarding the patient status was lacking between members of the same team and between members of teams from different specialties.

CONCLUSION

Conducting a simulated obstetric emergency in the Emergency Department can provide a useful teaching tool for residents in training.

Can We Use Narratives to Teach ACGME Core Competencies?

Samir Johna, MD, Brandon Woodward, MD, and Sunal Patel, MD
Arrowhead Regional / Kaiser Fontana General Surgery Residency Program
Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION

Teaching ACGME core competencies remains a challenge for faculty particularly the advanced competencies beyond medical knowledge and patient care. Structured educational experiences such as formal presentations, classes, or seminars are not frequent enough to meet the needs. It is ideal that faculty would use every patient encounter or work experience to teach these competencies whenever possible.

PURPOSE STATEMENT

Narratives through reflections have the potential of bringing into focus one or more of the core competencies in every patient encounter or work experience. Such experiences, if feasible, can be used as an educational intervention by the faculty to teach ACGME core competencies to their learners.

SUBJECT

All physician-assistant students, medical students, and all surgery residents rotating with the first author are required to reflect on their experiences at any of the locations they have rotated through.

METHODS

All physician-assistant students, medical students, and all surgery residents rotating with the first author are required to reflect on their experiences at any of the locations they have rotated through, whether positive or negative experiences, in an anonymous way. The reflections were studied by the first author. The embedded overt and/or covert core competencies were identified and interjected within the text. The narratives were discussed at a later date with the learners one-on-one, with a focus on the identified ACGME core competencies. An anonymous survey was conducted using surveymonkey looking at the gained knowledge (Kirkpatrick level I), and at learners' reaction (Kirkpatrick level II) with a focus on the perceived effectiveness of this educational intervention by the learners. The data were finally collected and analyzed using descriptive statistics.

RESULTS

The author collected 33 narratives over the past 2 years from physician-assistant students, medical students and surgical residents. All narratives were analyzed by the first author. Each narrative analysis took 10-15 minutes to complete. Each narrative discussion with its learner took similar amount of time. The median number of paragraphs per reflection was 3 (R= 1-9). The median number of words per reflection was 438 (R= 184-1152). The median frequency for each core competency per reflection was zero for medical knowledge (R= 0-2), 3 for patient care (R= 0-6), 2 for interpersonal and communication skills (R= 0-6), 2 for practice-based learning and improvement (R= 0-9), 1 for system-based practice (R= 0-7), and 3 for professionalism (R=1-7). The median for collective number of core competencies per single reflection was 4 (R= 4-6). All learners were surveyed. Only 23 learners responded (69.6%). One responder skipped question three on the survey.

All surveyed participants responded with "yes" to every question (100%). The learners perceived that narratives through reflection were useful educational intervention for learning ACGME core competencies. The first author is currently in the process of assessing the reflective capacity in each narrative using the "REFLECT" rubric as described by Wald, et al.

CONCLUSIONS

Narratives through reflection are simple and feasible educational interventions that can be used to teach one or more of the ACGME core competencies, particularly those that are beyond medical knowledge or patient care. Such narratives can also be used to document compliance with regulatory requirements for teaching ACGME core competencies. Further research is required for validation of this intervention as an educational tool and potentially as an assessment tool.

Switching Conferences from Lecture to Discussion—Does it Impact Residents' Learning?

Karen Lind MD, Manish Sharma DO, Antonios Likourezos MA MPH
Maimonides Medical Center

Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION & EVIDENCE OF NEED

The lecture method does not consider individual differences in learning styles or foster collaborative learning (Twigg, 2009). Results from a randomized trial involving orthopedic residents showed that small group learning was more popular than lecture didactics, and may have led to increased retention (Costa, 2007). Testing with Kolb's learning style inventory revealed that emergency medicine residents learned well through active experimentation (Rowden, 2005). In July 2012, our residency changed from a lecture-based didactic model to a small group, lecture-free conference.

PURPOSE STATEMENT

Current literature supported shifting from lecture-based didactics to small-group-based learning. The purpose of this intervention is to use multiple choice test performance to demonstrate adequate medical knowledge acquisition since July 2012.

SUBJECTS/SETTING

Subjects include 42 PGY-1, 2 and 3 emergency medicine residents at Maimonides Medical Center; the setting was regular weekly conference.

METHODS

The conference format was didactic lecture from the residency's inception in 2005 until July 2012, when the format was changed from lecture to small-group discussion. In December 2012 (the 6 month point of conference), residents were given a 99-question quiz: 33 questions covered material already taught in the new conference format between July-Dec 2012 (months 1-6), 33 questions covered material from months 7-12, and 33 questions covered material from months 13-18. We hypothesize that residents will not perform more poorly than prior years' testing overall (non-inferior). The null hypothesis is that the residents will score no differently on overall material than in years past.

A quiz with identical topic breakdown (but different questions) will be given at the 12- and 18-month mark. By having a quiz at the 6 and 12 month mark which include material from months 13-18, this 13-18 month material will serve as the "control" material, as it is never covered in conference during the testing period; thus, the residents will serve as their own controls and similar scores on month 13-18 material will help reflect validity.

RESULTS

Data was analyzed using SPSS 19.0, the independent samples test comparing medians was used for the bulk of the data analysis. 6 PGY-3, 11 PGY-2 and 10 PGY-1 residents completed the test. Median scores for PGY 1, 2 and 3 were 52.6%, 65.3% and 69.9% respectively. There was no significant difference between the medians of each of the three topic groups overall (similar performance by all PGY levels), and there was no significant difference between the topic groups for PGY-2s and PGY-3s within their own class.

CONCLUSIONS

There was no significant difference between material covered in the new conference and that which was not for any of the EM classes. This demonstrates that the new conference is not leading to decreases in overall medical knowledge.

Early Development of an Electronic Medical Educational Assessment Enterprise Solution (EMEAES)

Peter McKeown, Adam Landow, Amanda Nagle, Stephen Winn, Victor Minichiello
University of New England

Session time: Sunday, 2/24/2013, 7:15 – 8:20 am

Large businesses frequently use Business Intelligence Software to make strategic decisions. Extensive analyses can be conducted looking at multiple facets across the business model. Results can be analyzed looking specifically at products, divisions, personnel, management etc. The ability to look at the information in many different ways and to drill down on certain facets is enormously powerful. If similar software programs were used extensively in medical education more effective decision making could be implemented in terms of pedagogy, curriculum revision, faculty assignments and potentially individual student learning and faculty teaching targets. The University Of New England School Of Rural Medicine (UNESRM) is using this philosophy to try to develop an Electronic Medical Educational Assessment Enterprise Solution (EMEAES). By using a combination of commercial software and programs developed in house we can now effectively and efficiently assess many aspects of medical students' performance and the impact of teaching in the curriculum. The assessments include interactive questions (pre and post) PowerPoint lectures, Problem Based Learning (PBL) sessions, E OSCEs (Electronic Objective Structured Clinical Examinations) and on line MCQs (Multiple Choice Questions). It is essential to do a full risk analysis prior to implementing any new software assessment program, especially proprietary, in-house developments. For example, prior to implementing the University of New England School of Rural Medicine EOSCEs a full risk assessment profile was performed. This included features such as student identification (Photo and student number used for double identification), tutor identification (signature) , unauthorized access, incomplete fields, system failures and system stability. Another relatively inexpensive program, TurningPoint , is an audience response system can be used to facilitate interactive audience participation anywhere in the world provided there is internet access. While it can be used with clickers it is now available on IPads and smart phones. The questions are embedded in a PowerPoint presentation and the responses can be downloaded and transferred to a spreadsheet program for analysis. A simple electronic program was developed in house to assess the skills lab performance of first and second year medical students undergoing an introduction to ultrasound course. The PBL assessments are also done electronically and include not only tutors assessment of medical students but also students' assessment of the tutors.

CONCLUSIONS
Using electronic submissions and responses has proven to be far more accurate and efficient than traditional paper recording. It also allows for collation and analysis is a way that was previously time consuming and limited. With the range of software programs available, it is now possible to develop an Electronic Medical Education Assessment Enterprise Solution (EMEAES) in order to make more meaningful and intelligent decisions as regards to content, pedagogy, personnel and curriculum.

Using Collaboration and Broadband connections To Link a large California Medical School with a small Rural medical School in Australia- The UCI – UNE Connection.

Peter McKeown1, Stephen Winn,1 Victor Minichiello1, Shahram Lotfipour2, J Christian Fox,2Gerald Maguire2
1 University of New England, Australia   2. University of California Irvine

Session time: SUNDAY, 2/24/2013, 7:15 – 8:20 am

Rural Medical schools are at a distinct disadvantage compared with their urban counterparts, in terms of resources, clinical rotations and academic staff. The University of New England School of Rural Medicine (UNESRM) is a small young rural medical school in Australia and part of the Joint Medical Program (JMP) with the University of Newcastle. Its five year undergraduate entry program enrolled its first students in 2008. In an effort to even the playing field UNESRM has used the affiliation with the University of California Irvine School Of Medicine (UCI) to demonstrate the feasibility of remote broadband linked educational endeavors. Multiple simultaneous training sessions have now been implemented. These have included simultaneous synchronous simulation exercises and remote ultrasound education that include hands on instruction and assessment. Using High speed Broad band connections not only allows the sharing of lectures, simulation and ultrasound instruction between the two institutions, but software programs like Turning Point can facilitate simultaneous interactive engagements at either or both stations. The initial intent was to use the superior simulation skills of UCI and match it with the UNE e-learning and remote education experience in the hope that UNESRM could improve its delivery of the JMP curriculum. While the expectation was that UNESRM would be the major beneficiary, there have been advantages to both institutions. The synchronous simulation exercises and collaboration exchanges have significantly enhanced the capacities of both institutions, not just UNESRM. The virtual exchanges were followed by reciprocal visits of students and faculty between the two institutions, further strengthening the affiliation. UCI students spent a week at UNE in a peer to peer introduction to ultrasound course and UCI and UNE faculty jointly conducted a Simulation instructor's course. UNE in term has contributed to the high speed internet capabilities of UCI.

CONCLUSIONS
Collaboration between institutions, using high speed broadband links and exchange visits can greatly enhance the capacities of all parties. Following from this initial success, plans are now well under way to expand the model of collaboration and remote education between UNE and UCI to other institutions in North America and South America and South East Asia. / /

Using Expert Advice to Revise a Curriculum

Karen Hughes Miller PhD, Michael Ostapchuk MD MS Ed, Pradip Patel MD
University of Louisville School of Medicine

Presentation time: 2/24/2013, 7:15 – 8:20 am

INTRODUCTION

In 2011, our medical education team came to INNOVATIONS for the purpose of getting expert feedback on revising a good (but not great) course designed to help second year residents prepare for their ACGME required scholarly activity. The course, developed in 2010 and delivered for the first time in 2011, addressed ACGME Common Program Requirements IV.B.1., IV.B.2. and IV.B.3. that institutions must encourage and support residents' scholarly activity. The course was revised and repeated in 2012 with improved learner outcomes.

PURPOSE

This poster presents a case study of how a curriculum can show measurable improvement using a combination of (1) quantitative and qualitative evaluation data, (2) medical education research literature, and (3) expert advice from other medical educators.

SUBJECT/SETTING

Each year, second year residents from all specialties (N = 138) participate in a mandatory full day workshop designed to prepare them for their various scholarly project.

METHODS

The 2011 program evaluation (exempted by the IRB) used a pre-post knowledge quiz and opinion survey, a faculty/facilitator survey, independent observers, and a 6-month follow-up survey. The 2012 evaluation included a pre- and post knowledge quiz, an opinion survey (separate from the knowledge quiz), and discussion with presenters and facilitators about their perceptions of the revised curriculum.

RESULTS

The 2011 pre-post content quiz and opinion survey found significant differences (P<0.05) on 10 of the 15 items measured. Open ended comments were positive in regard to the instructional content and small group activities, but more negative on the length and level of detail offered in sessions on statistical processes. Presenters' and facilitators' survey results ran parallel to residents' with an appreciation of the event in general, the learning activities and materials, but awareness that sessions on statistics and data management needed redesign.

The 2012 outcomes showed stronger instructional gains with the pre-post knowledge score difference significant at P<0.001. The open ended comments were also more positive with almost no negative comments about the difficulty of the statistical modules, and a more positive view of the day overall.

CONCLUSIONS

The key to success in revising this curriculum was being open to expert advice from other medical educators who were not as close to the content as we, as developers, were. Rather than being defensive about the modest results of the year one evaluation, we approached the revision as a challenge to make significant improvements as measured by pre-post scores, evaluations, and open ended comments.

HOLLENBECK GERIATRIC PILOT: A MODEL FOR INTER-PROFESSIONAL EDUCATION

Jo Marie Reilly, M.D. ; Patricia Harris, M.D. ; Freddi Segal, PAC; Katie Jordan, OTD; Brad Williams, PharmD; Cheryl Resnick, DPT
USC Health Science Campus

Session time: Sunday, 2/24/2013, 7:15 – 8:20 am

INTRODUCTION/PURPOSE
Inter-professional (IP) education is the cutting-edge of health care training. Complex health care systems and an aging population necessitate more multi-system disease management. Further, studies demonstrate the benefits of collaborative health care teamwork to improve patient care and decrease medical errors. / / The association of Academic Health Centers has recognized the value of inter-professional training, making the business case for inter-professional education and training (1). Further, the Inter-professional Education Collaborative (2) and the WHO (3) recently released core competencies for IP collaborative practice, providing academic centers with a template for core curricular IP guidelines. While there is a clear case to be made for the benefits of IP early education, supportive medical literature is sparse. As health professional schools are challenged to provide multi-disciplinary training, the need for IP curriculum and collaborative training modules and models is critical.

PURPOSE:
The 5 USC health science campus faculty developed a community-based, geriatric model as a vehicle for providing IP training for pre-doctoral medical students, OT, PT, PA and pharmacy students to meet this need and assess its effectiveness.

METHODS:
We chose 12 students per discipline on a volunteer basis from 5 USC health professional schools to participate in a longitudinal, inter-professional, community-based geriatric pilot program. They were grouped into 12 teams, each representing PA, MD, OT, PT and pharmacy. Teams met 3 times during the academic year, were paired with an older adult resident of a multi-level residential facility and an IP faculty. Elder residents and students received topical geriatric didactics prior to each session followed by a meeting of each team with its resident for a focused interview and assessment.

RESULTS
The 60 participating students completed a RIPLS questionnaire pre- and post- study pilot to assess changes in IP attitude. The students met with an IP faculty mentor after each visit with the older resident to discuss a health IP team plan. Additionally, after each session students completed clinical write-ups specific to their discipline and turned them in to their faculty sponsor. Lastly, the medicine, OT, PT and PA students participated in post-experience focus groups to better assess the nuances of their inter-professional experiences.

CONCLUSIONS
We describe an effort to train the USC health care providers of the future in the IP model, using geriatric setting as the vehicle. On-going assessments of the students' attitudes and skills in IP work continue to be developed and evaluated.

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**A Computer Based Clinical ECG Tutorial for Internal Medicine Residents to
Improve Skills and Confidence in ECG Interpretation**

Ali Shakir MD, Zain Azzo MD, Suzane Szpunar MD, Rosemarie Henschel RN
St John Hospital
Presentation time: 2/24/2013, 7:15 – 8:20 am

BACKGROUND
Internal medicine residents lack confidence and skill in basic ECG interpretation. The lack of adequate ECG skills has resulted in patient management errors due to misinterpretation of ECGs by trainees.

AIM
Develop a computer-based clinical ECG tutorial for internal medicine residents that improves residents' ECG interpretation skills and confidence in ECG interpretation.

METHODS
Internal Medicine Program interns (n=18) were administered a pretest covering basic ECG interpretation. The test consisted of 10 multiple-choice questions consisting of ECGs and identification of correct clinical diagnosis.   Additional questions were asked regarding comfort level in ECG interpretation and reliance on machine generated ECG interpretation. Subsequently over the next six months, interns received, via monthly emails, case based ECG tutorials covering 50% of the content material. Each tutorial contained 4 to 5 ECGs grouped together by clinical diagnosis to reinforce pattern recognition. Each ECG had arrows pointing to key features, along with a description of differentiating features. A six-month test was administered. Over another six-month period, interns received case-based tutorials covering the other 50% of topics and then another posttest.

RESULTS
During the one-year study, the 18 interns had an 83% compliance rate with opening the email-based tutorials.   Baseline mean scores for the interns were 60% correct. Final mean scores for the interns were 73% correct.   Interns' mean scores improved at each test period, with a greater percentage improving with the tutorial material. The improvement in scores with the tutorials was statistically significant with the second set of tutorials (p=0.048). Interns confidence level in ECG interpretation improved significantly throughout the year (p=0.03), however, their reliance on machine interpretation did not change (p=0.9).

CONCLUSIONS
A computer-based clinical tutorial can be administered to residents by email, and can be a useful adjunct in improving a resident's ECG interpretation skills and confidence level. The tutorials may be useful as a reference tool for residents as they enter practice.

The Prevalence and Permanence of Web References in Medical Education Journals

Ann E. Spangler, MD, MS
University of Texas Southwestern Medical Center

Presentation time: 2/24/2013, 7:15 – 8:20 am

BACKGROUND
Research publications contain references to provide the basis and evidence for their research. Historically these have been paper references, which remain in their original form and content over time. However, authors are increasingly citing web references in place of paper sources, and these original documents have been found inaccessible in up to 46% of web references in scientific journals, with an average half-life of 4.8 years before becoming inactive.

PROBLEM STATEMENT
This study was undertaken to determine the prevalence of the use of web references in medical education journals, if their use is increasing over time, and the percentage of web references which could be accessed using the link provided or additional resources.

METHODS
A random selection of medical education journals from the years 2007 and 2011 were abstracted, and web references were accessed via the hyperlink provided.

RESULTS
In this study, the percentage of web references did not increase over the period of study, comprising 7.8% and 7.5% of all references in 2007 and 2011, respectively. The most common domains cited were .com, .edu, .gov and .org. The success of identifying original documents was poor using the link provided in the reference, (29.0% in 2007 and 38.0% in 2011), due to errors in the URLs, website located but document not found, or the original document was updated and the earlier version was not available. Success improved with the use of Google and other search engines to 58.3% (2007) and 61.8% (2011).

CONCLUSIONS
Accessibility and permanence of web references can be improved by checking the syntax and spelling of URLs, truncating links to the domain name only, and using search engines to access archived data.

Evaluating Teaching of Surgical Technical Skills

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Presentation time: 2/24/2013 7:15 – 8:20 am

INTRODUCTION/EVIDENCE OF NEED
The operating theatre is a crucial learning environment for trainee surgeons developing their surgical skills. Learning in theatre is opportunistic, relying on exposure to cases. It is limited by available cases and training time, especially since the introduction of the Working Time Directive. There is no structured framework for teaching during surgery or evaluation of teaching. Objective assessment of teaching can evaluate performance and highlight areas for improvement, maximising benefit to trainee and teacher from this limited resource.

PURPOSE STATEMENT
To create a structured assessment tool to evaluate consultant supervision and teaching of surgical technical skills in the operating theatre and to demonstrate its validity.

SUBJECTS/SETTING
60 surgical trainees from all surgical specialities at ST1 level and above performing surgical procedures at St Bartholomew's Hospital and the Royal London Hospital (London) over a six month period.

METHODS
A modified 5-point Likert rating scale was devised to assess the teaching of technical surgical skills. Positive and negative teaching attributes were established with literature review and interviews of trainees and teachers. 27 attributes across 4 themes (briefing, surgery, debriefing and behaviour) were assessed with each given anchors coded 1-5 (1 being undesirable, 5 being extremely desirable). Higher total scores reflected higher trainee satisfaction with teaching. Trainees who completed surgical procedures supervised by consultants were asked to evaluate the quality of supervisor teaching using the tool. Construct validity of the assessment tool was analysed using repeated measures ANOVA for Likert scoring. A p-value of <0.05 was considered to be statistically significant.

RESULTS
Trainees demonstrated consensus on the relevance of themes in the scale with the majority ranked as important or absolutely essential and no difference across grades ($p=>0.05$). There was no difference in the overall scores between trainees of different experience levels ($p=>0.05$) nor between different complexities of procedure ($p=>0.05$). Junior supervisors scored more highly overall than senior supervisors ($p=0.024$).

CONCLUSION
The study demonstrated that the assessment tool is feasible, practical and applicable, with face and content validity. Clear discrimination between supervisors of different experience shows discriminative validity. Furthermore it has construct validity demonstrated by consistency in supervisor scoring between trainees of different experience levels and in procedures of varying complexity. The assessment tool can play a role in the objective assessment of teaching and learning in surgery. It is hoped this can enable improvement of teaching quality – an area for further study.

Sunday, February 24, 2013

Reflection, Professionalism & The Community

<u>Session 17 – Aresty Auditorium</u>   **8:30 – 10:00am**

Moderator: Janet Trial, EdD

Innovation Study: The KSOM Longitudinal Community Medicine Education Program

Jo Marie Reilly, M.D. Theresa Woehrle, M.D., MPH, Julie Nyquist, PhD, Win May, M.D. PhD
Keck School of Medicine of the University of Southern California

Presentation Time: 2/24/2013, 10:20 – 11:15 am

INTRODUCTION/PURPOSE
Despite the increasing demand for primary care physicians and predication of future primary care shortages, United States medical schools struggle to increase the rates of graduates in primary care specialties including family medicine[1]. Further, few medical students are trained in community based primary care[2]. In an effort to address this primary care workforce and training issue, our urban medical school created a pilot project within our Introduction to Clinical Medicine (ICM) Program: the Longitudinal Community Clinical Medicine Education program (LCCME). This pilot project provides medical students with community-based, primary care clinical training at community clinics.

METHODS
Twelve USC (University of Southern California)-KSOM (Keck School of Medicine) students were chosen in 2011 and 12 more in 2012 from an applicant pool that at matriculation, applied for the LCCME program, indicating an interest in primary care. These students were matched with an ICM primary care instructor, a primary care clinic mentor and a community clinic site. A monthly longitudinal community clinic experience is integrated into the traditional two-year ICM curriculum for these students. Additionally, the students in 2011-12 worked as part of an inter-professional geriatric care team. Data is currently being collected on these students and includes longitudinal community clinic patient logs, inter-professional (IP) and geriatric survey questionnaires, focus groups and an end-of-year class survey. These students will be followed into residency selection to determine the percent that go into primary care in comparison to other students.

RESULTS
Data reported is from multiple sources. 1) The log data reflects the students' continuity patients, preventative care, health education and chronic illness management. The focus group data themes included increased variety, volume and continuity of patient care and inter-professional care opportunities. The data from the year-end survey students confirms that the pilot met its goal of providing continuity, primary care experiences.

CONCLUSIONS
The ultimate goal of this pilot is to recruit more students into primary care specialties through early continuity of care exposure. This pilot presents a model to provide these experience, however, success of this program in reaching the ultimate goal will not be available for several years.

References _____
1.Http://www.aamc.org/newsroom/reporter/april11/184178/addressing_the_physician_shortage_under_reform.html. Accessed November 18, 2012.
2. Access Transformed: Building a Primary Care Workforce for the 21st Century. National Association of Community Health Centers. Robert Graham Center. George Washington School of Public Health. Washington D. C. 2008.

Reflecting On Life in Medicine: A Curricular Innovation for Internal Medicine Residents

Ron Ben-Ari, Erich Hsieh, Richard S Panush
Keck School of Medicine of the University of Southern California

INTRODUCTION

There is growing evidence that integrating elements of humanities with clinical medicine is salutary for doctors and their patients. Incorporating humanities early in training may help junior physicians develop skills in the "art" of medicine. We developed a humanities curriculum for PGY1 internal medicine residents, "Reflective Medicine," and assessed its impact and value.

METHODS

Reflective Medicine was delivered to groups of 2-6 PGY1s in 1-hour weekly sessions during a four-week ambulatory block rotation. Sessions were facilitated by 2 faculty with selected short readings and existential questions of medicine were explored: (i) "Who am I"? "Who are you to me"? "What is the meaning of life in medicine"?; (ii) "How can we help our patients' suffering"?; (iii) "What sustains our passion"?; and (iv) "How do we relate to diverse, multi-ethnic patients in a shrinking world"? and, "What is ultimately important in the practice of medicine"?. Residents submitted anonymous quantitative and qualitative evaluations.

RESULTS

33 residents evaluated the experience for 2011-2012. The series was rated 8.4/10 overall, and the faculty 4.74/5.00 overall. The residents judged the sessions would affect their thinking (8.2) and their behavior (8.2) about doctoring. They found the sessions interesting (8.3), educational (8.1), recommended their continuation (100%), and considered them better than or equal to other departmental didactic activities (100%, $p < 0.01$). All 33 comments were neutral or favorable. Sixty-four percent characterized the series as "great", "awesome", "excellent", "invaluable", "refreshing" and/or "thought-provoking". Twelve comments were limited to a single positive word or phrase. Five comments supported that establishing a defined time for this activity with peers and mentors was important, that the learning environment was non-threatening, and that the sessions fostered reflection and discussion. One comment suggested sessions might work better with discussion leaders who are not authority figures in the department and one comment noted that deeper examination of each individual participant's strengths and weaknesses might be interesting.

DISCUSSIONS

We introduced faculty-facilitated guided reflective time in our residency curriculum. The sessions were framed by selected readings and covered fundamental issues in understanding oneself and one's patients. The sessions were highly valued by residents and were judged as likely to affect their thinking about doctoring and future behavior as physicians. Our observations support that teaching residents to incorporate reflective time in their professional lives may lead to deeper appreciation of professional ideals and improved interpersonal and communication skills and should be a worthwhile area for further study.

Ethnic Differences in Perception of Professionalism by Medical Students: A Mixed-Methods Study

Lavjay Butani MD, Ana-Maria Iosif PhD, Andreea Seritan MD

Presentation Time: 2/24/2013, 8:30 – 10:00 am

BACKGROUND
Development of professional values is significantly influenced by role models in the clinical environment (Park 2010). Learners from minority ethnic groups may have different perceptions of professionalism since they have fewer role models of their own ethnicity that they can relate to. Data exploring ethnic differences in perception of professional and unprofessional behaviors are limited.

OBJECTIVES
To explore ethnic differences (Caucasian versus non-Caucasian) in medical student perception of unprofessional and superlative professional behaviors.

METHODS
Mixed-methods study, using quantitative and qualitative data from an anonymous survey exploring student perceptions of unprofessional behaviors among faculty, staff, school administration, or peers and also exemplary behaviors from faculty, staff, or administration. All students in the 2nd through 4th year at our school (n = 331) were eligible. Survey responses were summarized as frequencies. Two investigators independently reviewed response narratives and categorized them into one of five themes. Statistical analyses included Fisher's exact test and Wilcoxon test to evaluate differences (across ethnicity) in frequencies and number of themes.

RESULTS
114 students responded to the survey; 50% were Caucasian. Non-Caucasians more often reported witnessing unprofessional behaviors from faculty, staff or administration (55% versus 39%, p-value 0.03) but not from peers. A significantly greater percentage of non-Caucasians (91%) compared to the Caucasians (55%) were either unsure of or perceived that the aforementioned unprofessional interactions negatively affected their grade (p-value = 0.01). There were no significant ethnic differences in percentage of respondents reporting situations when the team exceeded expectations. Seventy six narratives of unprofessional behaviors among faculty, staff, or administration were reported by 48 students. Thematic categories of responses were: ethical issues (10/76 responses, 13%), patient interactions (24/76 responses, 32%), team interactions (34/76 responses, 45%), reliability (6/76 responses, 8%) and commitment to continuous improvement (2/76 responses, 3%).

CONCLUSIONS
Non-Caucasian medical students at our school perceived a higher frequency of witnessed unprofessional behaviors among faculty, staff, or administration, related to team and patient interactions. These findings may be due to differences in the perception of the construct of professionalism, a higher incidence of unprofessional behaviors directed against minority students, or a heightened sensitivity of minority students to their workplace. This area needs study so as to address and prevent such perceptions in order to promote learner and patient well being and maintain a diverse workforce.

Empathy Predicting Ratings By Standardized Patients On The Patient-Physician Interaction From Self-Reported Empathy By Medical Students

Win May(1), Robert Brent Stansfield(2), Denise Souder (1)
(1) Keck School of Medicine of USC, (2) University of MichiganMedical School

Presentation time: 2/24/2013, 8:30 - 10:00 am

INTRODUCTION
Empathy is a multidimensional construct that is essential in effective patient-physician interactions1-3. Earlier studies showed that self-reported empathy had a low correlation with observed empathy by SPs4, , and that empathy scores were related to clinical competence 5. Another study examined student self-reports of empathy and SPs' evaluations of student empathy6.

PURPOSE STATEMENT
This paper explores whether students' self-reports of empathy predict ratings by standardized patients (SPs) on their Patient-Physician-Interaction (PPI).

SUBJECTS/SETTINGS
153 fourth-year students from the Keck School of Medicine of USC were the subjects.

METHODS
At the Clinical Performance Examination, students completed the Jefferson Scale of Patient Empathy-Student Version (JSPE-S). Standardized Patients assessed the PPI and overall satisfaction (OS) of these students over 8 cases. Descriptive statistics, correlations and general linear modeling were performed. / / Results: / JSPE scores predicted higher across-case mean OS scores ($r = 0.18$, $p < .025$) and PPI scores ($r = 0.21$, $p < .025$). There was no case by JSPE interaction. This study showed that self-reported empathy could predict the PPI and OS as measured by SPS.

CONCLUSIONS
Students with higher JSPE scores performed better on Patient-Physician Interaction and Overall Satisfaction in a SP interaction.

REFERENCES
 1. Hojat, M., Gonnella, J. S., Nasca, T. J., Mangione, S., Vergare, M., & Magee, M. (2002). Physician empathy: Definition, components, measurement, and relationship to gender and speciality. American Journal of Psychiatry, 159 1563- 1569.
 2. Mercer, S. W., & Reynolds, W. J. (2002). Empathy and quality of care. British Journal of Medical Psychology, 52 S9-S13.
3. Stepien, K. A., & Baernstein, A. (2006). Educating for empathy. A review. Journal of General Internal Medicine, 21 524-530.
4. Chen D.C.R., Pahilan, M.E., & Orlander, J.D (2009). Comparing a Self-Administered Measure of Empathy with Observed Behavior Among Medical Students. Journal of General Internal Medicine , 25(3): 200–202.
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6. Berg, K., Majdan, J.F, Berg, D., Veloski, J., & Hojat, M. (2011). Medical Students' Self-Reported Empathy and Simulated Patients' Assessments of Student Empathy: An Analysis by Gender and Ethnicity. Academic Medicine. 86:984–988.

Sunday, February 24, 2013

Workshop

ADVANCE CONCEPTS IN MEDICAL EDUCATION CERTIFICATE WORKSHOP SERIES

Think "Safety First!": Ideas for Creating a Culture of Patient Safety in your Learners
Lind, Karen; Rickard, Michelle; Anderson, Cynthia
Maimonides Medical Center, Brooklyn, New York; University of Washington; University of California, Irvine

Presentation time: Sunday, 2/24/2013, 8:30 – 10:00 am

Rationale:
Patient safety is a national issue in healthcare. Organizations such as the Institute of Medicine and the Institute of Healthcare Improvement have emphasized that healthcare workers must work in interdisciplinary teams to look systematically at processes that reduce medical errors and improve care efficiencies. Accreditation bodies, such as the ACGME, now require training programs to identify how learners are trained to "identify system errors, analyze, implement, evaluate and report improvement initiatives." This need led to our development of this interdisciplinary, systems-based approach to patient safety training.

Intended Workshop Participants:
Healthcare educators interested in learning/sharing experiences and acquiring tools for training in system error reduction.

Learner Objectives:
By the end of the session, the learner will be able to:
Describe the resources available for establishing patient safety learning plans
Access resources for systems safety training for their learners
Implement activities to improve learners' knowledge, skills and attitudes in error reduction

Description of Activities:
This 90 minute workshop is designed to be both informational and interactive. The interactive activities are examples of those easily adaptable to learners in any training program. There will be four basic components of the workshop:
Introduction to patient safety (15 minutes): An audience response system will be used to test participants' basic
        knowledge in national safety issues and expectations of regulatory/accrediting bodies that may impact them.
Reducing Human Error: The Checklist (25 minutes) - The participants will work in small groups to design a checklist
        to improve a handover process.
Looking for improvement (25 minutes) - Participants will be presented with a picture of a clinical setting. In small
        groups, they will work together to identify: 1) potential safety issues, 2) processes that could improve the
        environment and 3) the interdisciplinary team make-up needed to create improvement.
Sharing ideas (25 minutes): Facilitators and audience will share ideas from their individual programs and small
        groups. Some innovative curriculum ideas in patient safety and systems based practice, such as the "Safety
        Process Morbidity and Mortality Conference" will be presented.

Take-Home Tools:
Participants will be provided with the following:
Bibliography focusing on curriculum ideas
Useful websites with brief description of each
Suggested games and other activities that can be used for interactive sessions

Pre-Workshop Preparation Requested: none

Workshop

<u>Session 19 – LG 504</u>   8:30 – 10:00am

WORKSHOP: Mobile and Social Learning
Randy Schell, M.D., MACM, Amy DiLorenzo, MA
University of Kentucky, Department of Anesthesiology

Sunday, 2/23/2013, 8:30 – 10:00 am

Workshop Rationale:
Effective teachers discover better ways to reach and teach their learners. Mobile and social learning can be an effective component of a multi-modal approach to teaching and learning, often bridging a gap between different generations of learners and teachers. Mobile learning is what occurs when a learner is not at a fixed location and/or takes advantage of mobile learning devices. It is convenient, accessible, collaborative (i.e., sharing is almost instantaneous), portable, entertaining, and supports the learning process. Mobile devices such as iPads can be used to deliver educational content (i.e., podcasts), foster collaboration and communication (i.e., wikis), and enhance presentations (e.g., Quick Response Codes). Podcasting consists of capturing, storing and delivering audio and combined audio/video recordings of presentations. These presentations may be used for learners to review lecture materials or provide supplemental materials in advance or following scheduled learning activities.   Social learning occurs through social interactions and activities between learners within a social network. Wikis provide a platform for collaborative peer learning and sharing of information and concepts. This workshop will introduce teachers in healthcare to mobile and social learning including podcasts, wikis, and enhancing presentations with newer technologies like QR Codes.

Targeted Audience:
The target audience is teachers in healthcare who are passionate about reaching their learners with a variety of newer learning tools and techniques.

Learner Objectives:
At the conclusion of this workshop, healthcare educators will be able to:
        1. Discuss the potential role of social and mobile learning in healthcare
        2. Describe the process of creating a podcast
        3. Establish a simple wiki platform for collaborative learning
        4. Create QR Codes on mobile devices for enhancing presentations

Description of Activities:
The workshop will include:
        1. Introduction including review of learning objectives
        2. ARS responses by participants to current uses of and perceptions about mobile and social learning
        3. A short didactic presentation to provide a foundation for the discussion of mobile and social learning.
        4. Think-Group share of ways mobile and social learning might be utilized to enhance learning within their unit
        5. Small Groups: "How to Do" Small group sessions / a. Podcasting / b. Wiki / c. QR Codes and iPads
        6. Think-Group Share something the participants learned from the workshop that they did not know before
        7. Commitment to action-Participants to describe two things they are committed to doing after this workshop. Information from commitment to action cards will be tabulated and shared with interested participants via email following meeting.

Take-Home Tools
        1. Primer on creating a Podcast
        2. Primer on choosing and steps for setting up a wiki
        3. Step-by-step process for acquiring QR Code software, utilizing with mobile devices, and integrating QR codes into presentations

Pre-Workshop Preparation Requested
View short podcast about what to expect from the workshop if they attend

<u>**Session 20 – Aresty Auditorium**</u>   <u>**10:20 – 11:50 am**</u>

Moderator: Jane Rosenthal, EdD

Utility and Efficacy of A Peer-Based Anatomy Tutoring Program For First-Year Medical Students

Cameron Escovedo, MSIV, Lesley Stahl, PsyD, Neil Parker, M.D., M. Elena Stark, M.D., Ph.D.
UCLA David Geffen School of Medicine

Presentation time: 2/24/2013, 10:20 – 11:50 am

INTRODUCTION
Gross anatomy content in medical school has traditionally involved hands-on learning in the form of student-performed dissections of human cadavers and/or a prosection format combined with technology-based instruction such as 3D models and animations.[1-2] Discussions with students at the David Geffen School of Medicine at UCLA (DGSOM) have revealed a desire to complement this with both additional time and instruction in the anatomy laboratory. In examining additional forms of instruction, peer tutoring has been noted in the literature as a well-characterized and effective instructional method as noted in several studies.[3-10] Furthermore, many studies show no significant difference between student performance in interviewing and physical exam when tutored by senior medical students versus faculty.[7-8,10]

PURPOSE
None of these studies, however, have focused specifically on gross anatomy tutoring by upperclassmen peers, and to our knowledge, no such program is documented within the medical education literature. The drive to provide students with optional assistance at this institution prompted the development of a novel peer-based anatomy tutoring program.

METHODOLOGY
First-year students were asked to anonymously and voluntarily complete a survey offered through SurveyMonkey. The questions assessed self-perceptions of knowledge and confidence with the material provided during the first-year anatomy curriculum.

RESULTS
One hundred-and-six students completed the survey out of 163 enrolled in anatomy (65%); 24 students attended no sessions (23%), 15 attended one session (15%), 13 attended two sessions (12%), 11 attended three sessions (11%), 10 attended four sessions (9%), and 32 attended five or more sessions (30%). The major areas of student concern were male and female pelvis (μ = 3.4 and 3.5, respectively, on a scale of concern from 1-5, 5 being extremely concerned). Correlation analyses showed significant positive correlations between the number of sessions attended and (1) the utility of sessions in verifying structures (r = .48, p < 0.01), (2) the utility of being quizzed by tutors (r = .42, p < 0.01), and (3) overall confidence in the material (r = .46, p < 0.01).

CONCLUSIONS
Peer tutoring sessions for gross anatomy improved self-reported knowledge and overall confidence in the material. Based on these preliminary findings from our pilot data, we believe our students benefit from this program. As such, there is a need for future studies that focus specifically on which aspects of tutoring were perceived as most useful, to ultimately expand and enhance this program in a way that optimizes anatomy learning and students perception of mastery of anatomical content.

Medical Student Values Regarding Human Sexuality Over a 6 Year Period

House, Hans, MD; Emrich, Jeff, MS
University of Iowa

Presentation time: 2/24/2013, 10:20 - 11:50 am

INTRODUCTION/EVIDENCE OF NEED

The Liaison Committee on Medical Education (LCME) accreditation requirements include PR02: Demonstrate awareness of one's beliefs and values and the impact they may have the ability to be a compassionate and ethical physician. This is the outcomes from six years of experience with an assignment developed to meet this accreditation requirement.

PURPOSE

Encourage students to explore their own values and beliefs about human sexuality and track the pattern of these beliefs over time.

SUBJECTS

Second year medical students (M2's) and first-year physician assistant students (PA-S) enrolled in the Foundations of Clinical Practice (FCP) course between 2006 - 2011.

METHODS

All students in the course are required to complete a 27-item clinical scenario-survey asking yes or no questions about their attitudes towards patients with erectile dysfunction, homosexuality, and abortion. Students follow this assignment with a one-page essay exploring their beliefs more thoroughly.

RESULTS

851 M2's and 152 PA-S over 6 years answered all the questions on the survey. For most clinical scenarios, the responses from students have remained static over time. Responses to questions #6 and 7 (providing erectile dysfunction (ED) medications) and question #25 (allowing prescription drug benefits for same-sex partners) have changed. In 2006, 27.8% of students were willing to provide ED medications for sexual pleasure to a diabetic male without ED, but in 2011, 47.5% of students would do so (p=0.0001). In 2006, 80.2% of students would support prescription drug benefits for same-sex partners, but in 2011 90.7% would do so (p=0.0149).

CONCLUSIONS

The FCP sexuality survey and writing assignment has been required for students at the University of Iowa College of Medicine every year since 2006. Although the attitudes and beliefs of students have remained largely unchanged over time, examination of this data reveals two areas with a steady and significant migration of opinion. Interestingly, in 2008, halfway through the collection of this data, the supreme court of the state of Iowa legalized same-sex marriage. It is possible that a greater acceptance for same-sex couples developed among students following this ruling and this change is reflected in the survey results.

The Introduction of Nutrition Education into the Medical School Curriculum: Using an Elective Course to Teach Students the Fundamentals, the Science, and the Clinical Implications of Food

Nupur Agrawal and Sara Ostrosky

Presentation Time: 2/24/2013, 10:20 – 11:50 am

In an effort to address the lack of formal nutrition education at the University of Texas Health Science Center School of Medicine at San Antonio, two second year medical students with training in nutritional sciences and public health designed an elective course in 2011 to teach other medical students about fundamental concepts in nutrition. The course consisted of five interactive classes during which students participated in lectures and discussions. A total of 30 medical students completed the course during the 2011-2012 academic school year; they provided feedback through voluntary completion of surveys. Based on the data collected, 70% of students stated that they learned new information from the course, and 100% of students would recommend the class to peers. While students reported benefiting most from the interactive aspects of the course such as potluck dinners and group discussions, 75% also suggested that future courses should be based more on scientific evidence.

Health Policy Advocacy Case for Medical Students

Schapiro R , Reardon C, Navsaria D, Busalacchi M, Feder, E, Bagwell S, Remington P. , Seibert, C. "A

Presentation Time: 2/24/2013, 10:20 – 11:50 am

INTRODUCTION/EVIDENCE OF NEED
Professional medical organizations and specialty societies have increasingly included physician advocacy as a component of physician professionalism. A public health education expert panel listed among its recommended competencies for medical education: "Participate in population health improvement strategies (e.g., systems and policy advocacy…"). Although the role of physician advocacy has provoked some controversy, it is increasingly regarded as an important element of medical education. The University of Wisconsin School of Medicine and Public Health (UWSMPH) has adopted advocacy as one of its core public health competencies.

PURPOSE STATEMENT
The UWSMPH has created a series of innovative Public Health Integrative Cases in which first- and second-year medical students explore issues that connect basic science, clinical medicine and public health. These are 1.5- 2.5 day, learner-centered, experiential curricular events covering priority health topics in Wisconsin. This presentation focuses on the Health Policy Advocacy Integrative Case that addresses the advocacy competency.

SUBJECTS/SETTING
In this 2.5-day case, each second-year student learns intensively about one communication tool: writing and delivering legislative testimony; holding persuasive conversations with policymakers; introducing resolutions at professional societies; writing letters to the editor and doing interviews with reporters; or using social media. Students then use their tools to advocate for one of five current public health topics in a final "mock event" for each tool. For example, one group goes to the Wisconsin state legislature to testify, while others are interviewed by local newspaper or television reporters.

RESULTS
In a questionnaire completed after the case, 90% of students agreed that the case was effective in developing "understanding of the role that physicians can play in advocating for public health initiatives with policymakers or media audiences," 86% in "making me feel more confident in advocating for public health initiatives in the future" and 83% in "acquiring skills in developing and communicating messages for policymakers or media audiences." Students completing pre and post-event ratings of their knowledge of, comfort with and likelihood of applying these advocacy skills showed significant increases in every measure, with students showing the greatest increases for the particular tool that their group focused on, but all groups showing increases even for those tools they only heard about from other students. Some students have pursued advocacy opportunities beyond the case.

<u>CONCLUSION</u>
Advocacy skills relevant to physicians can be effectively taught to medical students in a relatively short curriculum that includes opportunities for practice and demonstration of skills.

Workshop

<u>Session 21 – LG503</u>   <u>10:20 – 11:50 am</u>

ADVANCE CONCEPTS IN MEDICAL EDUCATION CERTIFICATE WORKSHOP SERIES

Career Development

Kathy Besinque, Rima Jubran
USC School of Pharmacy, Children's Hospital Los Angeles

Presentation time: Sunday, 2/24/2013, 10:20 – 11:50 am

Overview
The goal of this workshop is to enhance professional and career development skills. We will begin with a discussion of the tasks of career management. Participants will be engaged in small group activities that explore how networking, mentoring and values influence career development and satisfaction. The workshop will conclude with participants developing a personal career plan or planning workshop.

Intended participants:
Health care professionals interested in personal career development strategies or who will be working with leaners who need career development.

Learner Objectives:
By the end of the workshop you should be able to:
  ❖ Describe the tasks of career management/ development
  ❖ Utilize resources to explore career management and goals
      • Discuss the importance of a professional network
      • Describe the roles of mentor and protégé in career development
      • Assess how values relate to your career plans
  ❖ Develop a personal career plan

Description of Activities:
    Ice-breaker- initial career goals and introductions
    Move to groups (assigned)
    Presentation and discussion of the tasks involved in successful career management/ development.
    Small group activities –discussion of the role values, mentoring and networking have in career development.
    Work individually then in a group on a personal career plan or planning workshop.
    Follow-up: completed one page plan (personal or workshop)

Take home tools:
Handouts describing the tasks of career management
Resources: Values exercise worksheet
               Mentoring worksheet
               Networking worksheet
               Career development worksheet

Pre-workshop preparation: (in progress)

- **Pre-assignment:** Bring to the session **a one page description of your current career development curriculum. Include answers to the questions below:**
  - o   Who are your learners/participants?
  - o   List the current components of the career development curriculum (ie lectures, reading)
  - o   What "works" in your current program? What needs improvement?
- **Pre-assignment:** Bring to the session **a one page description of your ultimate career goal or dream job. Include answers to the questions below.**
  - o   What is your ultimate career goal (dream job)?
  - o   Describe the position. Be very specific.
  - o   List the activities you anticipate being engaged in that position. How do you perceive that your time will be spent (typical day or week).
  - o   Describe the skills will you use/need for that position.
  - o   What "attracts" you to the position? Do you see any negative aspects?

Workshop

<u>Session 22 – LG 504</u>   10:20 – 11:50 am

WORKSHOP: The Educational Portfolio Unplugged
William G Cloud,MD, Michelle M Olson, MD
Univ Southern California, Univ of Illinois Urbana

Sunday, 2/24/2013, 10:20 – 11:50 am

Workshop Rationale:
The educational portfolio has historically been institutionally based and served 3 primary functions: 1) workspace (process): a collection of artifacts in various stages of development in the service of an individual's learning goals; 2) showcase (product): a collection of artifacts organized and produced in the service of promoting an educator's career advancement; 3) assessment system: documentation of learner performance. The ring binder portfolio has evolved into the e-portfolio. The e-portfolio has essentially become a more accessible version of the educational portfolio, institutionally based, resident on an institutional server with the artifactual components accessible via mouse-clicks. A further evolution of the educational portfolio is the M-portfolio (mobile). The standard approach to this iteration of the portfolio continues to serve the same 3 functions but has certain advantages. The workspace function is enhanced by more immediate collection and production of artifacts. The showcase function is limited by screen size, functionality, and accessibility issues. The assessment capabilities are enhanced by real time documentation of competency and more immediate feedback. The interactive M-portfolio introduces the possibility of using the educational portfolio for 2 new purposes: to create 1) an extended professional learning community of educators1; and 2) a tool for the diffusion of innovation in education2,3. There is confirmed evidence that 70-80% of professional learning is informal (either by personal experience or social learning involving colleagues)4.

Intended Workshop Participants: Healthcare educators

Learner Objectives:
At the conclusion of the workshop, participants will be able to:
   1) compare and contrast the present uses and modes of delivery of the educational portfolio
   2) discuss the potential use of the interactive mobile portfolio as a tool to develop a professional learning
      community of educators
   3) describe the potential use of the interactive mobile portfolio as a tool for the diffusion of innovation
   4) evaluate the effectiveness of the different portfolio types

Description of activities
   - Q&A to determine initial knowledge base
   - Brief slide presentation about portfolio uses and delivery systems, professional learning communities, diffusion of innovation / Demonstration of example electronic portfolio and interactive mobile portfolio
   - Interactive session to 1) explore attendees' present and potential uses, delivery systems and effectiveness; and 2) provide a live example of informal learning to promote learning community development and diffusion of educational innovation
   - Evaluation of present workshop and re-evaluation of 2 new portfolio uses in 1 year

Take-home tools
Reference list
Links to examples of uses and delivery systems, professional learning communities and diffusion of innovation

Pre-workshop preparation requested: None

References
   1) Senge PM. The fifth discipline: the art and practice of the learning organization. New York: Doubleday, 1990.
   2) Rogers EM. The diffusion of innovations (3d ed). New York: Free Press, 1995.
   3) Moore Geoffrey. Crossing the Chasm New York: Harper-Collins, 1991.
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Sunday, February 24, 2013

Plenary Session

Graduate Medical Education: "Fog, Focus and Future"
Randall M. Schell, MD, MACM

LECTURE OBJECTIVES

At the end of this lecture, participants will be able to:

1. Identify current areas of graduate medical education where investigation is needed to provide evidence for the selection process, instruction, and assessment of learner outcomes.

2. Discuss current evidence related to the selection process, instruction/teaching, and assessment of learner outcomes, in graduate medical education

3. Recognize that they have unique skills and are at a critical junction in time to contribute individually and collaboratively to the future of graduate medical education