

Conference Proceedings

**Innovations in
Medical Education**

**Transforming Health Professions
Education through Innovation**

February 22-23, 2014

Hilton San Gabriel
225 West Valley Boulevard
San Gabriel, California, CA 91776

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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Saturday, February 22, 2014

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Welcome to Innovations in Medical Education

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

Continental Breakfast will be provided on Saturday, February 22nd in San Gabriel Ballroom Foyer.

Hot Breakfast Buffett will be provided on Sunday, February 23rd in the San Gabriel Ballroom Foyer.

Lunch will be provided on Saturday, February 22nd in the San Gabriel Ballroom Foyer.

For those who wish to have verification of attendance, a form is provided that must be completed 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.

Keck School of Medicine of USC

CONFLICT OF INTEREST DISCLOSURE AND RESOLUTION

COURSE DATES: February 22 & 23, 2014
COURSE TITLE: 2014 Innovations in Medical Education

The Keck School of Medicine of USC takes responsibility for the content, quality and scientific integrity of this CME activity.

As part of the new commercial guidelines, we are required to disclose any real or apparent commercial conflict(s) of interest (COI) of all persons in control of educational content for this activity, specifically, but not limited to: faculty/presenters, CME committee members and/or planners. Any disclosed real or apparent commercial conflict(s) of interest (COI) have been resolved through a conflict resolution process prior to the beginning of this activity.

The Keck School of Medicine further requires that, if applicable, faculty/presenters disclose to the audience their intention to discuss the off label and /or investigational (not yet approved for any purpose) use of pharmaceuticals or medical devices at the beginning of their presentation.

COURSE DIRECTORS

Faculty Member	Commercial Interest	Conflict/Resolution
Chachi Fung, Ph.D.	I do not have any relevant financial relationships with any commercial interests.	None
Julie G. Nyquist, Ph.D.	I do not have any relevant financial relationships with any commercial interests.	None

KECK SCHOOL OF MEDICINE OF USC FACULTY

Faculty Member	Commercial Interest	Conflict/Resolution
Ron Ben Ari, M.D.	I do not have any relevant financial relationships with any commercial interests.	None
Dixie Fisher, Ph.D.	I do not have any relevant financial relationships with any commercial interests.	None
Win May, M.D., Ph.D.	I do not have any relevant financial relationships with any commercial interests.	None
Lawrence Opas, M.D.	I do not have any relevant financial relationships with any commercial interests.	None
Anita Richards	I do not have any relevant financial relationships with any commercial interests.	None
Jane Rosenthal, Ed.D.	I do not have any relevant financial relationships with any commercial interests.	None

POSTER PRESENTERS

Faculty Member	Commercial Interest	Conflict/Resolution
Shadi Abdelnour, M.D.	I do not have any relevant financial relationships with any commercial interests.	None
Tania Arana	I do not have any relevant financial relationships with any commercial interests.	None
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Innovations in Medical Education 2014 Conference

Final Schedule

Saturday, February 22, 2014

7:00 – 8:00 am	Continental Breakfast and Registration (Poster Setup)			Location: Ballroom Foyer		
8:00 – 8:15 am	Welcome Introduction of Plenary Speaker <i>Julie Nyquist</i>			Location: Ballroom B,C		
8:15 – 8:50 am		KEYNOTE SPEAKER: Lawrence Opas, MD "Competencies, Milestones and EPAs!!! So Many Opportunities; The Time is NOW!!!" Associate Dean, Graduate Medical Education, Los Angeles County-USC Medical Center Professor of Clinical Pediatrics and Vice Chair of Pediatrics, Keck School of Medicine of USC		Location: Ballroom B,C		
9:00 – 10:30 am	Oral Presentations: GME	FIME: Basics of Needs Assessment	Conference Workshop: Development of Professionalism through Effective Feedback: Skills to Enhance Faculty Development	Conference Workshop: Facilitating Dialogue and Learning: Exploring Difficult Topics in Health Professions Education through Interactive Theatre		
	Location: Ballroom B,C Moderator: Ron Ben-Ari	Location: San Francisco A/B Facilitators: Julie Nyquist, Anita Richards	Location: San Diego Facilitators: Win May; Pedro Tanaka	Location: San Antonio Facilitators: Pamela Brett-McLean; Carol Hodgson; Bruce Fisher		
	Teaching Residents the Business Side of Medicine <i>Miller, Karen Hughes; Ostapchuk, Michael; Mason, Bonnie Simpson</i>	Description: A solid needs assessment is the bedrock upon which any new curriculum (course, rotation, faculty development session, etc.) is built. If your goal is to make a difference you must first understand the "actual" need or measured gap between the current and ideal, as well as the "perceived" need or the wants of the learners. At the end of the workshop, participants should be able to discuss the levels of need that are relevant to their own planned change; describe the steps in conducting a needs assessment; and utilize a worksheet to guide their own conduct of a curricular needs assessment.	Description: Through mini-lectures, videos, role plays and participant exercises, this workshop will help attendees distinguish between indirect and direct feedback, recognize characteristics of effective feedback, make use of three levels of effective feedback, as well as better understand their target population. The workshop will explore the relationship between giving effective feedback and inspiring residents to develop into confident and competent physicians.	Description: This highly engaging workshop will focus on exploring a range of perspectives regarding difficult topics in health professions education (including feedback, professionalism lapses, and student mistreatment) through a facilitated exploration of various challenging and multifaceted issues involved. The workshop will begin with a brief overview of applications of theater in medical education. Interactive exercises (e.g., silent "sculpted" images, and improvisational scenarios), along with group reflection will contribute to a broadened understanding of use of theater-based approaches that can be used to explore difficult issues in health professions education and suggest strategies for addressing these experiences. The workshop will finish with large group discussion that focuses on the ways interactive theater can be used to address other difficult issues and contexts in health professions education.		
	What are PACES candidates' perceptions of video-recorded consultation review as an educational tool for membership exam preparation? A qualitative study among MRCP (UK) candidates <i>Panopoulou, Katerina</i>					
	Conducting Advanced Care Discussions: Recent Graduates' Perspectives of Instruction and Experiences <i>Rao, Sheila; Deavenport, Alexis; Thangathurai, Jenica; Keefer, Matthew; Liberman, Danica; Moustafa, Marwa; Derrington, Sabrina</i>					
	A six-year review of clinical competency committee meetings-how much time will you need to evaluate milestones? <i>Souter, Karen</i>					
Resident Skill After a Pediatric Lumbar Puncture Simulation Program <i>Vilasagar, Niveditha; Michalik, David; Mink, Richard; Kallay, Tom</i>						
10:30 – 10:50 am	Break (Refreshments)			Location: Ballroom Foyer		
10:50 – 12:20 pm	Oral Presentations: UME-Pre Clinical	FIME: Teaching in the Clinical Setting	Conference Workshop: Facilitators as Followers: Building Starfish Healthcare Teams	Conference Workshop: I evaluate my residents better than you! Says who?		
	Location: Ballroom B,C Moderator: Mikel Snow	Location: San Francisco A/B Facilitators: Win May; Tatum Korin	Location: San Diego Facilitators: Kirsten Broadfoot; El-Shimaa Bash	Location: San Antonio Facilitator: Samir Johna		
	Stress, Well-Being, and Personality Traits among First-Year Medical Students <i>Bughi, Stephanie; Leafman, Joan; Wallace, Lisa; Rosenthal, Jane</i>	Description: Teaching in the clinical setting is a demanding and complex task. As physicians' work load increases, there is a corresponding decrease in time available for clinical teaching. A few models of clinical teaching have been successfully used in the faculty development of clinical teachers in all settings (inpatient, hospital outpatient and community). They include the "one-minute preceptor" or "Microskills of teaching" model, the "Stanford seven-category framework of analysis", the Dundee 3-circle outcomes model and SNAPPS: a learner-centered model for outpatient education.	Description: This workshop will focus on concepts involved in building starfish teams and facilitators in healthcare as well as the accompanying communication skills and processes for role modeling this form of leadership and followership in curriculum delivery.	Description: This workshop will use attention grabbers, brain-storming techniques, games, and case studies to improve end-of-rotation evaluations, by recognizing and minimizing rater errors.		
	Peer-based anatomy tutoring for first-year medical students: an analysis of 791 tutoring sessions. <i>Escovedo, Cameron; Lentz, Jacob; Harrison, David; Stahl, Lesley; Parker, Neil Parker; Stark, Elena</i>					
	The Business of Medicine: A New Curriculum for Medical Students <i>Kumar, Shubha; Schaff, Pamela; Patel, Shaan; Fung, ChaChi</i>					
	An Interprofessional Education (IPE) Model <i>Resnik, Cheryl; Aranda, Maria; Halle, Ashley; Han, Phuu; Reilly, Jo Marie; Segal-Gidan, Freddi; Williams, Brad</i>					
Combining Self-Directed Learning and Simulation in the Preclinical Medical School Curriculum to Teach Second Year Students about Pneumonia <i>Wald, David; Buttaro, Bettina; DelPortal, Daniel; Fane, Kathleen; Healy, Megan; Barrett, Jeffrey</i>						
12:20 – 2:00 pm	- Lunch Reception (Hot buffet) -			Location: Ballroom AB,		
Poster Session I - "Innovations & Cool Ideas!" (by authors)						
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p>1 Arana, Tania; Byrd, Theresa; Arroyave, Ana Maria; Steele, David</p> <p>2 Shara Steiner Brody, DO; Meaghan McNulty, MD; Yanisa Del Toro, MD; Maritza Suarez, MD</p> <p>3 Chilstrom, Mikaela; Mailhot, Tom; Seif, Dina; Kang, Tarina; Berone, Kristin; Medero-Colon, Roberto; Elkunovich, Dancoz, Christina; Ozel, Begum; Nelken, Rebecca; Israel, Jennifer; Macdonald, Heather; Felix, Juan</p> <p>4 J. Dasgupta, P. Martinez, J. Reilly, MD</p> <p>5 Dubina, Emily; Phan, Jennifer; Szumski, Meredith</p> </td> <td style="width: 50%; vertical-align: top;"> <p>18. Szumski, Meredith / Bergschneider, Jason / Thakur, Sarika</p> <p>19. Broadfoot, Kirsten; Fisher, Jennifer; Basha, El-Shimaa</p> <p>20. Broadfoot, Kirsten; Basha, El-Shimaa; Fisher, Jennifer</p> <p>21. Bruning, Madeleine; Rukmani Vasan; Parul Bhatia</p> <p>22. Bruning, Madeleine D.</p> <p>23. Trueger, Nathan Seth; Liferidge, Aisha T.; Blanchard, Janice; Fair, Malika; Davis, Steven; Pourmand, Ali; Dark,</p> </td> </tr> </table>					<p>1 Arana, Tania; Byrd, Theresa; Arroyave, Ana Maria; Steele, David</p> <p>2 Shara Steiner Brody, DO; Meaghan McNulty, MD; Yanisa Del Toro, MD; Maritza Suarez, MD</p> <p>3 Chilstrom, Mikaela; Mailhot, Tom; Seif, Dina; Kang, Tarina; Berone, Kristin; Medero-Colon, Roberto; Elkunovich, Dancoz, Christina; Ozel, Begum; Nelken, Rebecca; Israel, Jennifer; Macdonald, Heather; Felix, Juan</p> <p>4 J. Dasgupta, P. Martinez, J. Reilly, MD</p> <p>5 Dubina, Emily; Phan, Jennifer; Szumski, Meredith</p>	<p>18. Szumski, Meredith / Bergschneider, Jason / Thakur, Sarika</p> <p>19. Broadfoot, Kirsten; Fisher, Jennifer; Basha, El-Shimaa</p> <p>20. Broadfoot, Kirsten; Basha, El-Shimaa; Fisher, Jennifer</p> <p>21. Bruning, Madeleine; Rukmani Vasan; Parul Bhatia</p> <p>22. Bruning, Madeleine D.</p> <p>23. Trueger, Nathan Seth; Liferidge, Aisha T.; Blanchard, Janice; Fair, Malika; Davis, Steven; Pourmand, Ali; Dark,</p>
<p>1 Arana, Tania; Byrd, Theresa; Arroyave, Ana Maria; Steele, David</p> <p>2 Shara Steiner Brody, DO; Meaghan McNulty, MD; Yanisa Del Toro, MD; Maritza Suarez, MD</p> <p>3 Chilstrom, Mikaela; Mailhot, Tom; Seif, Dina; Kang, Tarina; Berone, Kristin; Medero-Colon, Roberto; Elkunovich, Dancoz, Christina; Ozel, Begum; Nelken, Rebecca; Israel, Jennifer; Macdonald, Heather; Felix, Juan</p> <p>4 J. Dasgupta, P. Martinez, J. Reilly, MD</p> <p>5 Dubina, Emily; Phan, Jennifer; Szumski, Meredith</p>	<p>18. Szumski, Meredith / Bergschneider, Jason / Thakur, Sarika</p> <p>19. Broadfoot, Kirsten; Fisher, Jennifer; Basha, El-Shimaa</p> <p>20. Broadfoot, Kirsten; Basha, El-Shimaa; Fisher, Jennifer</p> <p>21. Bruning, Madeleine; Rukmani Vasan; Parul Bhatia</p> <p>22. Bruning, Madeleine D.</p> <p>23. Trueger, Nathan Seth; Liferidge, Aisha T.; Blanchard, Janice; Fair, Malika; Davis, Steven; Pourmand, Ali; Dark,</p>					

Innovations in Medical Education 2014 Conference

Final Schedule

	7. Granat, Bonnie; Portanova, Ronald	24. Haber, Jordana	25. Christos Theophanous, Mariya Kalashnikova, Claire Sadler, Madeleine Bruning, Ed D., RN, CPNP
	8. Korin, Tatum; Vasan, Rukmani	26. Konia, Mojca; Hananel, David	27. Hyuma Leland, M.D.; Michael Minneti, B.S., R.R.T.; Maura Sullivan, Ph.D.; Warren Garner, M.D.; Mark Urata,
	9. Korin, Tatum; Rossetti, Gina; Hsieh, Eric; Sarte, Patrick; Politano, Seth	28. Martin, Kate	29. Molas-Torreblanca, Kira; Bynum, Francine; Schragger, Sheree
	10. Maldonado, Maria; Lie, Desiree; Schultz, Ann; Lohenny, Kevin	30. Julie G. Nyquist, Ph.D.	31. Julie G. Nyquist, PhD; Stephanie Gates, MSEd; Juan Barrio, MD; Ginna Wohlmut, MD; Ernie Guzman, MD; Luis
	11. Rossetti, Gina; May, Win; Politano, Seth; Cancako, Jeff; Hsieh, Eric	32. Pressley, Thomas A. and Fowler, John C.	33. Richards, Anita; Souder, Denise; May, Win
	12. Saenz, Jennifer; Corman-Thomas, Michelle; Vasan, Rukmani		
	13. Schultz, Ann / Lie, Desiree / Forest, Christopher		
	14. Singh, Rasnik; Wimmers, Paul; Mottahedan, Sara; Lee, Ming		
	15. Bruning, Madeleine; Kim, Alice; Wilcox, Shernie; Souder, Denise; Walsh, Anne		
	16. Seltzer, J; Habib, M; Yamauchi, E; Swadron, SP		
	17. Berdahl, C; Mestres, R; Mindlin, D; Amin, D; Swadron, SP		
2:00 – 3:30 pm	Oral Presentations: Technology in Medical Education	FIME: Small-group Teaching	Conference Workshop: Medical Improv: Creating Exceptional Physician Communicators Through Improvisational Theatre Training
	Location: Ballroom B ₂ C Moderator: Sajjad Yacoob	Location: San Francisco A/B Facilitators: Cha-Chi Fung; Denise Souder	Location: San Diego Facilitator: Belinda Fu
	HD Video Teaching Module for Selective Neck Dissection Mendez, Adrian; Ansari, Ka; Seikaly, Hadi; Cote, David	Description: Small group instruction is an essential teaching modality in the context of medical education. When designed and facilitated properly, it is a very powerful tool to enhance the transfer of knowledge learned in a more didactic setting. Participants of this workshop will learn the essential steps in setting the tone for a productive group discussion as well as skills necessary to handle issues that are disruptive to the effectiveness of the group discussion.	Description: The workshop begins with a discussion exploring communication challenges in medical education, and the fundamentals of medical improv. It then moves into activity-based group training exercises introducing participants to a selection of core medical improv skills. All attendees then reconvene to reflect on their skill acquisition, and discuss how medical improv curricula can be incorporated into medical education at their home institutions.
	The Effect of Audience Response Systems on Metacognition in Graduate Students Brady, Melanie; Rosenthal, Jane; Forest, Christopher		Description: This workshop will provide a simple example of how clinical faculty could incorporate discussion and assessment of medical ethics principles into the patient care setting through the process of informed consent.
	GME HUB: "One-Stop-Shopping" for GME Program Administration Resources Kokas, Maria		
	You Can Take it With You: iPad Usage by Students in Medical Education and Implications for Learning Outcomes Nezami, Elahe; Florin, Andrew; Patel, Keval		
	The use of video before arthroscopic shoulder surgery to enhance patient recall and satisfaction: a randomized-controlled study Hoppe, Daniel J; Denkers, Matthew; Hoppe, Fred M; Wong, Ivan H		
3:30 – 3:50 pm	Break (Refreshments)		Location: Ballroom Foyer
3:50 – 5:20 pm	Oral Presentation - Potpourri	ACIME: Learners in Difficulty	Conference Workshop: Teaching and Assessing Medical Professionalism through the Use of Reflection
	Location: Ballroom B ₂ C Moderator: Cha-Chi Fung	Location: San Francisco A/B Facilitators: Jane Rosenthal; Donna Elliott	Location: San Diego Facilitators: Suraiya Rahman; Stephanie Zia; Julie Nyquist
	The Human Rights and Social Justice Scholars Program: Building the Human Rights Community at the Icahn School of Medicine at Mount Sinai Bakshi, Salina; Hennelly Marie; Jakubowski, Andrea; Aisha, James; Palermo, Ann-Gel; Atkinson, Holly	Description: Learners in academic difficulty can consume significant time, resources and energy for faculty, yet often without demonstrating significant improvement. Learner sub-par performance can affect student advancement, team efficiency, and patient safety. Those responsible for learners in difficulty often feel frustrated and conflicted about what to do in these challenging situations. This workshop will include a guided discussion on strategies for identifying, preventing, and overcoming academic performance problems.	Description: Participants will engage in individual reflection, small group activities, and large group discussion, all designed to hone the skills of evaluation required for faculty to assess professionalism, detect problematic issues early and offer strategies for remediation. They will critique sample student work, apply a rubric to assess reflection, and identify nascent signs of professionalism challenges in their students. They will then relate their own case-based examples, discuss possible responses, and outline an action plan.
	Facilitating the Transition: A Care Notebook for Adolescents with Chronic Illness Xi, Cindy; Ho, Cynthia; Benedict, Shelley; Huang, Alyssa; Cua, Erica; Corman-Thomas, Michelle		Is "Doing a Good Job for Psychiatry Residents" Good Enough? Crapanzano, Kathleen; Vath, Richard J
	Preceptors As Teachers: How Do Preceptors Perceive Clinical Site Visits From PA Programs? D'Aquila, Mitzi		Ownership of decisions in training of medical residents Dubov, Alex
	Awareness and Understanding of Female Anatomy and Clinical Applications Amongst Obstetric and Gynecology Patients at LAC+USC Reid, Jessica; Brueggmann, Doerthe; Templeman, Claire; Jaque, Jenny		Fundoscopy de-mystified: presenting an innovative tool for learning and assessment Schulz, Christopher
	Distribution of personality scores differ between medical school classes selected with and without the multiple mini-interview Chang, Jiwoon; Uijtdehaage, Sebastian		How to tell your patient... communication skills teaching made explicit. Ganster, Anna

Innovations in Medical Education 2014 Conference

Final Schedule

Sunday, February 23, 2014

	“Equal Care without Safe Care?” Join The American Resident Project for a Breakfast Discussion on the Role of Patient Safety in Helping to Eliminate Health Disparities			Location: Ballroom A/Foyer
7:00 - 8:00 am				
8:00 - 9:30 am	Oral Presentations: UME-Clinical Location: Ballroom B ₂ C Moderator: Gail Rice Case Based Teaching – Does this teaching method have a role in the education of 3rd year medical students in the field of gynecology? <i>Brueggmann, Doerthe; Jague, Jenny</i> A peer-mentorship program to prepare third year medical students for a longitudinal integrated clerkship (LIC) <i>Nickerson, Jillian; Bakshi, Salina; Bloomfield, Elana; McBride, Thomas; James, Aisha; Fonseca, Maira; Daher, Pamela; Levenson, Anne; Awosogba, Temitope; Medoff, Sar; Gault, Allison; Meah, Yasmin</i> Giving Feedback to Superiors Within Medical Education <i>Shara Steiner Brody, DO; Richard G. Tiberius, PhD</i> Introduction of 2nd Simulation session during 3rd year Undergraduate University of Toronto Anaesthesia core rotation- “Exit Simulation” <i>Sarmah, Anita; Susan de Sousa; Agnes Ryzynski; Fahad Alam; Mabel Choi; Yvonne Goh; Vanessa Percival, Isabel Devito</i> Medical Student Self-Assessment and Faculty Assessment During OSCE Review - Part III <i>Souder, Denise ; May, Win ; Nyquist, Julie</i>	ACIME: Learning Strategies & Mind Mapping Location: San Francisco A/B Facilitators: Julie Nyquist; Win May Description: Metacognitive knowledge is one of the four types of knowledge integrated in the revised Bloom’s Taxonomy. The others are factual, conceptual and procedural knowledge. Metacognitive knowledge is defined as “knowledge of cognition in general as well as awareness and knowledge of one’s own cognition,” and includes knowledge about strategies for learning and thinking, like use of mind maps. Mind maps have been shown to be effective in health professions education.	Conference Workshop: Unveiling the Hidden Curriculum: The Power of Positive Role Modeling Location: San Diego Facilitators: Kathleen Crapanzano; Jen Encinas; Jordanna Haber Description: In this workshop, through the use of videos, brief presentations, and small group exercises, we will discuss the hidden curriculum, its value and impact, and develop commitments to improve how we impact our learners and future physicians.	Conference Workshop: Cooperative Learning: Review, Reinforce, and Reiterate Acquired Knowledge in Medical Education Location: San Antonio Facilitators: Mitzi D’Aquila; Ann Schultz; Jennifer Wegler Description: The workshop will begin with a brief presentation on cooperative learning and the jigsaw technique. The attendees will participate in a jigsaw learning activity. The participants will further reflect and discuss on the cooperative learning process and possible application to their own curriculum.
9:30 - 9:50 am	Break (Refreshments & snacks)			Location: Ballroom Foyer
9:50 - 11:20 am	Oral Presentations: Best of Cool Ideas Location: Ballroom B ₂ C Moderator: Julie Nyquist After the motivational interviewing workshop: Improving faculty and resident proficiency with feedback and coaching <i>Strohm, Maureen</i> Building a Milestones Savvy Culturally Responsive Healthcare Curriculum in a Family Medicine Residency <i>Newman, Nancy</i> Mindfulness Meditation for Medical Students: A Pilot Study <i>Yang, Elaine; Schamber, Elizabeth; Meyer, Rika; Gold, Jeffrey</i> Sorting through the noise: modules to improve students’ study of cardiovascular physiology <i>Pressley, Thomas A. and Fowler, John C.</i> Utilizing the RESPECT model to Assess and Improve Cultural Competency in Residency Education <i>Gonsalves, Wanda</i>	ACIME: Turn Innovations into Publication Location: San Francisco A/B Facilitators: Dixie Fisher; Cha-Chi Fung Description: This workshop is designed for those in education who wish to turn their idea for an exploratory study, quality improvement project, or innovation into a scholarly product for dissemination. Participants should come with a project idea and one or more ideal outcomes in mind. If time permits, we will also discuss projects that have already been implemented and might be able to be turned into a scholarly product.	Conference Workshop: Faculty as Teachers (FasT) Location: San Diego Facilitators: Casey White; Elizabeth Bradley Description: This workshop, through use of brief presentations followed immediately by active and interactive exercises and practice, provides attendees with foundational skills in understanding how their own beliefs influence their teaching, writing effective learning objectives, choosing pedagogical methods that engage learners, and choosing assessment tools that provide both learners and teachers with critical information about achievement of learning objectives.	
11:30 - 1:00 pm	- Lunch Reception (deli style) - Poster Session II - “Collaborators’ Corner - Cool Ideas!” & Award Ceremony (by authors)			Location: Ballroom AB ₁
	1 Berona, Kristin 2 DeMeo, Stephen; Izatt, Susan and Goldberg, Ronald 3 Kang, Tarina; Chilstrom, Mikaela; Seif, Dina; Berona, Kristin; Medero Colon, Roberto; Page, Michael; Dasgupta, Raj; Elkhunovich, Marsha; Mailhot, Tom. 4 Shoemaker, Erica; Fung, ChaChi; Wiggins, Anna 5 Peabody, Christopher; Shoenberger, Jan 6 Trost, Margaret; Christman, Grant 7 Abdelnour, Shadi 8 Flores, Teresa, MD and Austin, Armaily Vaghaiwalla, MD, MPH, FAAFP 9 Hales, Kathleen MD; Harper, Daubney PhD 10 Loubeau-Magnet, Helene 11 Meraz, Sofia 12 Navarro, Christine 13 Nelson-Vasquez 14 Nguyen, Tam 15 Parsa, Elyas 16 Pendergraph, Bernadette MD; Sanchez, Gloria MD; Jochai, Diana PhD 17 Puvvula, Jyoti 18 Nguyen, Emily; Su, John	19. Rommereim-Madden, Daphne 20. Badran, Sarah 21. Arce, Kevin 22. Kim, Albert J 23. Nordt, Sean 24. Saloun, David 25. Cormman-Thomas, Michelle; Saenz, Jennifer 26. Cormman-Thomas, Michelle; Saenz, Jennifer; Wu, Patty 27. Hartig, Jason; Nyquist, Julie 28. Rao, Sheela; Stafford, Bethany; Thompson, Michelle. 29. Maniscalco, Jennifer; Wu, Susan; Jubran, Rima 30. Ramachandran, Sujatha 31. Schulz, Catherine Rodziewicz; Shbeeb, Amir; Anderson, Cynthia 32. Thompson, Michelle; Bhatia, Parul; Liley, Fasha; Oh, Jane; Rao, Sheela 33. Tschanz, Mark 34. Villareal, Deborah		

Time: Saturday, 8:15 – 8:50 am

Session: Plenary Session

**Competencies, Milestones and EPAs!!!
So Many Opportunities; The Time is Now!!!
Lawrence Opas, MD**

LECTURE OBJECTIVES

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

1. Understand the issues leading to major changes in Graduate Medical Education
2. Appreciate that change in GME creates opportunities for innovation in medical education
3. Reflect with your colleagues on how we can collaborate to improve the clinical learning environment for all (PATIENTS FIRST)

INNOVATIONS IN MEDICAL
EDUCATION 2014

*Competencies, Milestones
and EPAs!!!*

*So Many Opportunities;
The Time is NOW!!!*

Disclosures

- I serve (2010-2016) as a voluntary member of the Institutional Review Committee (IRC) of the Accreditation Council for Graduate Medical Education (ACGME) Institutional Review Committee (2010-2016)
- Associate Editor, JGME
- I have no financial or other known conflicts of interest

Session Objectives

Over the next few minutes I hope you will . . .

1. Understand the issues leading to major changes in Graduate Medical Education
2. Appreciate that change in GME creates opportunities for innovation in medical education
3. Reflect with your colleagues on how we can collaborate to improve the clinical learning environment for all (PATIENTS FIRST)

Once Upon a Time

(A Story About Why GME MUST Change)

...in May, 1889 in a city (Baltimore, MD) far away from San Gabriel, there was one teensy weensy residency program (Surgery) that started in one institution (Johns Hopkins) with one Program Director (Halsted) and 1 resident (Frederic Brockway). Internship continued until Halsted felt the intern was competent to advance followed by 6 years as Assistant Surgeon and then 2 years as House Surgeon.

Halsted's Concern About the Quality and Safety of GME

...then in 1904, only 15 years after the first resident began training, Dr. William Halsted wrote



William Stewart Halsted, 1904
(founder of "intern and resident" system)

"The intern suffers not only from inexperience, but also from over-experience. He has, in his short term of service, responsibilities which are too great for him; he becomes accustomed to act without preparation and he acquires a confidence in himself and self-complacency which may be useful in times of emergency, but which tends to blind him to his inadequacy and to warp his career."

THEN IN 1919 CAME OTHER INTERNS** ..
 Los Angeles County+University of Southern California
 Medical Center

- Internship for 30 house staff. Term of service was 18 months divided into Junior, Middler and Senior. Each rotation is 45 days.
- Salary: \$10.00 per month for year 1 and then a raise to \$20.00 per month thereafter
- Benefits: white uniforms (not including shoes), board, lodging and laundry.
- Vacation: after 1 year each intern was allowed 2 weeks of vacation.

**From original Intern contract dated January 1, 1919.

126 Years After the First Interns
 GME In the USA* Looks Like This

- INTERNS/RESIDENTS/FELLOWS: **113,142**
- PROGRAMS: **8,887**
- SPECIALTIES AND SUBSPECIALTIES: **133**
- TRAINING INSTITUTIONS : **726**
- DIO (means God in Italian): **726**
- Others: Faculty, Educators, Support staff: **Countless and Priceless**

* Excludes training in Osteopathic Residencies

GME at Keck School of Medicine
 (1% of all GME in USA)

<u>SPONSORING INSTITUTION</u>	<u># Residents</u>
• LAC+USC/KECK	913
• CHILDRENS' HOSPITAL L.A.	169
• HUNTINGTON HOSPITAL	28
• CALIFORNIA HOSPITAL	<u>25</u>
	1135

Who Finances GME in USA?

- United States Government through Medicare
 - \$9.5 billion per year (\$3.0 B direct/\$6.5 B indirect)
- Complicated formula for distribution of funds
 - Based on the number of residents being trained
 - Based on the number of total number of inpatients available for training and the percent of that total who are insured through Medicare
 - Interns and Residents are reimbursed at 1.0 FTE
 - Fellows are reimbursed at 0.5 FTE

GME Financing (In Context)

YOU ARE PAYING FOR GME !!



Sherriff/jails



Lifeguards



Parks and Recreation



Education

Major Events Shaping GME in USA

- 1910 FLEXNER REPORT*
 - "...The curse of medical education is the excessive number of schools. The situation can improve only as weaker and superfluous schools are extinguished."
 - 168 Medical Schools reviewed
 - 12 (7%) Closed or merged almost immediately
 - 26 (15%) Closed or merged within 2 decades

* Flexner A. *Medical Education in the United States and Canada: A Report to the Carnegie Foundation for the Advancement of Teaching*; Bulletin No. 4. New York: Carnegie Foundation for the Advancement of Teaching, 1910.

The Night and Morning GME
Changed Forever in the USA

March 4-5, 1984

Libby Zion and Sidney Zion

- Libby Zion was the daughter of Sidney Zion
- Sidney Zion was a columnist for The Daily News
- Sidney Zion sued the hospital because doctors who provided care for his daughter were on duty for almost 24 hours and routinely awake for more than 36 hours

Libby Zion: Hospital Course

- Admitted to New York Hospital-March 4, 1984 for jerking uncontrollably and a fever 103 F
- Given Tylenol and Demerol
- Later given Haldol and put in restraints
- On March 5 at 0600 she had 108 F temperature; cooling measures were applied, but she had a cardiac arrest and died 7 hours after admission.

Libby Zion: the Untold Story

- Libby Zion was taking an anti-depressant phenelzine for weeks though never disclosed
- Edward Boyer, Director Medical Toxicology at U Mass concluded she died of "Serotonin Syndrome": interaction between phenelzine and demerol
- "Supervision, not regulation of hours, is the key to improving the quality of patient care" Bertrand Bell MD-Chair of New York State Commission (Bell Commission) that investigated the Libby Zion case.
- NY State implemented duty-hour rules and unannounced site visits were initiated 1985
- First ACGME duty hour rules implemented July 1, 2003 and revised again in July 2011.

After Libby Zion >40 Reports Calling for a Change in GME

- IOM (2000) "To Err is Human" safety initiative
- IOM (2003) "A Bridge to Quality" criticized GME for not teaching safety and quality
- Medicare Payment Advisory Commission (MedPAC-2009)-sponsored by Medicare-the great problem with GME was failure to teach sufficient "cost awareness in clinical decision making"

100 YEARS AFTER FLEXNER

- Carnegie Foundation (2010) for the Advancement of Teaching (sponsored the Flexner Report):
"Discharge becomes the highest goal... The imperative in the clinical environment is efficient patient management and swift disposition of problems; this task-focused environment is inhospitable to intellectual exploration". "Undesirable consequences: less time for reading, fewer opportunities for reflection, decline in quality of teaching and supervision and shift in GME to vocational training"

Macy Symposium 2011: Recommendations for Graduate Medical Education to Meet the Needs of the Public

- Broader input into GME planning and **greater transparency of GME outcomes** are needed;
- **Greater diversity** in the sites and content of GME, with expanded collaborative education across specialties and health professions, will strengthen education;
- **Enhanced quality and efficiency in GME** should be pursued by prioritizing the most educationally rich experiences and by reexamining the transitions into and out of GME, the duration of training, and the criteria for completion;
- Evidence-based GME requires **more research** focused on health professions education.

Challenge to Change

“Faced with the choice of changing one’s mind and proving there is no need to do it, almost everybody gets busy on the proof”

John Kenneth Galbraith-American Economist

The Phantom Menace of Sleep-Deprived Doctors

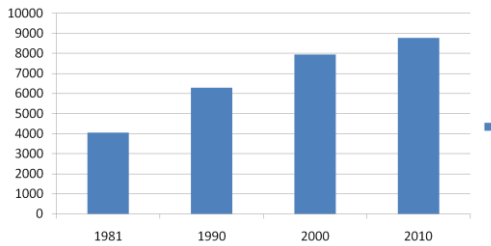
(Darshak Sanghavi MD, New York Times Magazine, August 5, 2011)



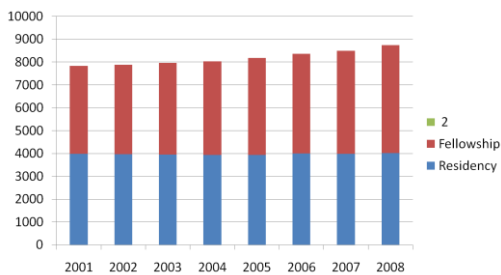
What should change in GME that is probably not going to change?

THE CHALLENGE FOR THE MEDICAL STUDENT CLASS OF 2014 and BEYOND

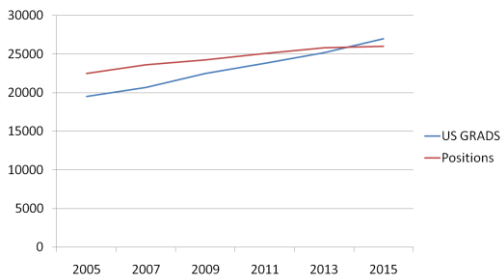
Accredited Residency/Fellowship Programs (4048 to 8765 in 20 yrs)



Residencies and Fellowships (3992 to 4020) (3846 to 4714)



PROBLEM: USA MD/DO GRADUATES vs GY-1 POSITIONS



End Result of Resisting Change

- The PUBLIC, through their governmental representatives, manipulate the system through payment mechanisms (CMS)
- GME Changes
 - ***Change may be implemented and/or required that is not evidenced-based***
 - ***Challenge: innovate and disseminate the evidence***

IME Opportunity:
The Trust Train Arrived JULY 1, 2013

NAS

(Next Accreditation System)



The Next GME Accreditation System-Rationale and Benefits*

Three aims

1. Enhance ability of **peer-review system to prepare physicians** to practice in 21st century
2. Accelerate ACGME movement toward **accreditation based on educational outcomes**
3. **Reduce the burden** associated with the current structure and process-based approach

*Nasca, et al 10.1056/NEJMSr1200117 published February 22, 2012 at NEJM.org

Competencies, Milestones, EPAs

- Competencies: Patient Care, Medical Knowledge, Professionalism, Interpersonal and Communication Skills, Practice-Based Learning and Improvement, Systems-based care
- Milestones: Measurable performance standards throughout continuum of learning
- Entrustable Professional Activities (EPAs)

EPAs: Time to Trust

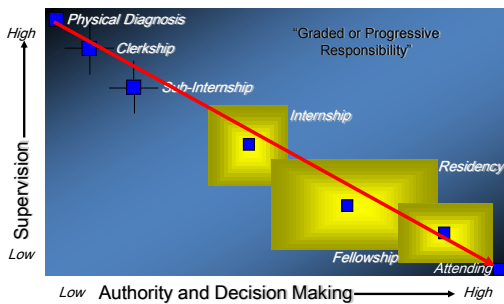
(Hirsh DA, Holmboe ES, ten Cate O. Academic Med.2014; 89:201-204)(
ten Cate, O. JGME.2013;12:157-158)

- EPAs are units of professional practice that faculty entrust to a trainee to execute unsupervised, once he or she has obtained adequate competence to do so.
- EPAs are executable within a time frame, are observable and measurable, and are suitable for overseers to make focused entrustable decisions.
- EPAs are not alternatives for competencies, but a means to translate competencies into clinical practice.
- EPAs require multiple competencies in an integrative, holistic nature

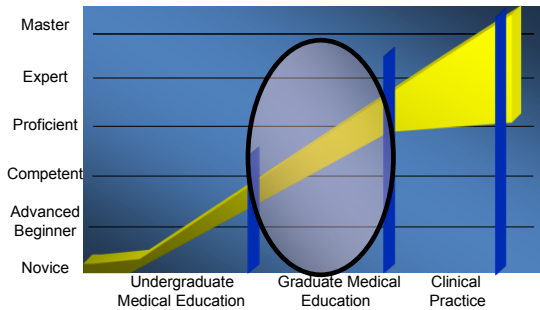
Next Accreditation System

- Each specialty has developed national milestones for each of the six competencies
- Residents will advance in training by demonstrating they have achieved the required milestones and not advance simply due to years of training
- Attainment of multiple milestones will permit the resident to perform Entrustable Professional Activities (EPAs)

The Continuum of Clinical Professional Development
Authority and Decision Making versus Supervision



The Goal of the Continuum of
Clinical Professional Development



Clinical Learning Environment Review (CLER)

- Institutional CLER site visit every 18 months
- Three site visitors over three days
 - Interviews with C-Suite Leadership at beginning and end
 - Interviews with PDs, faculty, residents (interdisciplinary), staff, and patients
 - Using audience response devices for anonymity
- Relatively unannounced (10 day notice)
 - Notification to DIO and CEO

Six Focus Areas for CLER

(BIG Opportunity of IME)

1. Integration of residents/fellows into the institution's **Patient Safety** programs and **demonstration of impact**.
2. Integration of residents/fellows into institution's **Quality Improvement** programs and efforts to reduce **Disparities in Health Care Delivery** and **demonstration of impact**.
3. Establishment, implementation and oversight of Supervision policies.
4. Oversight of **Transitions in Care**.
5. Oversight of **Duty Hours Policy, Fatigue Management and Mitigation**.
6. Education and monitoring of **Professionalism**.

Five Key Questions CLER Site Visit Team

1. **Who is responsible for and in what form is the hospital's infrastructure designed to address the six focus areas?**
2. **How integrated is the GME leadership and faculty in the hospital's efforts across the six focus areas?**
3. **How engaged are the residents and fellows (in patient safety/quality improvement)?**
4. How does the hospital determine the success of its efforts to integrate GME into the six focus areas?
5. What are the areas the hospital has identified for improvement?

Other Factors Forcing Change in GME

Innovations in medical education must account for changing expectations of students and residents

- Professional/personal balance
- Life Style
- Socialization
- Income

Changing Hospital Costs

- Duty hour restrictions have reduced clinical workload of residents
- Need providers for non-educational tasks
- Additional faculty to meet requirements
- Enhanced educational facilities
- New technologies
- Developing curricula to teach new subjects

Changing Economics

1919	2013
• SALARY \$120.00/yr	• \$43,956.60/yr
• FRINGE: None	• FRINGE: \$12,500/yr
• Room: Yes	• Room: No
• Meals: Yes	• Meals: \$28.00/day
• Laundry: Yes	• Laundry: Yes
	GY-2=49,176.96
	GY-3=53,284.08
	GY-4=57,419.40
	GY-5=61,443.48
	GY-6=65,606.52
	GY-7=69,519.60

Changing Responsibilities (aka SCUT)

- OLD SCUT
 - Draw blood, transport to lab, analyze, transport patients, start IV lines, administer IV medicine
- NEW SCUT
 - Schedule tests and procedures, obtain consultations, discharge planning and documentation, documentation, documentation
 - Increased work (average LOS decreased from 10 days to 3 days in two decades)
 - Duty hours: cutting corners inevitable to adapt to more work in less time

CLINICAL LEARNING ENVIRONMENT We are changing and for the BETTER

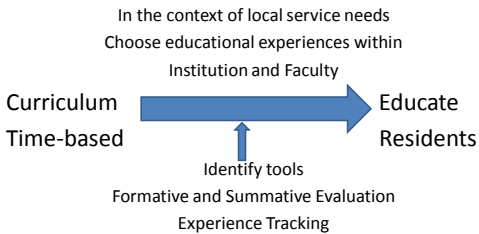
TRADITIONAL APPROACH

- SEE ONE
- DO ONE
- TEACH ONE

PATIENT SAFETY APPROACH

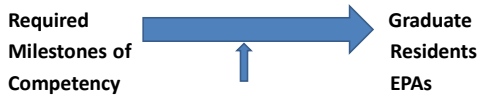
- LEARN about one
 - SIMULATE many
 - SEE ONE (or more)
 - DO MANY (and many more) under direct supervision
 - DO MANY (and many more) under indirect supervision
 - LEARN how to teach one
 - TEACH one (or more)
 - CONTINUOUS Improvement
- All with exemplary Professionalism

TRADITIONAL DRIVERS OF EDUCATIONAL CONTENT CIRCUMSTANTIAL PRACTICE



DRIVERS OF EDUCATIONAL CONTENT IN THE FUTURE
INTENTIONAL PRACTICE

Design *innovative* educational experiences
Rotations and Faculty



National Evaluation Tools
Formative and Summative Evaluation
Clinical Outcomes Tracking and Educational Research

Excellence in the NAS after the NAS

- PROFESSIONALISM
- SUPERVISION
- TEACHING
- OUTCOMES TRACKING AND RESEARCH
- FACULTY DEVELOPMENT
- PATIENT SAFETY
- CONTINUOUS QUALITY IMPROVEMENT
- INNOVATION IN MEDICAL EDUCATION

GME in USA from 1989 to 2014 Legacy of William Halsted, MD



The intern (resident/fellow) won't advance until he/she is competent to advance
But in the NAS there will be objective standards of competency

THE FEAR

*SERVICE WILL
TRUMP
EDUCATION*

The Opportunity

“Learners, patients and society as a whole should benefit from aligning assessment of physicians-in-training with what is required for safe and high quality health care”

Hirsh DA, Holmboe ES and tenCate O. Time to Trust: Longitudinal Integrated Clerkships and Entrustable Professional Activities. Acad Med. 2014;89:201-204.

CHANGE IS INEVITABLE

*“SOMEBODY HAS TO DO
SOMETHING,
AND IT’S JUST INCREDIBLY
PATHETIC IT HAS TO BE US”*

Jerry Garcia (Grateful Dead)
Stolen from Tom Nasca, CEO, ACGME

Think About It and Innovate

- When and how can we trust that a student is ready for residency training?
- When and how can we trust that a resident is ready for practice without direct supervision?
- When and how can we trust that a practicing physician can continue to practice without direct supervision?
- Eliminate blind trust: why do we license physicians (in California) to “practice” after medical school and an internship?

Time: Saturday, 9:00 – 10:30 am

Session: FIME Workshop

Basics of Needs Assessment

Julie G. Nyquist, PhD and Anita Richards, MACMc

Keck School of Medicine of USC

WORKSHOP RATIONALE

A solid needs assessment is the bedrock upon which any new curriculum (course, rotation, faculty development session, etc) is built. If your goal is to make a difference you must first understand the “actual” need or measured gap between the current and idea, as well as the “perceived” need or the wants of the learners.

INTENDED PARTICIPANTS

Participants in the Basic Concepts In Medical Education track (USC mini-faculty-development fellowship)

LEARNER OBJECTIVES

Participants should be able to: 1) discuss the levels of need that are relevant to their own planned change; 2) describe the steps in conducting a needs assessment; and 3) utilize a worksheet to guide their own conduct of a curricular needs assessment.

METHOD/ACTIVITIES

The methods will include 1) Brief presentation to provide background on the levels of needs and steps in conducting a needs assessment; 2) provision of examples of completed needs assessment plans; 3) work through examples provided by the audience to practice each step in planning a needs assessment 5) take home messages and commitments to act.

TAKE-HOME TOOL

- 1) a worksheet to utilize to plan a curricular needs assessment;
- 2) example needs assessment tables for the levels of need (patient, learner, curriculum, teaching/assessment methods); and
- 3) a table to help select tools for data collection in a actual needs assessment

REFERENCES

1. DeSilets LD. Needs assessment. *Journal of Continuing Education in Nursing*. 37(4):148-9, 2006 Jul-Aug.
2. Hauer J. Quill T. Educational needs assessment, development of learning objectives, and choosing a teaching approach. *Journal of Palliative Medicine*. 14(4):503-8, 2011 Apr.
3. Witkin BR. Altschuld JW. Planning and Conducting Needs Assessments. Sage Publications, Thousand Oaks, California, 1995.

Teaching Residents the Business Side of Medicine

Miller, Karen Hughes; Ostapchuk, Michael; Mason, Bonnie Simpson

University of Louisville School of Medicine / University of Louisville School of Medicine / OPM Education Inc.

PROBLEM STATEMENT

Today's Residents are expected to be proficient in billing and coding (often using electronic medical record systems); providing efficient clinical care; and, during their final year, making career decisions based on complex employment contracts that include performance expectations set by physician practices or other healthcare organizations. But where does their business training come from? As early as 2004, program directors were arguing for more formal training in practice management. 1 More recently, medical educators have argued that healthcare business content is too complex to be learned incidentally, 2 and that instruction in healthcare reform means nothing if residents don't understand the healthcare business to begin with. 3

METHODS

In 2010 the University of Louisville School of Medicine completed a needs analysis to see what kind of business education residents believed they needed, and what training was already offered. Outcomes of this study led to a collaboration with OPM™ Education, Inc., a not-for-profit physician education group that specializes in business training for residents and new physicians. The first learning event was a Dean's Hour open grand rounds in September of 2012. The goal was to introduce the concept of valuing business education by previewing some of the content from the 2013 course for residents. In January 2013, 133 senior residents in all specialties were enrolled in a 12 module online course, *Beyond the Exam Room™*, with the expectation that they complete 6 of the modules by June 2013, when face-to-face workshops were offered. The face-to-face workshops included brief didactic sessions, panels of local business and finance experts, and small group activities to challenge residents' skills in areas such as contract negotiation role play.

RESULTS

Of the three mandatory non-clinical courses offered to U of L residents, the face-to-face Residents in Business course has proven to be the most popular. All eight modules earned mean scores of 3.82 or higher on a 5 point scale of usefulness, with the modules on contract negotiation and personal finance earning means of 4.71 and 4.38 respectively. These two modules were also mentioned frequently in open ended comments as being valuable and useful. Comments also included requests for more business education and offering it even earlier during residency. Residents also mentioned their intent to use financial tools provided such as an Excel® personal budget tracker and create action plans such as working with attorneys and financial planners.

LESSONS LEARNED

While the BTER™ online modules are interactive and well designed, busy residents really needed the additional protected time for face-to-face instruction, activities, and discussion to immerse themselves in the business content that is so different from clinical training. The face-to-face course was repeated on three consecutive days so programs were missing no more than 33% of their seniors at one time, and combining the business course with the Seniors' Job Fair provided even more incentive for their participation.

REFERENCES

Lusco, V.C., Martinez, S.A., Polk, H.C. Program directors in surgery agree that residents should be formally trained in business and practice management. *The American Journal of Surgery*, (2005) 189; 11-13.

Roberts, J.L., Ostapchuk, M., Miller, K.H., Ziegler, C.H. What residents know about healthcare reform and what we should teach them? *Journal of Graduate Medical Education* (2011) June, 155-161.

Holak, E.J., Kaslow, O., Pagel, P.S. Facilitating the transition to practice: a weekend retreat curriculum for business-of-medicine education of United States anesthesiology residents. *Journal of Anesthesiology*, (2010) 24; 807-810.

Resident Skill After a Pediatric Lumbar Puncture Simulation Program

Niveditha Vilasagar (1,2) ; David E. Michalik (3) ; Richard Mink (1,2) ; Tom Kallay (1,2)

1.Harbor UCLA Medical Center, Torrance, CA / 2.LA BioMed, Torrance, CA / 3.Miller Children's Hospital Long Beach, Long Beach, CA /

PROBLEM STATEMENT

There is a growing concern that the skill of residents performing pediatric lumbar puncture (LP) is declining. 1-3 Interns (future "trainers") traditionally learn LPs under a supervising resident ("trainer"). We propose that an educational intervention via simulation, geared towards interns and senior residents would specifically "train the trainers," and potentially improve long-term retention of skills.

METHODS

This study was quasi-experimental; the intervention and control groups were at two separate institutions. The intervention group was first, second, and third year pediatric and emergency medicine residents who received the course. The control group was first, second, third, and fourth year pediatric and emergency medicine residents who did not receive training. / / At both institutions, for each LP performed, residents completed a form documenting success and number of attempts. Success was defined as obtaining any amount of CSF. Six months into the academic year, the intervention group received the course. The courses were delivered to groups of 4-5 interns and residents over a 2 month period and consisted of a short didactic session, a 10 minute video, a quiz, and observed practice on an infant simulator model. Practice was guided by a 26-point validated checklist, and all courses were provided by the primary investigator. After all sessions were provided, data collection continued at both institutions for 10 months. / / To detect a 25% improvement in success from baseline, we projected that a sample size of 66 would be needed in each arm of the study to achieve 80% power ($\alpha=0.05$). Success rate and number of attempts were compared pre- and post-course, and between intervention and control groups, using Chi square and two sample t-test. /

RESULTS

The control group consisted of 29 interns out of a total 74 residents whereas the intervention group consisted of 24 interns out of 51. Both groups were similar pre-course as rates of success and number of attempts were not significantly different ($p>0.05$). / / There was no significant change in success or number of attempts pre- and post-course in either group. In the intervention group pre-course, there were 113 LPs with a mean of 1.66 attempts until success and post-course the mean number of attempts for 73 LPs was 1.7 ($p = 0.75$). In the control group during the pre-course time period, there were 72 LPs with a mean of 1.65 attempts until successful, and in the post-course time period for 151 LPs the mean number of attempts was 1.77 ($p = 0.38$). / / The mean success rates for the intervention group was 53.9% pre-course versus 61.4% post-course ($p = 0.24$). The mean success rates for the control group was 62.8% in the pre-course time period versus 60% during the post-course time period ($p = 0.7$). /

LESSONS LEARNED

LP skill did not improve significantly throughout the year with or without intervention. Additionally, long-term LP skill retention was not achieved with a single LP course. Further study is needed to determine whether frequent LP sessions could improve LP skill.

REFERENCES

Kessler DO, Arteaga G, Ching K, Haubner L, Kamdar G, Krantz A, Lindower J, Miller M, Petrescu M, Pusic MV, Rucker J, Shah N, Strother C, Tilt L, Weinberg ER, Chang TP, Fein DM, Auerbach M. Interns' success with clinical procedures in infants after simulation training. *Pediatrics*. 2013 Mar;131(3):e811-20.

Kilbane et al. Pediatric residents' ability to perform a lumbar puncture: evaluation of an educational intervention. *Pediatr Emerg Care*. 2010 Aug;26(8):558-62.

Lammers et al. Competence of new emergency medicine residents in the performance of lumbar punctures. *Acad Emerg Med*. 2005 Jul;12(7):622-8.

What are PACES candidates' perceptions of video-recorded consultation review as an educational tool for membership exam preparation? A qualitative study among MRCP (UK) candidates

Panopoulou, Katerina

London Deanery

PROBLEM STATEMENT

Modern medical education has experienced a pivotal change away from conventional teaching towards experiential training methods aiming to stimulate reflection, a skill believed to assist complex decision making, encouragement of self-directed learning and self awareness. Videotape recording is considered a powerful, acceptable and effective teaching tool. This qualitative study aimed to explore candidates' perception of video-recorded consultations as a learning tool in the context of exam preparation for MRCP (UK) PACES (practical assessment of clinical examination skills).

METHODS

The educational intervention included video-recording of the participants' history-taking consultation along with their time for reflection and examiner's questioning in the exact MRCP (PACES) Station 2 format. Qualitative data were obtained and triangulation was achieved through a focus group interview and anonymous questionnaires. Elements deriving from the focus group transcript and the questionnaire were coded and thematically analysed.

RESULTS

Thematic analysis resulted in recurrent themes related to the camera effect, the candidates' areas of focus during the video review, the value of video as a feedback tool and the participants' feelings towards individual versus group review. / Results: Despite the limited and distant, if any, previous video experience of our participants, no cosmetic concerns were identified in the data derived from either the focus group or the questionnaire. All candidates found the review of a video-recorded consultation useful or very useful in their exam preparation. In particular, it was a universally agreed notion that the video review helped them identify deficiencies in their consultation skills. These related to either their consultation "habits", their interaction with the patient or the structure of their consultation. Flaws in the consultation structure were also made apparent to some candidates through their video review; it was felt that it helped them identify how to structure their history in order to elicit key facts in a smooth way, whereas others paid more attention to the use of open questions, time keeping and summarising. Most candidates agreed that an important outcome of video-recording was the contextualization of feedback and the opportunity it gave them to validate and actively participate in the feedback process. Except accentuating areas for improvement, the video-consultation review was also perceived as a valuable tool to provide reassurance and point out aspects of excellence in the participants' consultation skills, in agreement with educational literature. The main concern of candidates expressing discontentment towards the idea of group review, was the fear of embarrassment at watching themselves along with their colleagues.

LESSONS LEARNED

The findings were in accordance with recent educational literature supportive of integration of experiential methods in clinical and communication skills training in medical education. The study however is limited to the candidates' subjective perceptions of their performance in mock exam settings. Areas for future research could include examining the impact of video-assisted reflection on the candidates' repeat performance against objective criteria.

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Conducting Advanced Care Discussions: Recent Graduates' Perspectives of Instruction and Experiences

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Children's Hospital Los Angeles, Keck School of Medicine at USC, Lurie Children's Hospital of Chicago

PROBLEM STATEMENT

It is increasingly challenging for pediatricians to master the communication skills necessary to balance a family's goals of care for their child with the goals of maximizing quality of life. Information is limited about resident comfort in conducting advanced care discussions with complex patient populations.

METHODS

An electronic survey was sent to the most recent e-mail addresses on record for graduates of classes 2008-2012 (N=96) at a children's hospital. Subjects were asked to comment on the experiences in training that built their skillsets and their comfort level in conducting advanced care discussions. Data were analyzed using descriptive statistics and independent samples t-tests.

RESULTS

24 of potential 96 respondents completed the survey, 45.5% of whom remained in academia. During residency, 75% had 5 or more patients who were offered palliative care, 66.7% experienced 5 or more patient deaths, 29.2% attended 5 or more family meetings, 33.3% attended palliative care didactic lectures, and 20.8% attended ethics resource committee consultations. More than half felt comfortable or very comfortable with discussing goals of care with patients and families, and 29.7% had used the Provider Order for Life Sustaining Treatment form since completion of training. 21% of residents had led advanced care discussions only one time in residency. When compared to 2012 graduates (mean=4.6 +/- 1.07), residents who graduated between 2008-2011 (mean=3.4 +/- 1.5) were significantly less likely to have led advanced care discussions in family conferences, $t(22)=2.11$, $p<.05$. Resident graduates from 2008-2011 (mean=0.93 +/- 0.27) were significantly more likely than 2012 graduates (mean=0.5 +/- 0.53) to suggest that new curricula should include information on how to introduce pediatric palliative care to families, $t(22)=2.62$, $p<.05$.

LESSONS LEARNED

While most residents felt comfortable participating in advanced care discussions, they may not have had the opportunity to actively lead these discussions. Pediatric residents may need more training in conducting advanced care discussions and faculty may benefit from applying standardized tools for deconstructing these episodic yet significant experiences. /

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A six-year review of clinical competency committee meetings-how much time will you need to evaluate milestones?

SOUTER, KAREN

UNIVERSITY OF WASHINGTON

PROBLEM STATEMENT

The ACGME Common Program Requirements (CPRs)¹ developed for the Next Accreditation System (NAS)², require program directors to appoint a Clinical Competency Committee (CCC). The CCC's role is to review each resident's achievement of milestones and report these to the ACGME semi-annually. For most specialties the CCC represents a new entity in resident evaluation. In Anesthesiology programs however the CCC is a well-established part of resident evaluation and is responsible for providing 6-monthly reports of "Clinical Competence" to the American Board of Anesthesiology (ABA)³. The faculty workload required in instituting a CCC as part of the NAS is at present unknown. The Department of Anesthesiology and Pain Medicine (A&PM) at the University of Washington has 110 residents and over 180 clinical faculty. We have a long established CCC dedicated to resident evaluation, identification of performance concerns and development of remediation plans. / The purpose of this study was to review the activities of our CCC over the past 6 years and estimate the amount of faculty time involved. This will serve as a guide for residency programs in developing their CCCs for the NAS. /

METHODS

CCC meeting minutes were reviewed between July 1, 2007 and June 30, 2012. Since the attendance and duration of meetings varied over the years we used this 6-year review period to improve the consistency of our results. The committee's activities, the number of faculty in attendance, the duration of each meeting (to the nearest 30 minutes) and the number of residents discussed were recorded. The number of faculty hours devoted to CCC meetings and the workload per resident was calculated.

RESULTS

The CCC's main activities were to identify and investigate concerns and plan remediation for residents with performance deficits in one or more of the 6 ACGME competency domains; CCC meetings were held quarterly. During the 6 years of investigation the CCC had between 22 and 25 faculty members. The CCC held 24 meetings, lasting on average 2.1 hours, (between 1.5 and 2.5 hours); the average attendance was 12.7 (between 6 and 19) faculty members per meeting. 15,352 hours of faculty time was dedicated to CCC meetings, (2559 hours for 4 meetings per year). The average number of residents discussed at each meeting was 8 (between 4 and 12).

LESSONS LEARNED

Our previous CCC model differs from the new CPRs, only residents with performance deficits, requiring remediation were discussed. We devoted a significant amount of time to discuss a few residents about whom performance concerns had been raised. The new CPRs will require our CCC to discuss Milestone attainment by all 110 of our residents. We anticipate the need for a more focused and concise discussion of each resident and the development of rubrics to allow for rapid evaluation of each resident's progress, otherwise, based on our current practices our CCC meetings could last over 24 hours! Detailed discussions related to resident performance deficits and remediation planning are likely best done at a separate meeting and we plan to use the other 2 of our quarterly CCC meetings to discuss resident remediation.

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Facilitating Dialogue and Learning: Exploring Difficult Topics in Health Professions Education through Interactive Theater

Brett-MacLean, Pamela; Hodgson, Carol

University of Alberta / University of Alberta

WORKSHOP RATIONALE

The arts are increasingly being used in health professions education and faculty development. This workshop will consider the application and benefits of interactive, performative approaches in medical education. Inspired by our experience of faculty development workshops led by internationally recognized and respected director of "Theatre for Living" (formerly Headlines Theatre), based on Vancouver, Canada in 2012 and 2013, and educational innovations that have since been collaboratively introduced in our medical school, we will illustrate the use of theatre exercises in helping faculty members, residents and students to explore subjects they are struggling to understand. This workshop will be rooted in theatrical techniques developed by David Diamond whose work involves adaptation of Augusto Boal's Theatre of the Oppressed (TO) with systems theory. Diamond's issues-based community work is premised on the idea that "there are no good guys or bad guys." Rather his approach recognizes the community as an "integrated organism that often finds itself struggling to resolve difficult issues."

INTENDED PARTICIPANTS

Medical educators, other health professions educators. This workshop will be highly relevant to those interested in communication and professionalism, as well as those interested in engaged, interactive approaches to teaching, and/ or humanism and the humanities in medicine.

LEARNER OBJECTIVES

Participants will have an increased understanding of the potential benefits of interactive, theater-based exploration in health professions education, through their own experience of embodied, or performative reflection. Participants will have an enhanced understanding of "Theatre for Living" (TfL) systems-based principles, and appreciation of the potential of TfL exercises in fostering dialogue and productive change within the health professions. Participants will be introduced to an enhanced repertoire of active, engaged teaching approaches that they may want to further develop following this workshop. This workshop will provide an opportunity for meeting with others interested in use of interactive theatre techniques in health professions education, sharing experiences in this area, and exploring potential collaborative projects.

METHOD/ACTIVITIES

This highly engaging workshop will focus on exploring a range of perspectives regarding difficult topics in health professions education (including feedback, professionalism lapses, and student mistreatment) through a facilitated exploration of various challenging and multifaceted issues involved. The workshop will begin with a brief overview of applications of theater in medical education. Interactive exercises (e.g., silent "sculpted" images, and improvisational scenarios), along with group reflection will contribute to a broadened understanding of use of theater-based approaches that can be used to explore difficult issues in health professions education and suggest strategies for addressing these experiences. The workshop will finish with large group discussion that focuses on the ways interactive theater can be used to address other difficult issues and contexts in health professions education.

TAKEHOME TOOL

During the group discussion at the end of the workshop, participants will identify exercises and other interactive theater approaches they plan on using to explore and address difficult issues and contexts in health professions education in their own educational settings.

PREPARATION

None.

Development of Professionalism through Effective Feedback. Skills to Enhance Faculty Development

Tanaka, Pedro; May, Win

Stanford University School of Medicine / Keck Medical School

WORKSHOP RATIONALE

Residents place great educational value on feedback. The medical literature demonstrates that although learners believe the feedback they receive is insufficient, untimely, and unspecific; they do place great value upon it. When residents rated the qualities of a good preceptor, they ranked the ability to provide feedback as second only to clinical competence. / Last ACGME survey: 49% compliant with residents satisfied with feedback after assignments. We are still behind national average of 70% rate compliance. /

INTENDED PARTICIPANTS

Professionals of all levels involved in teaching and participating in health care and medical education.

LEARNER OBJECTIVES

1. List 3 methods of feedback skills
2. Identify 3 feedback opportunities in teaching institution
3. Identify the components of effective feedback

METHOD/ACTIVITIES

Through a mini-lecture and participant exercise, this workshop will help attendees distinguish between indirect and direct feedback, recognize characteristics of effective feedback, make use of three levels of effective feedback, as well as better understand their target population. The workshop will explore the relationship between giving effective feedback and inspiring residents to develop into confident and competent physicians.

TAKEHOME TOOL

Feedback instrument

PREPARATION

Read "Don't be so touchy! The secret for giving feedback for the millennials" Joanne Sujanski and Jan Ferri-Read. / <http://www.myarticlearchive.com/articles/9/213.htm> / Bring One Case teaching scenario involving your teaching and feedback /

Time: Saturday, 10:50 am – 12:20 pm
Session: FIME Workshop

TEACHING IN THE CLINICAL SETTING

Win May, MD,PhD and Tatum Korin PhD

Keck School of Medicine of USC

WORKSHOP RATIONALE

Teaching in the clinical setting is a demanding and complex task. As physicians' work load increases, there is a corresponding decrease in time available for clinical teaching. A few models of clinical teaching have been successfully used in the faculty development of clinical teachers in all settings (inpatient, hospital outpatient and community). They include the "one-minute preceptor" or "Microskills of teaching" model, the "Stanford seven-category framework of analysis", the Dundee 3-circle outcomes model and SNAPPS: a learner-centered model for outpatient education.

INTENDED PARTICIPANTS

Participants in the Fundamentals in Medical Education Track

LEARNER OBJECTIVES

By the end of the session, participants will be better able to

1. List the skills of an excellent clinical instructor
2. Describe the Stanford seven-category framework of analysis
3. Describe the Dundee 3-circle outcomes model
4. State the microskills in the "one-minute preceptor" model
5. Practice the microskills of the "one-minute preceptor" model
6. Describe SNAPPS
7. Practice SNAPPS

METHOD/ACTIVITIES

The methods will include 1) a brief presentation to provide a brief description of the models of clinical teaching that are commonly used; 2) practice with the one-minute preceptor and SNAPPS models; 3) take home messages and commitments to act.

TAKE-HOME TOOL

Handouts of the 4 models of clinical teaching

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Stress, Well-Being, and Personality Traits among First-Year Medical Students

Bughi, Stephanie A.1 ; Leafman, Joan1;; Wallace, Lisa1;; Rosenthal, Jane2;

1. A.T. Still University, Arizona School of Health Sciences / 2. Keck School of Medicine, University of Southern California /

PROBLEM STATEMENT

Stress and burnout are prevalent among physicians and are known to begin early in the medical training. Susceptibility and response to stress can be shaped by one's environment, genetics, and individual characteristics. When stress is poorly managed, it can negatively influence physicians' health and patient care. Therefore, effective stress-management techniques may require assessment of medical students' overall well-being and personality traits. The purpose of this study was to explore the prevalence and relationship between stress, well-being, and the Big Five personality traits (i.e., Extraversion, Conscientiousness, Openness, Neuroticism, and Agreeableness) among first-year medical students.

METHODS

A cross-sectional study was conducted with a convenience sample of 175 first-year medical students attending a medical school in Southern California during the 2013 spring semester. Two valid and reliable instruments, the General Well-Being Schedule (GWB) and the Big Five Inventory-10 (BFI-10), were used to assess participants' stress and well-being levels, as well as their personality traits. Descriptive analyses were performed to identify demographic characteristics and the prevalence of stress, well-being, and personality traits. Based on the outcomes of previous studies, student t-test was conducted to explore gender differences among the variables and a two-tailed Pearson correlation was used to assess their relationship.

RESULTS

Stress was reported by 41.7% of students; however, no significant gender differences in stress were noted. In the six subcategories of the GWB scale, anxiety was significantly higher among female students ($t = 2.287, p < 0.05$). Female students were also found to be more extraverted ($t = -2.020, p < 0.05$) and conscientious ($t = -3.174, p < 0.01$) than their male counterparts. Overall well-being score was positively associated with degree of extraversion ($p < 0.05$) and agreeableness ($p < 0.05$); both traits suggested positive well-being ($p < 0.01$) and less depression ($p < 0.01$). Negative correlations ($p < 0.001$) were reported between neuroticism and all six subcategories of the GWB (i.e., general health, anxiety, depression, vitality, self-control, and positive well-being).

LESSONS LEARNED

The high prevalence of stress among first-year medical students suggests a need for interventions early within the medical school training. Effective wellness programs may need to consider students' personality traits, which may offer additional insight into individuals' susceptibility and response to stress.

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Peer-based anatomy tutoring for first-year medical students: an analysis of 791 tutoring sessions.

Cameron Escovedo, M.D.; Jacob Lentz MSIII; David Harrison MSIII; Lesley Stahl, PsyD; Neil Parker, M.D.; M. Elena Stark, M.D., Ph.D.

David Geffen School of Medicine, UCLA

PROBLEM STATEMENT

Discussions with students at the David Geffen School of Medicine at UCLA have revealed a desire for additional instruction in the anatomy laboratory, beyond the established curriculum. Peer tutoring is a well-characterized and effective instructional method, which prompted the development of a peer-based tutoring program specifically tailored for the anatomy curriculum, which to our knowledge, has never been documented within the medical education literature.

METHODS

Based on promising results from our pilot study, we expanded the program from 5 to 13 upperclassmen tutors, who were interviewed and selected by anatomy faculty. This peer-tutoring program was designed as a complement to the traditional curriculum, and all student involvement was optional and voluntary. Throughout the 2012-2013 academic year, 791 peer tutoring sessions were held. First-year students anonymously and voluntarily completed a series of surveys, the purpose of which were threefold: (1) Assess self-perceptions of knowledge and confidence with the material provided during the first-year anatomy curriculum, (2) the efficacy of the tutoring sessions, and (3) specific anatomical areas of concern as well as areas of confidence. We collected 154 responses over three organ system-centered "Blocks" .

RESULTS

In total, we collected 154 responses over the course of three organ system-centered "Blocks" of the first year curriculum using a modified 5-point Likert scale. The data identifies specific anatomical areas of concern (for example, the heart, pelvis and perineum), as well as areas of confidence (upper and lower GI, lower extremity and gluteal region). The vast majority of students (83.8%-88.2%, depending on which block) used tutoring sessions to review material. Across all three blocks, the most helpful aspects of each session include getting quizzed by tutors ($\mu = 4.19-4.73$), verifying structures ($\mu = 4.19-4.76$), and improving confidence ($\mu = 4.06-4.72$). Specific to Block 4, the musculoskeletal block, students found relating structures with neighboring structures to be particularly helpful ($\mu = 4.67$).

LESSONS LEARNED

Since most students attended "5 or more" sessions (the maximum was 8 sessions per student), it suggests that those who choose to take advantage of tutoring do so as much as is allowed. Based on our data, students derive significant benefit from the program. Attending more sessions led to improved self-perceived helpfulness in all categories, especially structure identification, getting quizzed by tutors, and overall confidence in the material. As such, there is a need for future studies that focus specifically on which aspects of tutoring were perceived as most useful, and to appropriately tailor the curriculum for challenging anatomical areas.

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An Interprofessional Education (IPE) Model

Resnik, Cheryl; Aranda, Maria; Halle, Ashley; Han, Phuu; Reilly, Jo Marie; Segal-Gidan, Freddi; Williams, Brad

USC, Division of Biokinesiology & Physical Therapy; USC, School of Social Work; USC, Division of Occupational Science & Occupational Therapy; USC, Ostrow School of Dentistry; USC, Keck School of Medicine; USC, Keck School of Medicine; USC, School of Pharmacy

PROBLEM STATEMENT

Interprofessional collaborative practice, “when multiple health workers from different professional backgrounds work together with patients to deliver the highest quality of care” is the key to safe, high quality, accessible, patient-centered care.(1) In 2003 the Institute Of Medicine identified the ability to work in interdisciplinary teams as a key competency for all health professions.(2) The Interprofessional Education Collaborative Expert Panel has identified five key challenges to the implementation of healthcare professional education: 1. institutional level challenges, 2. lack of institutional collaborators, 3. practical issues, 4. faculty development issues, and 5. assessment issues.(3) Interested faculty from four different schools representing seven different professions (Dentistry, Medicine, Occupational Therapy, Physician Assistant, Pharmacy, Physical Therapy, Social Work) designed and implemented an interprofessional experience that enabled students in each of these programs to work together in a community setting to address these issues.

METHODS

Students from all seven programs participated in pre- and post- testing to determine attitudes towards interprofessional education using The Readiness for Interprofessional Learning Scale (RIPLS). Student teams and their faculty advisors met with community dwelling elderly people on three occasions across the academic year to perform patient assessments and develop care plans for the elders. Student participants wrote weekly reflections about their experiences. Post-experience focus groups that included both student participants and student controls were conducted where verbatim transcripts of the sessions which were coded by independent reviewers for the development of themes for each individual discipline as well as across disciplines.

RESULTS

The RIPLS survey was not sensitive enough to identify differences between the groups. The qualitative analysis of the focus groups revealed similarities between all the professions in terms of lessons learned. The four most important themes that were revealed were: 1. interprofessional education is necessary for quality patient care, 2. interprofessional care is best learned in clinical settings, 3. adding interprofessional education to the current academic load is overwhelming, and 4. students have limited knowledge about other professions' approach to care delivery, scope of practice, and educational preparation. Student participants universally felt greater confidence in their contribution to comprehensive patient care and newfound knowledge about when and to whom to refer patients under their care to facilitate quality care.

LESSONS LEARNED

This experience replicated the challenges identified by the Interprofessional Education Collaborative Expert Panels findings, however, the faculty leading the experience found satisfactory methods to meet all the challenges. Alternative attitude assessment tools have been identified and instituted in the third year of this experience. This program may be replicated in other institutions to facilitate interprofessional education, communication, and understanding of a patient management model that is being adopted across the country and represents the future of healthcare.

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The Business of Medicine: A New Curriculum for Medical Students

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Keck School of Medicine of USC

PROBLEM STATEMENT

The changing landscape of medicine should stimulate changes in medical education. With the rise of new and complex healthcare policies, financing mechanisms, and technologies, business and management skills are becoming increasingly essential for physicians, yet how to teach these skills and concepts to medical students effectively has remained a challenge. While the focus of medical education has historically focused on the clinical knowledge and skills necessary to become an effective clinician, studies have shown that physicians possessing an understanding of the "business of medicine" have felt better prepared to practice in and navigate the complex healthcare system, increased job satisfaction and earning potential, and better able to deliver quality care to their patients.^{1,2,3} In 2012-2013, a new program entitled "The Business of Medicine" was developed and implemented at the Keck School of Medicine of USC to introduce medical students to the fundamentals of the business side of medicine.

METHODS

The Business of Medicine Program was piloted as a required course for Year II medical students. Modeled upon case-based instruction used in MBA courses, the pilot course offered five 2-hour sessions that incorporated both didactic presentations and interactive case-based discussions around key topics including healthcare costs, financing and policy, physician leadership, legal issues in healthcare delivery, etc. Students were assigned readings from journals and popular press along with a case study drawn from the case database at Harvard Business School Publishing prior to attending each session. Each session consisted of a lecture by an expert in the field, a brief overview of the case, discussion of case questions in small groups, and a final case debriefing amongst the whole class. A two-part end-of-course survey was administered to assess learning as well as student feedback on the curriculum, its delivery, and general interest in the field.

RESULTS

The end-of-course survey administered to 180 students revealed the following selected results: the mean score on the learning component which examined knowledge of business concepts and cases was 66% (SD =12%); 68% of the class agreed that having training in these topics would benefit their earning potential; and a third expressed likelihood of exploring this topic further or pursuing an MBA.

LESSONS LEARNED

Results from the pilot suggest a few important lessons. First, students agreed the overall topic was valuable and the general format of the course was effective. However, student performance on the learning component of the survey was lower than expected. Students expressed significant frustration about scheduling near the USMLE Step 1 exam, and, did not feel adequately prepared to discuss cases amongst their small groups without a faculty/instructor to lead them at all times. This suggests the curriculum may have benefitted from more introductory sessions, and, being offered at a different time in their educational career- ideally around a time when major exams are not looming and once they have gained more experience in a professional healthcare setting and are better able to understand and relate to the operating environment and context from which the cases are drawn. When asked what additional topics they would be interested in, students suggested having more on how to run a private practice and reimbursement mechanisms.

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Combining Self-Directed Learning and Simulation in the Preclinical Medical School Curriculum to Teach Second Year Students about Pneumonia

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Temple University School of Medicine

PROBLEM STATEMENT

As defined by the Liaison Committee on Medical Education (LCME), self-directed learning involves students' self-assessment of learning needs; independent identification, analysis, and synthesis of relevant information; and appraisal of the credibility of information sources. As part of our "Doctoring" course, we developed an exercise combining self-directed learning and simulation to further the understanding of pneumonia for 2nd year medical students. As part of our "Doctoring" course, we developed an exercise that combines self-directed learning and simulation to further the understanding of pneumonia for 2nd year medical students. In 2012, the session was well received but was organized in a faculty led question / answer session. For 2013, our was to further engage the students by transitioning away from a faculty facilitated session to a student facilitated session.

METHODS

For this exercise, we developed 6 cases (community acquired pneumonia, tuberculosis, hospital acquired pneumonia, Pneumocystis jirovivi, Legionella and aspiration pneumonia). Each case included history and physical exam findings and a chest x-ray. For each 2 hour session (6 total sessions), the students were arranged into 6 groups of 5 students. Each group was assigned 1 of the above cases and worked together to diagnose the patient and identify the most likely causative agent. The groups were allowed to request additional information (by email); the additional information requested was provided only if it would be available in real time to patient care (additional history or physical exam findings, basic laboratory tests, gram stain of sputum, etc.). Each group was also expected to prepare a powerpoint presentation covering; the case review and supportive data, diagnosis/causative agent and rationale, treatment, disposition and teaching points. During the exercise, 3 of the groups were brought into the simulation center and encountered a simulated patient with shortness of breath, cough and fever; the other 3 groups finalized their presentations. After 15 minutes, the groups switched. For the remainder of the session (1 hour 20 minutes), the groups gave their presentations. The faculty served as consultants and reemphasized key basic science and clinical teaching points at the end of each of the 6 presentations.

RESULTS

All students (n-168) reported that the exercise achieved the learning objectives. The majority (96.5%, n-172) felt the self-directed component was a valuable part of the learning experience and most (90.1%, n-172) noted working together as a team helped them to better understand the material. Most (97.1%, n-171) students reported that the combination of working together as a team to solve the case and the simulation complimented each other. All groups (n-36) developed high quality presentations. Students reported that most (95.9%, n-172) team members participated in a meaningful way and all shared the responsibility for presenting the information to the other groups. Most (94.2%, n-172) of the students reported that the other group presentations were educational and valuable. 77.9% (n-172) reported that they enjoyed the shift away from a faculty-facilitated session to a student-facilitated session.

LESSONS LEARNED

The majority of students felt the exercise was educational and valuable and most noted that working together as a team helped them to better understand the material. For an exercise like this to work well, student instructions need to be clear and concise and proper planning needs to occur to develop appropriate clinical cases. In addition, all student instructions and case material should be provided at least 1 week ahead of time to allow the student groups an opportunity to meet and prepare for the exercise. Resource challenges include simulation center and faculty availability (basic science and clinical faculty) along with providing a consistent and a rapid turnaround for the additional information requested by the groups. Other opportunities for self-directed learning are now being identified in the curriculum.

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Facilitators as Followers: Building Starfish Healthcare Teams

Broadfoot, Kirsten; Basha, El-Shimaa; Fisher, Jennifer

University of Colorado Anschutz Campus

WORKSHOP RATIONALE

When leadership is considered the exclusive responsibility of one team member, effective team function is compromised, jeopardizing patient safety and other clinical outcomes. Optimally, all team members should possess both leadership and followership (Kellerman, 2008) skills, collectively operating as self organizing and essentially 'leaderless' teams. But where do they learn these skills and from whom? Traditional team training practices focus on coaching or teaching leadership skills and neglects the training, performance or role modeling of followership by those facilitating the training. On the Anschutz Medical Campus, all learners are exposed to communication processes undergirding team leadership and followership in the Interprofessional Education and Development curriculum. In particular, during the second phase of this curriculum, Clinical Transformations, teams of interprofessional learners are coached through simulated clinical scenarios by a trained facilitator (Kaner, 2007) charged with encouraging the team to become more like a 'starfish' – self organizing and leaderless (Brafman and Beckstrom, 2006). This form of team radically changes the position of the coach during this experience and requires a different communication, leadership and followership skill set to be modeled to the learners, so that they may, in turn, come to practice in the same way. But 'getting out of the way' as a facilitator, and encouraging a team to self-organize does not often come naturally. What kinds of communication skills and practices are useful to facilitators engaging in such an educational shift?

INTENDED PARTICIPANTS

Any and all faculty and learners interested in team facilitation and management.

LEARNER OBJECTIVES

1. Understand the concepts and practices of leadership and followership as well as the communication processes underpinning starfish teams.
2. Discuss opportunities and challenges in working with teams of learners who have diverse degrees of comfort with leadership, followership and self-organizing.
3. Provide and practice an innovative framework and process for developing coach-facilitators for interprofessional clinical teams.

METHOD/ACTIVITIES

- Interactive discussion on concepts involved in building starfish teams and facilitators in healthcare as well as the accompanying communication skills and processes for role modeling this form of leadership and followership in curriculum delivery.

TAKEHOME TOOL

1. Access to powerpoint slides and resources for workshop
2. Facilitation guide, tools, and worksheets from the workshop

PREPARATION

None

I evaluate residents better than you! Says who?

Johna, Samir

Kaiser Fontana

WORKSHOP RATIONALE

One of the essential tools to evaluate learners is the end of rotation evaluation. Program directors, associate program directors, and faculty members are not necessarily trained how to perform an evaluation that is based on objective data rather than biases that dominate such evaluations. By exposing common raters errors, their causes, and how to overcome them gives the faculty a chance to conduct fair evaluations of their learners. Furthermore, such evaluations when done properly, enhance learners' performance and help the receive timely feedback to improve their performance.

INTENDED PARTICIPANTS

Program directors, associate program directors, and faculty members at all levels of medical education.

LEARNER OBJECTIVES

1. Discuss the purposes and principles of end of rotation evaluation
2. Describe common evaluation methods and their strengths and weaknesses
3. Recognize common rater errors / 4. Discuss methods to minimize rater errors

METHOD/ACTIVITIES

1. Pre-course assessment
2. Short PowerPoint presentations.
3. Brain storming.
4. Matching games.
5. Case study
6. Breifing
7. Course evaluation and commitment to act

TAKEHOME TOOL

A chart with common rater errors, definitions, causes, and cures.

PREPARATION

None

POSTER #: 1

A three-week immersion experience for first year medical students

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TTUHSC – Paul L. Foster School of Medicine, El Paso, TX.

PROBLEM STATEMENT

: The Paul L. Foster School of Medicine (PLFSOM) curriculum provides students with an integrated curriculum. The Society, Community and the Individual Course (SCI) offer a broad overview of health using the ecological model. The course was developed due to the need to expose students to the unique cultural and linguistic environment of the border and to the impact of social, familial, and economic forces on health, illness and health care. This immersion experience is introduced before the scientific principles of medicine course to give students a framework to “hang” scientific knowledge and keep in mind the bigger picture throughout their training as medical students.

METHODS

The Society, Community and the Individual Course (SCI) offers a mandatory 3 week immersion program for first year medical students before the beginning of classes. During this immersion program, students are exposed to a broad overview of human health presented using the ecological model. The course was organized to first introduce students to such concepts as social determinants of health, which looks at health issues at the societal level. Secondly, students are exposed to community health through a Community Assessment activity and classroom discussion on the role of community and culture in healthcare. The Community Assessment activity was designed to teach students to better understand the community and culture they will serve as student-doctors and to foster a desire for learning about the assets and needs of the community. Through this activity, students are also encouraged to participate in service learning opportunities in their community. We have also implemented a required Spanish course in an effort to adapt our instruction to the community of El Paso. Finally, at the interpersonal and individual level, students have interactive sessions with standardized patient in both English and Spanish where they put in practice the concepts of patient-centered medical interviews.

RESULTS

Through trial and errors and a summit meeting with Faculty, medical students and Spanish instructors working together we were able to develop a structured 3 week immersion program addressing important medical knowledge that address key competencies such as Systems-based care without the pressure of a course such as Scientific Principle of Medicine. Through positive student feedback and evaluations, students have demonstrated the success of the 3-week immersion program and are able to appreciate the importance of such topics in medicine. Students' evaluation of the course has greatly improved since the initial inception and continues to get great reviews from students. Student feedback and course evaluations will be presented along with the changed that were implemented in response to the feedback received.

LESSONS LEARNED

: The development of the course was not without its challenges. We will present the structure of SCI and its elements and would like to share the strengths and challenges and to describe how the challenges were addressed to make SCI as useful, practical, and relevant as possible. The program is an integral part of the curriculum and will continue to be improved. Future plans will explore other areas of public health, such as health policy.

REFERENCES

POSTER #: 2

Innovation with Team-Based Learning in Undergraduate MD/MPH Curriculum: Implementation, Evaluation, and Lessons Learned

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PROBLEM STATEMENT

Team-Based Learning (TBL) is a teaching strategy that promotes active learning in three ways: 1. Employing pre-learning and student accountability to the team for pre-session preparation; 2. Focusing on team-building and collaboration; and 3. Shifting focus from delivery to application of concepts through engaged, content-focused discussion and problem-solving.^{1,2} In the MS1 Community Public Health Practicum (CPHP) in the UMMSM MD/MPH program, we transformed our monthly didactic Seminar into a dynamic TBL session.

METHODS

In spring of 2013, our teaching team conducted a needs assessment for the CPHP course. The results of the needs assessment informed the decision to replace Seminar with a monthly, two-hour variation on the classic TBL model. A pilot TBL was run in May, 2013. The pilot TBL evaluation data informed the design and implementation of the first TBL of the 2013-2014 academic year. THE CPHP TBL session is broken down into three phases: Phase-1: pre-session reading, submission of collaborative written assignment; Phase-2: self-assessment quiz, team-based quiz discussion, and facilitator-led quiz discussion; Phase-3: completion of team-based application exercise, presentation of exercise followed by feedback from large-group and facilitators.

RESULTS

At the end of each TBL, students (n=48) complete a hand-written evaluation of the session on two axes: “Describe what went well in today’s TBL session” and “Describe what could be done better for the next TBL session”. Comments from the first TBL evaluation include: “interactive”, “useful and beneficial”, “creative”, “applicable to our future careers”. Corrective feedback included: “the [auditorium] setting was awkward”, “Session was not well-timed”, “[Assign] an activity that requires more participation within the group”. The teaching team reviewed student feedback from the first and second TBL sessions and revised facets of the instructional methods as appropriate. Student comments from the third TBL included: “I think it’s drastically improved since the 1st TBL session”, “Felt like we were all more involved than the last few sessions”. Corrective feedback included, “Repetitive”, “Presentations too long...Use a timekeeper”, “Challenge us more”.

LESSONS LEARNED

The teaching team believes, and the data show, that TBL is a valuable learning and leadership experience for the students. We acknowledge that TBL requires exponentially more collaboration and planning than Seminar, but we believe that implementation will become more efficient through successive waves of evaluation and revision.³ Formative feedback from each TBL helps identify potential improvements for subsequent sessions. Changes we have made based on formative feedback include: use of a classroom with modular seating instead of fixed, tiered rows to foster team collaboration; tightening time management (e.g., setting strict time limits for quiz discussion, presentations, and feedback); providing more detailed instructions and assigning specific roles within the teams for the application exercise; and use of the “backwards design” planning method to ensure alignment with both the session and course objectives.² Future expansion of learner assessment and session evaluation methods will include Commitment-to-Change with longitudinal follow-up, portfolios, and peer evaluations. We hope that these fortified assessment and evaluation data will help us measure not only students’ reaction to TBL, but also their learning and ability to apply concepts to public health in medicine.⁴

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POSTER #: 3

Ultrasound Integration into the Second Year Medical Student Curriculum

Chilstrom, Mikaela; Mailhot, Tom; Seif, Dina; Kang, Tarina; Berona, Kristin; Medero-Colon, Roberto; Elkhunovich, Marsha.

LAC+USC Medical Center; LAC+USC Medical Center; LAC+USC Medical Center; LAC+USC Medical Center; LAC+USC Medical Center; LAC+USC Medical Center; Childrens Hospital Los Angeles

PROBLEM STATEMENT

Clinical ultrasound is being used by an increasing number of medical specialties creating the need for ultrasound exposure and teaching at the medical student level. At Keck School of Medicine (SOM), second year medical students learn the cardiovascular and abdominal exams during two workshops as part of their Introduction to Clinical Medicine (ICM) curriculum. In 2013, Emergency Medicine Ultrasound faculty members taught a 30-minute hands-on ultrasound session to complement the instruction of the physical exam given by the core ICM faculty for both of these workshops. On-line pre-recorded lectures were available to students prior to the sessions to provide background for the sessions.

METHODS

We performed a prospective cross-sectional survey of second year medical students and ICM faculty who had ultrasound integrated into two physical exam workshops for the first time. Online surveys were sent to 192 students and 21 ICM faculty members after the sessions. All questions were multiple-choice, and basic proportions were calculated to summarize responses.

RESULTS

Among the 192 students who participated in the workshops, 78 (41%) and 77 (40%) students responded to the cardiovascular and abdomen surveys respectively. 40% and 83% of students reported watching the on-line lectures prior to the cardiovascular and abdomen workshops, respectively. Almost all (96% and 100%) of students agreed that the ultrasound portion of the workshops improved their understanding of the cardiovascular and abdominal exams, respectively. Of 21 ICM faculty members, 9 (43%) responded to survey; 71% and 66% of faculty members agreed that the ultrasound portion of the workshops improved their students' understanding of the cardiovascular and abdomen physical exam respectively. 95% of students and 22% of faculty thought the amount of ultrasound in the SOM curriculum should be increased. 33% of faculty reported not having enough time to teach the physical exam with the addition of ultrasound; 56% disagreed with the statement that ultrasound distracted from the student learning of the physical exam.

LESSONS LEARNED

Most medical students and faculty members reported ultrasound integration into physical exam instruction enhanced learning. Most faculty members did not think that ultrasound distracted from the learning the physical exam; however, there were concerns about sufficient time to teach both ultrasound and the physical exam. Online educational materials can be helpful preparation for hands-on sessions when students know how to access them.

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POSTER #: 4**A comprehensive colposcopy curriculum to improve resident colposcopic learning**

Dancz, Christina; Ozel, Begum; Nelken, Rebecca; Israel, Jennifer; Macdonald, Heather; Felix, Juan

*Department of Obstetrics and Gynecology, University of Southern California; / Department of Pathology, University of Southern California***PROBLEM STATEMENT**

Colposcopy is a pattern recognition skill that is recognized to improve with the number of procedures performed. It has been suggested that the recent push towards primary care provision of colposcopy has impaired the colposcopic volume referred to Ob/Gyn residency programs and may be limiting our ability to train future colposcopists effectively (1). The purpose of this project was to develop a comprehensive colposcopic curriculum to optimize resident ability to appropriately manage, document and detect cervical abnormalities in patients referred for abnormal cervical screening tests.

METHODS

A comprehensive colposcopy curriculum was implemented for 1st and 2nd year residents starting in July of 2012. The curriculum included: a directed reading list, biannual grand rounds lectures, bimonthly histopathology correlation conference, posted guidelines on recommended terminology (2), and a standardized form for documentation of findings to be reviewed with the attending supervising the colposcopy. Colposcopic findings and biopsy results are reviewed individually with each resident by an attending; discrepancies and plan for followup are discussed. / / Medical records of women referred for colposcopy between July 2010 and August 2013 were reviewed. Colposcopies done before and after implementation of the curriculum were compared with respect to: indication for procedure, standard terminology, documentation of relevant findings, # of biopsies performed, performance of indicated additional procedures and correlation between clinical impression and final biopsy result. /

RESULTS

A total of 294 charts were reviewed. 50 cases after implementation of the curriculum and 24 controls before implementation were identified. There was no difference between groups in terms of the distribution of cytology results ($p=0.39$), or the percent that were post menopausal ($p=0.59$). 100% of the procedures were indicated, and concomitant testing was performed when appropriate (100% pre intervention vs. 97.8% post intervention, $p=1.0$). / / Documentation of colposcopies performed after intervention were more likely to document informed consent (100% vs. 83.3%, $p=0.01$), details of acetowhite changes (80.0% vs. 41.7%, $p<0.01$), and to describe presence/absence of punctuations (60.0% vs. 33.3%, $p=0.04$). Documentation was no different for describing whether the examination was adequate (96% post vs. 91.7% pre, $p=0.59$), presence of mosaicism (50% post vs. 45.8% pre, $p=0.8$) or abnormal vessels (40% post vs. 54.2% pre, $p=0.32$). / / In terms of overall clinical impression (benign, low grade or high grade), the post intervention group trended towards being more accurate (51% accurate, 27.1% one grade discrepant and 4.1% two grades discrepant) vs. pre intervention (29.2% accurate, 41.6% one grade discrepant and 12.5% two grades discrepant) ($p=0.061$). / / The detection rate for dysplasia was higher after intervention compared to before; before intervention (66% benign, 16.6% low grade, 16.6% high grade) vs. after intervention (40.8% benign, 26.5% low grade, 32.6% high grade) ($p=0.04$). The distribution of abnormal cervical cytology was not different between groups; before (16.6% ASCUS, 12.5% LSIL, 45.8% HSIL and 20.6% AGC) vs. after intervention (10.2% ASCUS, 30.6% LSIL, 46.9% HSIL and 12.2% AGC) ($p=0.39$). Furthermore, the mean number of biopsies performed was similar between groups (2.8 +/- 1.1 pre vs. 2.9 +/- 1.3 post, $p=0.58$). / / Overall, correct management of cytologic abnormalities with colposcopy, endocervical curettage and endometrial biopsy (when indicated) was high before and after the intervention. The curriculum improved documentation of informed consent and description of abnormalities using standard terminology. The curriculum further increased the ability of residents to correctly identify and biopsy cervical pathology, when present. /

LESSONS LEARNED

1) A comprehensive colposcopy curriculum improved documentation of informed consent and descriptions of abnormalities using standard terminology, / / 2) A comprehensive colposcopy curriculum improved the ability of residents to correctly identify cervical pathology when present. /

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POSTER #: 5

Health Partners: Effects of Longitudinal Patient-Student Partnerships on Chronic Illness Management Among Community Clinic Patients and Preclinical Medical Education

J. Dasgupta, P. Martinez, J. Reilly, MD /

KSOM, USC

PROBLEM STATEMENT

The goal of this project was to assess whether a longitudinal partnership between diabetic community clinic patients and pre-clinical medical students could improve management and understanding of diabetes among patients, and change medical students' attitudes towards compliance issues among underserved patients and their confidence as patient educators. /

METHODS

11 pre-clinical Keck medical students were paired for 8 months with 11 diabetic patients recruited from two CHCs. All participants were consented, and students were trained. Each pair was asked to interact 6 times, with a maximum of one telephone contact. Effects were evaluated with pre-and post-experience surveys using the Likert scale and objective health outcomes from chart review. Due to variation in the number and type of interactions, each partnership was considered a case study, and percent changes in outcomes were assessed.

RESULTS

Data analysis indicates that patients found greater subjective benefit from the experience than students, with patient understanding and management of diabetes showing improvement in 7 of 11 cases, while results from student surveys were more mixed. Of note, 3 students felt decreased confidence as patient educators, likely due to difficulties encountered during the experience. This effect may be lessened with more training and discussion of expectations and results throughout the process. Objective health outcomes from patients show no clear pattern, though more patients were successful in decreasing HbA1c (6 patients) than BMI (3 patients). Only 1 patient decreased both. A possible confounding factor in these results is the variability in interactions completed between partners, which ranged from 1-8 interactions in variable proportions of in-person and phone interactions.

LESSONS LEARNED

Major obstacles in this process were student recruitment and patient retention. 2 of the 11 retained partnerships completed the required 6 or more interactions, with one completing 6 in-person interactions. Language and finding common times and places to meet were commonly cited barriers. Aspects of the project have been incorporated into Keck's Longitudinal Clinical Community Medicine Experience for 24 MS1/MS2 students. Each student has partnered with a chronically ill patient with whom they will regularly follow up. We believe this model will promote more uniformity in interactions based on curriculum requirements, and increased compliance as self-selection of partners will allow for verification of communication/schedule compatibility in advance. Furthermore, integration into an optional curriculum will provide additional motivation to students. Survey data will be gathered to assess student confidence as patient educators.

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POSTER #: 6

Student-Led Initiatives to Address Mistreatment and Recognize Excellence

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David Geffen School of Medicine at UCLA

PROBLEM STATEMENT

Medical education innovations have traditionally been the domain of faculty members, with little or no student involvement.¹ In 2008, the David Geffen School of Medicine at UCLA brought faculty together to create a new social media policy; while student leaders were involved in the discussion, there was no formal mechanism to include students in the decision-making process. To address this issue, the Medical Student Council, based on the input and suggestion of a student leader, created the Professionalism Council, a mixed group including faculty, staff, and students, to provide recommendations for the improvement of the overall practice and teaching of professionalism within the medical school. Following the publication of a study demonstrating that 60% of third and fourth year medical students at UCLA reported some type of mistreatment while on their clinical rotations, the Professionalism Council sought to find a way to change this culture at our institution.²

METHODS

Two third year medical student representatives on the Professionalism Council sought to create an anonymous student feedback survey aimed at changing the culture of professionalism at the DGSOM following results from the student mistreatment study. This survey has been made available to all third and fourth year students, and it is completely separate from the course evaluation surveys completed at the end of each clinical elective. The survey allows for reporting of both first and second hand accounts. The survey allows students to identify individuals (interns, residents, fellows, or attendings) who have had a both a positive or negative impact. They can also report medical student mistreatment or abuse, whether verbal, physical, sexual, or power abuse, which occurred while on a clinical rotation. Finally, the survey allows students to include their contact information if they would like to be contacted by the Dean of Student Affairs. The goal of the survey is to trend patterns of both excellence and shortcomings. Once a pattern of problematic behavior or mistreatment has been identified, it is the hope of the Professionalism Council to be able to take action on this in order to improve the overall culture of professionalism at our institution.

RESULTS

The survey has been available to students since December 2012. Initial survey responses have demonstrated that student mistreatment continues to be problematic for third and fourth year students in their clinical rotations. Trends are becoming apparent in terms of repeat offenders and problematic services. Interestingly, students are reporting not only incidents of mistreatment, but also the names of people who have demonstrated excellence in terms of teaching and attitude.

LESSONS LEARNED

Students continue to be concerned about the truly anonymous nature of their reporting, which could be contributing to lower response numbers. In order to increase reporting, the Professionalism Council has decided to include the survey in the third year systems-based healthcare longitudinal course so that more incidents can be reported. In light of the positive responses, the Medical Student Council is in the process of developing an award for residents who have demonstrated excellence.

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POSTER #: 7

Course and Faculty Assessment Program (CFA)

Granat, Bonnie; Portanova, Ronald

New York Institute of Technology College of Osteopathic Medicine

PROBLEM STATEMENT

NYIT COM wanted to examine the curriculum as experienced by students. Before instituting the CFA, our institution like so many others, queried students with surveys on the last day of each course. We asked students to agree or disagree with the typical statements posed by surveys in higher education, but the institution really didn't learn much from the mean of likert responses to such questions. Participation in the surveys was limited and data gathered was general. We felt that the results of this form of assessment didn't generate information we could use to improve the learning environment and opportunities for students (Stone, & Qualters, 1998). We felt that the students hadn't truly been given a voice.

METHODS

The Course Faculty Assessment program is based on an assessment process used at the Mayo Clinic (Viggiano & El-Swi, 2008) founded on the principles of Continuous Quality Improvement (Deming, 2000). Students (20-23) are randomly selected to assess each system/course (300 class size/13 courses) during the pre-clinical years. These students form a CFA team. Students are asked to attend all classroom sessions and labs and to record anything noteworthy. / / The assembled group receives orientation and training to prepare professional, actionable feedback. All group members meet weekly to discuss their findings. After the course concludes each group develops two brief (1-2 pages) reports: A Course Report & Faculty Report. If the group feels that an issue requires action, a proposal of action must be generated and included in the report. We have made a promise to students that we will evaluate and follow-up on all of their comments/recommendations. All student course comments, recommendations, and the school responses are made public within the NYIT COM community. / /

RESULTS

The CFA program is now in its fifth year and it has most certainly exceeded our expectations. More than 80% of all student recommendations have been put in place. Students speak highly of the process and of the assessment experience. During our last site visit, our accreditors wrote more about the CFA than any other aspect of the school's assessment processes.

LESSONS LEARNED

One of the many benefits of the Course Faculty Assessment is that it has created a culture of assessment at our school. Students have an opportunity to reflect on their learning processes, to participate in collaborative problem solving, and to author professional feedback. Students know that their comments can initiate improvements, not only for future classes, but for their own class. In addition, the CFA offers students an opportunity for leadership. / / Faculty members benefit from the CFA program as well. Specifically, students provide detailed, useful feedback which can be used to inform pedagogy and curricular design, dialog between students and faculty/administration has increased. In addition, insights from the CFA provide a unique perspective of curriculum as experienced by students. Members of CFA a group tell us exactly what worked and what didn't and their suggestions for improvement are by and large, excellent. Further, this detailed feedback helps to initiate and support administrative decisions. /

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POSTER #: 8**Efforts to Promote Resident Engagement in Quality Improvement and Patient Safety Initiatives**

Korin, Tatum; Vasan, Rukmani

LAC+USC / KSOM

PROBLEM STATEMENT

The Institute of Medicine report the sixth leading cause of death in the U.S., with as many as 98,000 annual deaths, are due to medical errors costing an estimated \$29 billion (IOM, 1999). Hospital-acquired Infections, which are preventable, account for almost 100,000 deaths a year (CDC). Further, Medicare patients experiencing an adverse safety event, have a one in five chance of dying from that event (HealthGrades, 2008). Adverse events and medical errors are preventable (Kohn, 2000) – only if those providing the care recognize the causes and implement solutions. Not surprising, residents/fellows are the frontline of care delivery, and thus should be educated about and encouraged to participate in quality improvement (QI) and patient safety (PS) efforts to improve delivery of care. / / Started in 2013, the Accreditation Council for Graduate Medical Education (ACGME) launched Clinical Learning Environment Review (CLER) site visits which include the identification (and impact) of residents/fellows integration in QI and PS initiatives. These formative visits are designed to provide information to institutions about resident's level of awareness and engagement with national and local patient safety goals. /

METHODS

In response to the ACGME CLER initiative, the Office of Graduate Medical Education (GME) at LAC+USC initiated a campaign in the summer of 2013 to align themselves with national patient safety goals, institutional goals, and CLER objectives. / Significant efforts were made to promote resident awareness, encourage participation and support scholarly activities. /

RESULTS

The following pilot program was initiated to educate, engage and support residents in quality improvement and patient safety (2013): / 1) January: Resident Clinical Council (RCC) established / 2) February: National & Institutional QI and patient safety goals identified / a. Infection prevention (i.e., Sepsis, CLABSI) / b. Handovers/transition of care / c. VTE prevention / d. Adverse events and near miss reporting / e. Clinic flow / 3) March – July: Faculty reps present topics (see above 2a-e) to the RCC / 4) August: Meeting location change to promote attendance and convenience / 5) September: Local QI/PS scholarship opportunities introduced to residents and faculty / 6) August – October: One-on-one CLER readiness interviews conducted with core departmental program directors (N=23) / 7) October: Interview data presented at Graduate Medical Education Committee (GMEC) meeting for discussion and review / 8) August – December: Commencement of resident-led project presentations/cessation of faculty-led presentations (list to be provided at conference) / / The above efforts confirmed the following information about residents: / 1) Overall awareness / a. >100 Patient safety/Quality improvement projects (Core program director interviews) / b. October GMEC presentation of interview data / c. Preliminary CLER site visitor verbal feedback, December 2013 / 2) Increased participation / a. 80% (ACGME annual survey, Feb – May 2013) versus 83% (Core program director interviews, Aug - Oct 2013) / b. Attendance at RCC monthly meetings N~4 (Jan – July 2013) to N~13 (Aug – Dec 2013) / 3) Sustained scholarly output / a. > 10 poster presentations and publications / b. Resident presentations at RCC (Aug – Dec 2013) /

LESSONS LEARNED

Data collection is ongoing but current findings suggest this pilot program is generating awareness, participation and scholarship. More research needs to be done to determine the overall impact of this pilot program.

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POSTER #: 9

An Anthropologic Approach for the Improvement of Inpatient Clinical Teaching

Korin, Tatum; Rossetti, Gina, Hsieh, Eric; Sarte, Patrick; Politano, Seth

USC Keck School of Medicine

PROBLEM STATEMENT

The medical education literature is ripe with studies that tout the benefits of providing useful feedback to learners. In fact, “feedback often serves as an impetus for performance improvement, and therefore a fundamental component of teaching and learning” (Menachery, et al 2006). However, many of these studies focus solely on physicians-in-training as the recipients of the feedback. Faculty attendings, who do a vast majority of the teaching on patient rounds, are infrequently observed and provided with immediate, high-quality feedback on their performance. This study examines socio-cultural observation as an evaluation method and the role of high-quality feedback in improving the teaching skills of faculty attendings during patient rounds.

METHODS

Twenty-four attending faculty on inpatient service in the department of medicine were observed during patient rounds with their team. Teams consisted of an attending, several residents and medical students, and a nurse care coordinator. Each team was observed by two faculty members to increase inter-rater reliability. A 13-question instrument used to rate the attending’s teaching behaviors from the common rotation evaluation. A subset of questions was pulled from five broad categories evaluating skills specific to teaching. Team dynamic diagrams were drawn for each case illustrating the interactions between the attending and other team members. Each team was observed for 1-2 hours, which included at least one existing patient case and one new patient admission. The observation included at least one bedside rounding experience. Face-to-face feedback from both observers was provided to the attending within 24 hours of the observation. Specific feedback included areas of strength and suggestions for improvement, including strategies for facilitating small groups discussions and teaching at the bedside. All attendings will be observed again to determine if the specific feedback had any effect on teaching behaviors. End-of-rotation evaluations (by residents) will also be compared to evaluations prior to the observations and feedback.

RESULTS

Observations revealed attendings struggled in three areas: Teaching at the bedside (38%), encouraging further learning (31%) and providing constructive criticism (31%). Team dynamic diagrams showed the majority (>50%) attendings dominating discussions and not engaging the entire team in case deliberations. Preliminary comments about the observation and feedback given from attending have been positive.

LESSONS LEARNED

Data is still being collected. However, initial findings show that although time and personnel intensive, observation and immediate, specific feedback yield useful information for performance improvement.

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POSTER #: 10**HOW CAN A COMMUNITY-BASED CURRICULUM MEET AND SUPPORT PHYSICIAN ASSISTANT ACCREDITATION (ARC-PA) REQUIREMENTS?**

Maldonado, Maria; Lie, Desiree; Schultz, Ann; Lohenry, Kevin

*USC Keck School of Medicine, Department of Family Medicine, Division of Physician Assistant Studies, same for all authors***PROBLEM STATEMENT**

To describe impact of a new community-service based curriculum (CSBC) on student knowledge/attitudes; and how it meets ARC-PA requirements of: "...provide medical care to diverse populations", "...exchange information and collaborate with patients, families and health professionals", and "...understand concepts of public health.

METHODS

A required longitudinal course (4 hours/week) was offered over 16 weeks in the 6th semester of a 33-month Physician Assistant (PA) training program (n=50 students), immediately prior to graduation. Students had already received didactic and clinical instruction and were scheduled to take final examinations within 4 weeks of CSBC completion. CSBC objectives were: community immersion for students to educate patients, the community, peers and to advocate for improved health outcomes. Curriculum was delivered via lectures, small group facilitation, fieldwork, team collaboration, reflective writing and project presentation. Students formed teams of 4 to 5 to complete a community-based project. Four 'tracks' were offered: advocacy, community, patient education, and peer education. At least one student from each team participated in each track. / Individual student performance in the course was rated on a 1 to 5 point Likert scale by faculty and peer and by scores on 2 quizzes. Team performance was rated by quality of the project out of 100 points and final oral presentation by faculty using a 1 to 4 point Likert scale. Mixed-methods course evaluation was conducted and consisted of 1) course-end 5-point Likert scale questions, 2) theme analysis of student narratives from weeks 2, 9, course-end 3) theme analysis of faculty qualitative assessments of the course. /

RESULTS

All students met the passing score for quizzes and passed individual faculty ratings. Team scores for the group projects were at expected. Ratings were uniform without a normal distribution; individual and team performance demonstrated achievement of competencies expected without much variation in performance. Faculty performance, as evaluated by students, was based on overall effectiveness of teaching and ranged from 3.00-3.85, on a 1 to 5 point Likert scale. Course evaluation scores are as follows: Course-end Likert responses (96% response) ranged from 2.02-4.36 for "expectations clearly communicated", "course organization", "achieved course objectives", "teaching materials", "group projects", "value of tracks learning experience", "field work beneficial", "group projects", "quizzes fair", "logistics/scheduling". The lowest scoring areas were "expectations clearly communicated" and "course organization". Based on narrative student responses, the top four learning themes were (68% response): team work, identifying and meeting challenges, learning organization, and site receptiveness. The top 4 faculty themes about teaching efficacy (100% response) identified in faculty written narrative feedback to course directors were: advanced skills, barriers, organization, and practice relevance.

LESSONS LEARNED

This is a single institution study; more community input is desirable, and long-term outcomes awaited. We conclude that a 16-week CSBC increases knowledge of advocacy skills, community engagement, skills for team-based-care, meets ARC-PA standards, and should be introduced into earlier community-based experiences. Successful delivery requires robust organization and execution. Lessons learned from this first delivery will be applied to future implementation. We propose that multiple perspectives, ongoing student and faculty feedback, and reflection-in-action contribute to the success of this course.

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POSTER #: 11

A Structured Handover OSCE Given to Third Year Medical Students on an Inpatient Medicine Rotation

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Keck School of Medicine of USC

PROBLEM STATEMENT

Over the last decade, the ACGME has recommended and ultimately required residency programs to monitor their patient handoffs. This requirement was developed in the setting of restrictions on duty hours of resident physicians, which increased the need for competency in handoff communication. Most articles written on the subject of handovers pertain to resident experience and education. Providing medical students with a foundation of knowledge of effective patient handoffs is a logical step to achieve lasting change across residency programs. Therefore, the aim of this study was to develop and evaluate the efficacy of a curriculum designed to teach handoff communication to third and fourth year medical students at Keck School of Medicine at USC in Los Angeles, CA.

METHODS

Two Internal Medicine clerkship rotations, each with 24 students, were administered an end of rotation Patient Handover OSCE. Students watched an eight minute video of a patient encounter, wrote a brief handover and then delivered their handover to an internal medicine resident. The interaction was videotaped and reviewed by the Senior Internal Medicine faculty at USC. Using the SIGNOUT? Mnemonic, the videotaped encounter and the written handover sheet were evaluated for presence and quality of content. Each SIGNOUT? Mnemonic component (S – Sick or DNR, I – Identifying data, G – General hospital course, N- New events, O – Overall health status, U – Upcoming possibilities, T – Tasks to complete, ? – Any questions) was scored based on presence or absence in both the verbal and written format. Students were then given a 1-hour workshop on proper delivery of handovers. Three Senior Internal Medicine Faculty Members (Residency Program Director, Associate Residency Director, Clerkship Director) delivered the workshop, which included review of proper written, and verbal handovers and common handover errors. Students were shown examples of actual written handover lists and videos of handovers highlighting typical handover mistakes. Faculty and students then discussed ways to improve the written and verbal handovers seen. After the workshop, students repeated a videotaped handover OSCE and were once again evaluated on their handovers using the same scoring rubric.

RESULTS

Our study demonstrated that there was a statistically significant ($p < 0.0001$) improvement in the quality of the student's written and verbal feedback after the Handover workshop training session. Senior faculty evaluating the videotaped handovers and written handover sheets noticed marked improvement in organization, flow, and inclusion of necessary handover components.

LESSONS LEARNED

Given the importance and increased prevalence of patient handovers, a structured handover curriculum should be implemented early on in medical school training.

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POSTER #: 12

GATHERING THE TROOPS: AN INTERACTIVE WORKSHOP TO ENHANCE RESIDENT AND FACULTY PARTICIPATION IN QUALITY IMPROVEMENT/PATIENT SAFETY PROJECTSSA

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PROBLEM STATEMENT

Residents are required to learn Quality Improvement and Patient Safety (QIPS) during training. The ACGME has placed an increased focus on QIPS training in residency that includes faculty participation. The ACGME Pediatric Program requirements expect residents to “systemically analyze practice using quality improvement methods and implement changes with the goal of practice improvement” and to “advocate for quality patient care and optimal patient care systems.” Programs must show outcomes in the area of resident QIPS projects. QI and PS are two of the six focus areas for CLER. Traditionally our residents have participated in activities to improve QIPS. However, there is a need for more leadership and active involvement by faculty and residents on QIPS projects, and to demonstrate outcomes. /

METHODS

A plan was developed and implemented to educate all residents in QIPS fundamentals. Collaborative meetings between Institutional GME director, pediatric program director and departmental QI director were held to review CLER focus areas and identify program improvement needs in QIPS. The newly implemented three-hour block curriculum allowed time flexibility for a QIPS workshop. A workshop was planned after recruiting one dozen faculty members from various service areas to participate as mentors. / Objectives: / / 1. Enhance resident knowledge of QI and PS. / 2. Promote resident/faculty collaboration on QIPS projects. / 3. Ensure 100% resident participation in QIPS projects. / / Residents completed a pre-test to identify baseline knowledge. The program director delivered a case-based didactic lecture to review the fundamentals of QIPS and the AAP, ACGME and CLER focus areas were highlighted. After a brainstorming session, faculty-resident groups formed based on shared project interest. Worksheets helped guide the teams to complete and document project plans. A post-test was given at the end of the session to measure any change in knowledge. Teams continue to meet regularly to implement improvement projects and conduct PDSA cycles. Progress reports are submitted quarterly to the program directors. All groups will present their QIPS project at the Outcomes portion of the Scholarly Activity Week in June 2014. /

RESULTS

Following this single afternoon session, we attained the goal of 100% participation by residents in QIPS projects. The participation is now five times greater than at the start of this academic year. Differences between pre- and post-tests demonstrated a significant increase in QIPS knowledge, participation in QIPS projects, and overall comfort with development and implementation. Sixteen new QIPS projects were created through this workshop. Active involvement in QIPS projects by both faculty and residents were enhanced. Twelve faculty are now participating in projects, increasing mentorship in our program. The quarterly progress reports have facilitated compliance monitoring.

LESSONS LEARNED

A QIPS teaching session and interactive workshop has significantly increased the knowledge and participation in projects by residents and faculty. The understanding that QIPS is an essential part of residency and that it enhances the patient experience, has increased resident interest in project participation. This structured, interactive faculty-resident workshop model can be adopted by busy academic centers that are struggling to enhance participation in QIPS by both faculty and residents.

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POSTER #: 13

The State of Integration of Inter-Professional Education into PA Programs: A National Survey Study

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Keck School of Medicine of USC

PROBLEM STATEMENT

Research questions: / 1. What is the effectiveness of a faculty development session in local IPE integration during a regional CME-based PA meeting? / a. Do faculty show a knowledge gain as a result of their participation? / b. Do faculty show improvement in skills as a result of their participation? / c. Do faculty feel more confident as a result of their participation? / 2. What is the current state of IPE curriculum integration? / a. What are strategies used? / b. What are the obstacles encountered? / c. What are the levels of institutional support/commitment to IPE? / d. What is the level of faculty readiness to implement IPE? / 3. What are PA program directors' opinions about best strategies to offer faculty IPE development? /

METHODS

Currently, no tool exists for evaluating faculty readiness to integrate IPE in PA education. We propose to construct an appropriate tool to assess self-reported knowledge, skills and leadership readiness to implement IPE among participants of the June 2012 annual Western Consortium meeting at 4 months post-meeting. An immediate post-program online evaluation conducted within 2 weeks of the meeting had already yielded positive self-reported gains in knowledge. The 4-month (intermediate) data will be collected using Qualtrics Labs, Inc. © software⁹. The survey will focus specifically on self-reported pre/post knowledge, skills and attitudes of the participants and will be administered in October 2012. / The results of the 4-month survey will be used to develop a more comprehensive survey to be sent to directors of all 162 PA programs in the nation.

RESULTS

While most respondents were aware of the new accreditation requirements for physician assistant training programs the National survey yielded a poor response rate with significant variability in organizational support, available faculty development and level of faculty knowledge, skills and attitudes to support the required training.

LESSONS LEARNED

While most respondents were aware of the new accreditation requirement for physician assistant training programs the National survey yielded a poor response rate with significant variability in organizational support, available faculty development and level of faculty knowledge, skills and attitudes to support the required training. / Because of the vast regional differences in PA training programs, a national study may not yield results that will lead to viable options for faculty support and training.

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POSTER #: 14

Do Medical Students Admitted through Multiple-Mini-Interview Perform Better in Problem-based Learning?

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David Geffen School of Medicine, UCLA

PROBLEM STATEMENT

This study explores whether students selected via multiple mini-interview (MMI) perform better in problem-based learning (PBL) as assessed in four domains by small-group facilitators.

METHODS

There are 20 PBL groups per class per block, each led by a facilitator who evaluates students on the quality of learning issue write-ups and observed performance and behavior. Performance in four domains was compared between two traditionally-selected classes (class of 2013/2014) and two MMI-selected classes (class of 2015/2016) (total N = 635). Block 1 data from each class was used to minimize the influence of curriculum on PBL performance. The four assessed domains were: Problem Solving; Use of Information; Group Process; and Professionalism, all scored on a 7-point Likert scale. ANOVA was done to compare the four domains between the two groups of classes. The Likert-scale is accompanied by 57 milestone descriptors of student behavior. We hypothesized that an effect of MMI on student performance would be most noticeable in Group Process. Chi-square tests were used to compare group differences on five selected milestones that were most likely to be affected by MMI: Displays initiative in group discussions; Frequently and openly discusses reasoning process; Knows and shows limits in own knowledge; Frequently takes on a leadership role; Knowledgeable about own and others' learning issues. Significant p-value is <.05, 1-sided.

RESULTS

ANOVA revealed significant differences for all domains: Problem Solving-F(1,629)=16.14, p<.0001, η^2 =.025; Use of Information-F(1,629)=15.43, p<.0001, η^2 =.024 ; Group Process-F(1,626)=11.44, p<.001, η^2 =.018; and Professionalism- F(1,626)=14.94, p<.0001, η^2 =.023. / The MMI group was significantly stronger in milestone #2, Traditional (26%) vs. MMI (39%), $\chi^2(1, 635) = 10.97, p = .001$; milestone #3, Traditional (33%) vs. MMI (54%), $\chi^2(1, 635) = 27.12, p<.0001$; and milestone #4, Traditional (20%) vs. MMI (26%), $\chi^2(1, 635) = 3.17, p = .046$. /

LESSONS LEARNED

Students selected via MMI had higher scores in all domains. Furthermore, these students seem to be more expressive and eager to take on leadership roles. Our results indicate that MMI may select cognitively stronger and socially expressive students who perform better in PBL as assessed by facilitators.

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POSTER #: 15

An Inter-professional- Intercollegiate Partnership – Teaming up to Care for Military Service Members and their Families

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PROBLEM STATEMENT

More than 2 million U.S. troops have been deployed for Operation Enduring Freedom, Operation Iraqi Freedom and Operation New Dawn. It is estimated that 50,000 service members have sustained injuries ranging from catastrophic physical injury to “invisible wounds.” Posttraumatic Stress Disorder and Traumatic Brain Injury affect roughly 1 in 6 service members and subsequently impact military families. The number of active military, reservists, and veterans, as well as military family members struggling with burdens that affect their physical, mental and psycho-social-spiritual integrity is well into the millions. Evidence demonstrates that an inter-professional, multidisciplinary model of holistic, patient/family centered-care is critical to achieve optimal outcomes. / / The workshop goal is twofold: 1) to educate and develop interdisciplinary teams of students in identifying and meeting the needs of service members and military families through the lens of each discipline, and 2) to provide a unique opportunity for students to collaborate and construct an interdisciplinary plan of care to meet the unique health care needs of the military and veterans in their communities. A key strategy in translating knowledge to practice is to provide opportunities that enable collaborative sharing and problem solving together as an interdisciplinary team. /

METHODS

To achieve the workshop goals, an 8-hour workshop is planned. Ten volunteer students from each discipline of USC Schools of Medicine, Social Work, the Division of the USC School of Medicine Physician Assistant, and Nursing students from Mount St. Mary's College will be recruited. All students will be at the equivalent level of training. Pre-workshop reading assignments will be sent to the students. / The first 3 hours of the workshop will be didactic sessions on military culture, including the physical, mental, and psychosocial problems that can be the results of deployment and/or the military culture itself. Students will then assemble into 10 teams, with 1 student from each discipline per team. Each team will interview standardized military patients in a realistic outpatient visit scenario for 40 minutes, and will then collaborate and formulate a treatment plan for the military service member and their family through the theoretical framework of each respective discipline. / Pre and post outcomes will be measured with regression analyses used to control for differences. Pretest measures will assess: 1) knowledge of military health issues; 2) attitudes toward working on teams; 3) perceptions of working together with other health professionals; and 4) intentions to collaborate in future practice. Post-test assessment is identical to the pre-test with the addition of reflective questions that prompt students to examine their own interactions. /

RESULTS

The data will be analyzed after completion of the workshop and will be reported in the presentation or poster.

LESSONS LEARNED

The collaborative knowledge and skills of the student interprofessional teams can improve services to clients, which in turn has the potential for better patient outcomes. This collaborative project is an exemplar of how partnering academic institutions extract strengths and resources to best meet the needs of their students and the community they serve. / /

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POSTER #: 16

Medical Students as Teachers: Undergraduate Anatomy

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Keck School of Medicine

PROBLEM STATEMENT

Teaching anatomy at the undergraduate level is difficult. While medical school anatomy programs have a well-established infrastructure with multiple professors, dozens of cadavers, and small dissection groups, undergraduate anatomy courses typically have markedly fewer resources. Moreover, there is a large-scale interest in such courses, resulting in large class sizes. This creates special challenges for faculty and students with a curriculum that has traditionally relied on an abundance of resources and instructor time. / / Using plastic models and other teaching aids to substitute for actual experience with human cadavers is one option but it is not preferred by students.[1] Breaking classes up into small groups in the undergraduate setting is difficult and inefficient without multiple instructors, placing unreasonable demands on the professor. Because it has been demonstrated that teaching contact time is essential to its role as a preparatory class, a new model of undergraduate anatomy teaching must address these issues.[2] /

METHODS

We created a new course, "Clinical Perspectives on Human Anatomy." This course was created as an introduction to anatomy for students planning a career in medicine or other health care professions. As the class grew in size from its first to second offering, selected junior medical students still enrolled in their foundational curriculum were recruited to serve as teaching assistants on a voluntary basis. The significant literature support for medical students as teachers and peer teaching in anatomy informed our model.[3][4] Their role is intended to be multi-faceted, and includes assisting in small group teaching during weekly cadaver labs and scheduled reviews, as well as assisting faculty in their mentorship of pre-medical students. / / Equally important is the course's role in developing medical students' skills as teachers. All of the medical student teaching assistants will receive regular instruction in teaching methods by the lead course instructor. This is intended to better prepare the medical students for the teaching roles they may assume as residents.[5] / /

RESULTS

The first course offering in fall 2013 had 9 undergraduate student enrollees. This increased the following year to 30 students. Based on course evaluations and feedback from the first course, it is an excellent preparatory class for medical school anatomy. It was also noted to be extremely helpful for undergraduate students engaged in early clinical experiences. / / The medical student teaching assistant model was tested late in the fall 2013 semester. Although informal feedback was excellent, formal, anonymous course evaluations from both the undergraduate and medical students were not obtained. Formal pre and post course evaluations will be obtained for the spring 2014 course. /

LESSONS LEARNED

Larger class sizes can quickly saturate the capacity of a single professor to provide the level of hands on experience necessary to teach anatomy effectively. Our model promises to enhance the effectiveness of teaching anatomy to undergraduate students and extend the reach of professors without adding additional faculty. It also simultaneously provides unique opportunities for medical students to hone their own anatomy skills and to prepare for their future roles as resident teachers. This is especially important given the increasingly important role residents now play in medical education [6].

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POSTER #: 17

Residents as teachers: a new course model for pre-medical education

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Keck School of Medicine

PROBLEM STATEMENT

Traditional medical education focuses on teaching cognitive skills related to the basic sciences. However, an outstanding physician must understand controversial topics in medicine, develop opinions regarding how the system can be improved, and hone the skills required to express those opinions effectively. Pre-medical students lack access to mentors in clinical professions, and residents lack opportunities to develop teaching skills. A new model of undergraduate course using residents as guest-instructors may accomplish multiple educational goals: 1) introduce undergraduate students to controversial topics and practical skills related to medicine; 2) teach resident physicians to teach; 3) provide mentoring opportunities among students, residents, and attending physicians.

METHODS

As part of a minor in medical sciences, we created a new undergraduate course, "Preparation to the clinical experience", which taught students about controversial topics in medicine, encouraging them to develop writing and public speaking skills. Emergency medicine residents and attending physicians designed class material, drawing primarily from recent literature and current events. Instructors and students had ample opportunities to establish mentor-mentee relationships. / / The structure of the course enabled several different strata of education: / 1. "Teach the teacher" (attending physicians – residents):[1] Residents designed course objectives and content, seeking feedback from senior faculty regarding how to optimize content and its delivery. / 2. Class sessions (senior faculty and residents – students): Residents delivered content to students during interactive multimedia class sessions, with senior faculty interjecting to emphasize important points. / 3. Small group discussions (residents – students): Residents facilitated small group discussions that encouraged the assimilation and manipulation of topics introduced during class. / 4. Mentorship (attending physicians – residents; residents – students; and attending physicians – students): Constant interaction among all levels of course participants led to the establishment of trans-strata mentorship and professional connections. / / While students took a traditional final examination, they were also assessed on the presentation of their own opinions via oral presentations and written position papers. A key objective was to help students discover their "voices" in thinking, writing, and speaking. /

RESULTS

Through routinely administered course evaluations, students remarked that they enjoyed the interactivity of the class, its emphasis on the expression of their own opinions, and the opportunity to network with and learn from practicing physicians. While students valued the opportunity to work with multiple instructors, they did report anxiety regarding what would be emphasized in examinations and other assessments, given that course was non-traditional in its structure. Students requested biweekly quizzes so that they could receive structured feedback on how effectively they were learning core content.

LESSONS LEARNED

Within the typical curriculum offered by colleges and universities, pre-medical students master cognitive skills related to the basic sciences. They may not have enough opportunities to develop and voice their own opinions about the controversial issues facing physicians today. A course emphasizing these issues and skills may help produce a new generation of multifaceted clinician-instructor-policy makers.[2, 3] / / "Preparation to the clinical experience" may be a viable model for the presentation of traditionally underemphasized facets of pre-medical education, though pre-medical students may appreciate routine forms of assessment, such as biweekly quizzes, in addition to graded papers and presentations. / / Following this preliminary qualitative reflection, further research will be required to elucidate how effective the multiple strata course education are. /

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POSTER #: 18

Employee Driven Innovations: Simple technology adaptations in career advising for millennial medical students

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PROBLEM STATEMENT

Millennial expectations versus faculty pedagogical preferences pose distinct challenges to the advising process[1]. Millennials expect personalized advice, given in real-time and access to “one-stop-shopping” advising resources, whereas faculty tend to favor face-to-face interactions and a structured advising curriculum [3]. Technology is increasingly touted as powerful solution to bridge this gap, but understanding its effective use and application is not always intuitive [2]. / / In 2010, the DGSOM at UCLA piloted a faculty based career advising program for medical students. Though largely successful, students reported dissatisfaction in two areas: engagement with advisors and accessibility of information at an individualized pace. Staff in the Student Affairs Division responded by adapting simple web-based platforms, thereby providing-real-time advising . The resulting innovations increased student satisfaction immediately and remain highly rated. This poster examines drivers and challenges behind technologically simple solutions and introduces employee driven innovations (EDI) as a valued method for improving learning outcomes. Programs resulting from creative adaptations of technology highlight student affairs practitioners’ innovation potential. / /

METHODS

In 2010, DGSOM student affairs staff began experimenting with technology platforms that were familiar to staff, millennials, and faculty including Survey Monkey, Google Docs, email, and Doodle. Major outputs from the EDI process within the DGSOM career advising program include an online personal narrative exercise, strategically timed series of informational emails, self-reflection queries aimed at disseminating critical and timely information to peers and mentors. / / Response and completion rates of all surveys (2010-13) have been quantified and a qualitative analysis of QI questions embedded in the surveys conducted as well. / / / /

RESULTS

What began as trial-and-error attempts resulted in technological products, processes, and services that significantly improved the student advising experience with minimal additional effort from faculty. These technological programs are best understood as innovations under the conceptual framework of Employee Driven Innovation (EDI) theory, which asserts that the best advances and products are developed from those within the daily trenches of the problems. EDI theory believes that those with the most exposure to the problematic situation have the best solutions. / / /

LESSONS LEARNED

1. Knowledge of EDI theory as mechanism to engage staff and encourage creative solutions / 2. Understanding of basic framework used to measure successful EDI outcomes / 3. Expanded ability to encourage creative solutions to address student concerns within parameters of academic institutions, which may have little to no resources or budget, allotted /

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POSTER #: 19

Revisoning Clinical Simulation Centers as Learner Centered Clinical Performance Homebases

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IDEA

Using the CAPE's electronic management system, we will propose a prototype Learner Centered Clinical Performance Homebase governed by decreased, but controlled privacy (i.e. not open access) and confidentiality measures to encourage 'feed forward' communication mechanisms across the longitudinal curriculum and learner's development life span.

RATIONALE

Clinical simulation centers, such as the Center for Advancing Professional Excellence (CAPE) on the Anschutz Medical Campus in Aurora, Colorado are often considered 'data goldmines' due to their use for educational and assessment activities across a learner's development trajectory. Capable of recording and storing observational and assessment data from many different time points and events for all students, for distressed or disruptive learners. Considered one of multiple, diverse, silo-ed programs, it is not uncommon for learner difficulties to be miscommunicated or delayed in their communication, making it difficult to coordinate interventions for learners and practitioners in distress, or even to prevent such situations. / / This proposed innovation addresses issues of performance data consolidation, isolated support efforts and mis-communication, and longitudinal programs for professional learner development and wellbeing through the construction of a Learner Centered Clinical Performance Homebase, or electronic record/portfolio of learner assessment and observational data over the course of a learner's developmental life. /

METHOD

To enable feed forward processes but also protect privacy and confidentiality as appropriate, levels of access to the data, will be carefully defined and restricted, with full visibility provided to the learner. All educational and assessment data gathered in the center will be consolidated and contextualized in the electronic portfolio. Faculty responsible for the learner at different points in time will have access to and be able to comment on, the appropriate clinical performance data for learners. Spaces for learner goal setting and self-reflection will be provided and coaches or mentors will also be able to assist in these efforts preventatively, rather than curatively. The electronic learner centered clinical performance homebase, will be administered and managed by the clinical simulation center as an independent and objective evaluation body, to coordinate a 'circle of care' for learners on their path to clinical practice. Creating such a 'circle' will hopefully result in increased accountability and visibility for learner-related issues and concerns across faculty and advisors, enabling more sustainable and appropriate resource support. /

EVALUATION PLAN

A prototype of the Learner Centered Clinical Performance Homebase will be rolled out for usability to a small sample of pilot learners and faculty, based on consents granted. These users will be interviewed about the usability and design of the prototype as well as its features and asked to evaluate potential challenges and opportunities for its use and misuse. Pilot learners will be asked to complete goal setting and self-reflection activities and their clinical performance data will be monitored for any changes. These results will be compared to a control group of learners not involved with the prototype. / / With further refinement and rollout, it is anticipated that we could measure the cost and resource effectiveness of such an electronic portfolio. /

POTENTIAL IMPACT TO THE FIELD

Consolidating learner performance into a single point in a clinical simulation center could assist greatly with competency evaluations over time, the identification of learner difficulties and earlier resolution. Could have wide ranging applicability for continuing medical education also.

REFERENCES

POSTER #: 20

Keeping it Real: Student-Faculty Designed Telemedicine Simulation Experiences for Rural Settings

Broadfoot, Kirsten; Basha, El-Shimaa; Fisher, Jennifer

University of Colorado Anschutz Medical Campus

IDEA

Rural track medical students and faculty, will use student experiences to create simulated telemedicine clinical encounters for fourth year medical learners.

RATIONALE

Nearly 65% (42 counties²) of Colorado counties are identified as rural according to the Colorado Rural Development Council. Telemedicine can increase equity, improve health care and decrease disparities in these counties by providing access to services unavailable in their locale. / / Telemedicine provides a cost-effective, high quality and efficient solution to increase health care access in rural communities, but also adds technological and interpersonal challenges to the clinical encounter, requiring different combinations of communication skills to achieve a relationship centered interaction.¹ Communication skills education in medical school typically uses multi-modal simulated experiences to educate and assess students. However, it is rare for medical students to practice the clinical and communication skills in telemedicine encounters before they graduate medical school. Can these simulation methodologies provide an opportunity to expand communication skills education in telemedicine encounters and enable students to practice communication skills in diverse, resource constrained populations and clinical environments? How can educators best design authentic simulation based educational environments for telemedicine encounters? / / This student-faculty collaborative experience enhances the authenticity of the simulation experience while also engaging in professional development around the use of simulation in communication skill education and assessment. Rural track students and faculty will be exposed to simulation design, case writing, and standardized patient training for telemedicine encounters, developing skills needed for meeting future credentialing requirements and ACGME residency competencies. They will also participate in the identification of future communication skill development needs for effective telemedicine encounters.

METHOD

Rural track faculty and medical students will collaborate with communication skills faculty and simulation educators, to collaboratively design curriculum and learning goals for a telemedicine simulation exercise. Rural health faculty will provide curricular and clinical knowledge and outcomes to be addressed, and will narrow potential scenarios to reflect the most 3 common types of telemedicine encounters experienced. Simulated scenarios and storyboards will be collaboratively constructed and tested with a small group of fourth year medical learners before being finalized. Standardized patients will be trained to enact patient experiences and assess the learners. The simulated experience will then be rolled out to fourth year medical students.

EVALUATION PLAN

During the simulated telemedicine encounters, learners will be evaluated by standardized patients using the communication skills assessment rubric focused on relationship centered care used in preclinical and clinical years. This tool assesses learners' communication skills in seven domains: agenda setting, gathering information, sharing information, negotiating a mutual plan on action, sustaining structure and relationship, as well as closing and forward planning. A group debrief with all faculty, patients, and student participants will be held about the experience to identify opportunities and challenges to further development, as well as to identify possibilities for a wider curricular rollout in other curricular venues. A student survey will be administered to participants after they have completed the simulation experience to address program effectiveness and delivery.

POTENTIAL IMPACT TO THE FIELD

This innovation will expand the realm of communication skills training for the field and diverse populations

REFERENCES

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² <http://www.ruralcolorado.org>

POSTER #: 21

Fostering Education and Leadership Opportunities for Voluntary Faculty in Community Hospital Sites

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Keck School of Medicine of USC

IDEA

Provide an opportunity and funding for Voluntary Faculty Site Coordinators to participate in facilitating a “best practice” workshop with the clerkship leadership at the Council on Medical Student Education in Pediatrics (COMSEP) Annual Conference

RATIONALE

As sites expanded into the community and somewhat “distant” sites, the “community” teaching model evolved and required novel strategies in three primary areas: 1) ensuring equity of clinical experience (LCME - ED-2), 2) voluntary faculty orientation and development, and 3) mentoring site coordinators by identifying “Best Practices” and formal pedagogy in the format of a Pediatric Core Clerkship Leadership Retreat. Incentivizing and motivating voluntary faculty continues to surface as a significant challenge as identified by the site coordinators. The innovation is to collaborate with our community partners and present a workshop at the Annual Meeting and Conference of Council on Medical Student Education in Pediatrics in which the site directors would also attend and facilitate the workshop. / We feel that this process would assist in mentoring and fostering leadership as well as formal academic education. / /

METHOD

/ One way to promote the leadership roles of the site directors is to incorporate them into academic learning opportunities and acknowledge their contributions. The Annual COMSEP Meeting and Conference offers pediatric clerkship leadership the chance to present innovative programs through workshop offerings. Our proposal will allow us to share our “lessons learned” and assist other clerkships with practical and creative approaches to meet the challenges of expanding to distant sites. The overall workshop objectives reflect the same objectives as our leadership retreat 1) Ascertain and assess equity among site – LCME, 2) Provide faculty mentoring 3) Explicitly acknowledge the value and strengths of voluntary faculty teaching contributions. / /

EVALUATION PLAN

Through the lens of Mezirow’s Transformative Learning model, a quantitative and qualitative survey will be utilized to assess the site directors evaluation of the process as well as their perceptions of whether this process convey a message of appreciation and acknowledgment for the many contributions they make as voluntary faculty and as a site coordinator. It is our hope and intention that by actively and explicitly incorporating them into a national / conference and partial funding provisions would be perceived as an act of good faith and message of the value they add to the quality of the clerkship. / /

POTENTIAL IMPACT TO THE FIELD

As the need to acquire quality pediatric clinic sites continues to support increased enrollment, the clerkship leadership must develop, implement and evaluate novel methods to foster the development of faculty and demonstrate the value of their contribution to undergraduate medical education.

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POSTER #: 22

The Kid Next Door- Raising Awareness of Civilian Providers to the needs of Military Children - A Tactical Approach

Bruning, Madeleine D.

Keck School of Medicine of USC

IDEA

Best Practices in Teaching Military and Veteran's Health Care / Purpose: / The conflicts in Afghanistan and Iraq have been largely supported by the National Guard and Reserves. It is estimated that California has 157,419 military children with 11,100 residing in Los Angeles County, yet these children are unidentified in their communities. Approximately 85% of military families in California do not live on installations, but in civilian neighborhoods. The first step in meeting the health care needs of military children is to raise awareness of community pediatricians, pediatric faculty and future providers. /

RATIONALE

Military children have traditionally lived on bases where the culture is known and understood. While military base clinics are attuned to the needs, stressors and strengths of military children, civilian clinics are unaware that a child is military connected because the question is not asked. LAC + USC Medical Center is one of the largest maternal-child teaching units in the United States with over 50,000 primary pediatric visits per year and a primary site for nursing, medical and social work students. Meeting the needs of military children begins with raising awareness through targeted education of academic faculty and students who provide health care within the County system.

METHOD

Strategy and implementation: / A key in transforming care is to raise awareness through education. The proposal targeted faculty and students in both academic /clinical settings with a two phased approach: 1) educate inter-professional groups of pediatric faculty and students through existing educational venues e.g., Pediatric Grand Rounds, resident conferences and student "brown bag" discussion 2) design an inter-collegiate, inter-professional training workshop for students to promote collaboration in caring for veteran families.

EVALUATION PLAN

Pre and post evaluations will measure acquisition and retention of knowledge and self identified changes in confidence and attitudes in caring for military families.

POTENTIAL IMPACT TO THE FIELD

Implications for Educators:Using existing educational venues expedites the dissemination of knowledge among health care providers and students, but does not replace the need to create formal curricula that addresses veteran health care needs and is integrated throughout each specialty in health care provider programs.

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POSTER #: 23

Teaching Health Policy: Developing a Portable E-Learning Tool for Medical Student Education

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George Washington University (all except Dr. Dark), Baylor College of Medicine (Dr. Dark)

IDEA

This project proposal calls for the development of an online curriculum that provides undergraduate medical students with the aforementioned core domains of American health policy.

RATIONALE

In the wake of major American health care reform by way of the Affordable Care Act (ACA) of 2010, it is imperative that medical / education for the next generation of American physicians include formal study of health policy. In a survey of / medical schools, only 30% have a department or institute of health policy within the university, and often lack experts who can / adequately teach health policy courses. Despite the fact that medical schools continue to expand curricula in traditional / health sciences, medical students and residents consistently report a desire for more formal education in health policy.

METHOD

Develop an online, self-directed, case-based curriculum of 6 E-learning modules for undergraduate medical students, designed to teach the fundamentals of American health policy.

EVALUATION PLAN

The effectiveness of this curriculum, as compared with traditional, in-person instruction, will be assessed by evaluating outcome measures based on pre and post session tests, as well as a culminating final test 3-months following completion of the curriculum to assess retention. Additionally, we will evaluate medical students' satisfaction with the online course. A subset of the George Washington University (GWU) medical students in the health policy track will participate in the study and complete the curriculum.

POTENTIAL IMPACT TO THE FIELD

If effective, this course has the potential to satisfy the need for standardization of health policy education, and will provide a convenient and efficient means by which to do so.

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POSTER #: 24

Reflection Curriculum for Emergency Medicine Residents

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IDEA

The primary goal of the REFLECT curriculum is to introduce emergency medicine residents to the basic theory and skills of critical reflection and metacognition in order to prepare them to make decisions and articulate their thinking in complex clinical situations, accurately self-assess and continue their professional development upon completion of residency

RATIONALE

Reflection is recognized in medical education for its benefits in developing professional expertise. Teaching reflective skills has been found to enhance critical reasoning and professional habits of learners. In recent years accreditation bodies both nationally and internationally have including reflection at all levels of medical education. The unique cognitive challenges of Emergency Medicine (EM) make skills of metacognition especially relevant

METHOD

The REFLECT curriculum (Reflection in EM For Lifelong-learning, Empathy, and Critical Thinking), as a stand alone curriculum for EM residents that will run over the course of 1-training year. The primary learners are PGY1-3. Learners first received two introduction didactic sessions: The first, reviewed theory and concepts of a reflective practice for EM. In the second session, learners were introduced to a literature based model of writing a written reflection; In this model, the learner reports on an experience, seeks feedback, and develops an informed plan for future practice. Over the course of the year, learners will submit one critical reflection per each block they are in the ED.

EVALUATION PLAN

Feedback is given on each reflection by using a validated reflective ability-scoring rubric. A comparison will be made over the course of the year, with the first reflection, prior to feedback serving as the control.

POTENTIAL IMPACT TO THE FIELD

Through implemented and evaluating this curriculum, we hope to gain a better understanding of teaching and assessing skills of reflection to EM residents.

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POSTER #: 25

Preliminary Data and Reflections on a Partnership with Student Interest Groups to Teach Military Health and Culture

Christos Theophanous, Mariya Kalashnikova, Claire Sadler, Madeleine Bruning, Ed.D., RN, CPNP

Keck School of Medicine

IDEA

The Keck Organization of Student Representatives is partnering with specialty student interest groups (SIGs) to organize a series of sessions examining military health through the lenses of different healthcare disciplines. Our goal is to educate medical students about the unique healthcare needs of veterans and military connected families, so that they can recognize the profound impact of military service on an individual's health and the importance of asking about military affiliation as part of a comprehensive clinical history.

RATIONALE

There are few standards or guidelines outlining how to teach students about military health. Currently, Keck students have little exposure to military health issues due to the lack of a formal curriculum addressing military culture and unique health care needs. We aim to fill this gap through a series of lunch talks on a diverse range of military health issues. We are partnering with SIGs to publicize individual sessions in order to reach a wide range of students with varying degrees of knowledge and self-identified interest in learning about military health. Currently, there are 26 specialty focused SIGs at Keck, according to a directory published by the Associated Students of the School of Medicine. According to the Keck Student Affairs Office, the overwhelming majority of students list involvement in a SIG on their CV when applying for residency. Bypassing the formal curriculum allows us to introduce a large volume and range of content quickly, with flexibility to adjust sessions according to student feedback.

METHOD

We propose the following sessions: / / November 11, 2013 - Military SIG: Military culture in and outside the “fortress” / / December 4, 2013 – Pediatric SIG: The Military Child / / January 21, 2014 – Psychiatry SIG: Recognizing and Healing Invisible Wounds: Caring for service members and veterans with PTSD / / TBD – Obstetrics and Gynecology SIG: Sexual Assault in the Military / / TBD – Surgery SIG: Polytrauma in the military / / The content for individual sessions will be developed by the expert guest speakers and reviewed by Dr. Madeleine Bruning for relevance and cultural sensitivity. We estimate that 50 first and second year students will attend each talk. /

EVALUATION PLAN

Prior to the first session, we distributed an anonymous questionnaire to the first and second year classes gauging interest in learning about veteran's health issues, comfort with discussing military service during patient encounters, and knowledge of specifics of military culture. After the completion of our proposed curriculum, we will re-administer the questionnaire with an additional question about how many sessions each respondent attended. We will analyze the data to determine whether those students who attended the talks report increased levels of awareness of military health issues and greater comfort assessing veteran health needs.

POTENTIAL IMPACT TO THE FIELD

We hope that our proposed intervention will better prepare students to take care of military connected patients and open the door for the introduction of more formal curriculum focused on veteran and military health at Keck.

REFERENCES

POSTER #: 26

The use of cognitive task analysis in the development of new simulation models in medicine

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University of Minnesota

IDEA

We developed a cognitive task analysis tool in a table form, which could replace the cognitive task analysis interview process.

RATIONALE

Evidence of need and importance / Simulation models often aim at teaching complex tasks. Complex tasks require the expert to incorporate many cognitive processes and decision-making steps to successfully complete the task (1). In order to teach complex tasks to a novice with simulation models, learning environments must be structured in a way that provides opportunities to document the actions of a novice learner and provide feedback that guides the novice towards the achievement of the learning objective. In order to develop such learning experiences in the simulation environment the designer of the simulation model needs to be aware of all thought processes, conscious and unconscious, that lead to a successful completion of the task (2). One of the techniques, which allows for the deconstruction of complex tasks into a thorough explanation of the cognitive processes and decision-making steps is cognitive task analysis (CTA) (1, 3). One of the problems with this approach is that it is often labor intensive and time consuming and involves many hours of structured interviews of experts. /

METHOD

Description of project / We designed an approach to the development of new simulation models, which incorporates CTA tool based on a systematic series of written questions instead of the interviews. The CTA tool is a table that asks experts to answer all the relevant questions to allow for analysis of conscious and unconscious cognitive processes of a specific complex task. / Our tool consists of the following items: / 1. Ask experts to define tasks in terms of phase of the task, condition before and after specific phase/step, key decisions, required cues to make a good decision and their description, planning ahead, importance of the phase/step, difficulty of the phase/step, risks, complications, devices required. / 2. Ask experts to list cognitive, technical and team skills required for successful completion of the task. / 3. Ask experts to define relevant metrics. / 4. Ask experts to comment on tips and tricks for the complex task. /

EVALUATION PLAN

Questions or Desired outcomes / We would like to document that the use of a CTA tool can replace time-consuming interviews. We consider this important due to the high value of expert time. The experts will complete the CTA tool. The provided information will then be shared with designers. Based on the CTA tool the designers will develop a flowchart of the process as they understand it based on provided information. Expert and designers together will then evaluate whether the flowchart addresses the desired outcomes and could provide the basis for the development of new educational simulation system which would achieve the desired results. / / Development progress / We have so far developed the CTA tool, which we have used in the development of two simulation models. The experts were able to easily complete the table and provided information needed by the designers to develop new models. /

POTENTIAL IMPACT TO THE FIELD

What is needed? 1. Would you be willing to use the tool and provide feedback? 2. Would you be willing to collaborate in the future in the design of new simulation models to test the utility of the CTA tool?

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POSTER #: 27**Web-Based Evaluation of Surgical Skills Using High Fidelity Surgical Simulation**

Hyuma Leland, M.D. [1]; Michael Minneti, B.S., R.R.T. [2]; Maura Sullivan, Ph.D.[2]; Warren Garner, M.D. [1]; Mark Urata, M.D., D.D.S. [1]; Joseph Carey, M.D. [1]

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IDEA

In this study we use an internet “web” based educational software (Moodle.com, Moodle Pty Ltd., Perth, Australia) to upload videos of novice surgeons performing procedures that can be reviewed, graded, and feedback personally addressed to the learner by surgical experts. Additionally, the Moodle platform allows the novice surgeon to watch his/her own video, giving opportunity for self-analysis as well as understanding of the expert surgeon’s feedback. / / This trial will attempt to prove that expert-feedback and self-critique using a web-based telesurgical video platform increases the efficiency of procedural learning beyond the standard educational curriculum currently in practice.

RATIONALE

Acquisition of the skill set to become a surgeon requires practice in the same manner that one acquires the skill to become an athlete, musician, or pilot. Knowledge of the equipment and instruments, in addition to experience with procedures, are the very foundation by which one becomes a competent surgeon. Decreases in U.S. surgical resident clinical training hours have resulted in the need for supplementation of resident education with surgical simulation [1]. Simulation has been shown to improve a resident’s procedure related confidence, performance, and speed [2]. Current evidence demonstrates the utility of simulators in advancing specific surgical skills and techniques. Also important in surgical simulation is the role of expert feedback. Educational researchers and theorists dating back to the late 1800’s have identified expert feedback as an important factor in learning that allows students to advance according to their level of skill and understanding, direct future learning, and advance to expertise. In application, surgical simulation with expert feedback has been shown to decrease procedural errors in novice learners [3]. Though real-time feedback has been used effectively in telesurgical instruction, the role of web-based telesurgical teaching has not yet been studied. Additionally, expert telesurgical instruction may provide additional feedback that surpasses current self-learning and automated simulators.

METHOD

In this study, we will investigate the impact of web-based assessment of surgical skills using a high fidelity cadaveric simulation model. Medical students and surgical residents are video recorded performing a simple surgical procedure involving skin incision, placement of four deep-dermal sutures, and closing the skin with a running subcuticular stitch. De-identified videos are uploaded to an educational website that allows expert surgeons to view, evaluate, score, and provide and deliver feedback to novice surgeons in a time and cost-efficient manner. Novice surgeons are also able to self-critique their own videos. Total project cost is calculated to determine economic feasibility.

EVALUATION PLAN

In order to determine if web-based education improves procedural learning, the validated Objective Structured Assessment of Technical Skill (OSATS) is used as an objective measure of surgical skill. Secondary outcomes include duration of the operation, personal skill assessment, and trainee confidence. Finally, a measure of educational efficiency is calculated such that: / Efficiency = (Performance-Effort) / $\sqrt{2}$ / to determine if performance improvements are justified based on the time and cost of web-based education. /

POTENTIAL IMPACT TO THE FIELD

In an era of restricted clinical learning opportunity, web-based instruction enables expert physicians the opportunity to provide time and cost efficient evaluation and education in a realistic simulation environment to the nearly 30,000 residents in procedure based training programs in the US.

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POSTER #: 28

Using nature to enhance empathy of medical students

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IDEA

Proposal Title: Using nature to enhance clinical reflection skills / / Idea: After participating in a field trip and group reflection, medical students should be able to discuss a clinical encounter from the perspective of a patient. /

RATIONALE

Appreciating the patient's perspective helps with rapport building and communication during a clinical encounter. An objective of the Healthy People 2020 Program aims to increase the number of individuals who report that health care professionals possess satisfactory communication skills. Currently, only 62% of people say that health care providers show respect for what they have to say. It has been shown that empathy, or the capacity to recognize emotions being experienced by another person, not only facilitates patient-provider communication but may also improve disease outcomes. Health care disparities describe the unequal burden of illness experienced by specific populations. Unconscious biases about members of these groups can influence the clinical decision-making process and contribute to disparities in health. While many medical students begin their education with high levels of clinical empathy, a significant decrease has been seen during medical school and residency training.

METHOD

Third-year medical students (n=32, four per rotation) at the University of Nevada School of Medicine, Las Vegas campus will participate. Each group visits the Las Vegas Springs Preserve on the first day of their six-week family medicine clerkship. Each student is provided with two questions to answer, requiring personal reflection on their interactions with patients and introspection about their medical training. This activity requires the students to capture images of scenes of nature or works of art as a form of photo essay. The small group of students shares individual observations and discusses reactions to each other's photo essay. This educational experience has been modified from a museum-based model reported recently in the literature. During the discussion, the learners should be able to 1) demonstrate understanding of a patient's experience in a healthcare environment and 2) recall the impact that medical education has had on them personally and how that may influence their ability to empathize and communicate with patients. On the final day of the rotation the images are shown to the students via PowerPoint presentation to take them back to that experience. They will be asked at that point to reflect in writing on its impact on their patient care during the clerkship.

EVALUATION PLAN

The project evaluation will incorporate the following: 1) accountability – tracking full participation of the students in the field trip, photo essays, and end of clerkship reflections; 2) reaction – the students will assess the experience numerically as part of the end of rotation evaluation; 3) learning/behavior – on the final day after reviewing their first day photo essays learners will be asked to describe in writing the impact of the experience on their patient care; these essays will be reviewed for themes, which will be reported.

POTENTIAL IMPACT TO THE FIELD

Through this project, learners in any field can enhance their appreciation of the patient's perspective and their own role in communicating with patients.

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POSTER #: 29

Teaching Transitions of Care in a Medical Student Pediatric Clerkship: A Novel Curriculum for Integrating and Better Evaluating Three Core Competencies- Systems-based Practice, Practice-based Learning and Improvement and Interpersonal and Communication Sk

Molas-Torreblanca, Kira; Bynum, Francine; Schragger, Sheree

CHLA; USC

IDEA

The Council on Medical Student Education in Pediatrics (COMSEP) core competencies include standards related to therapeutics; specifically, third year medical students must be proficient in knowledge of medications, be able to describe ways medication errors are systematically prevented, must develop skills to negotiate a therapeutic plan with patients to maximize adherence and must be able to assess the patient's understanding of the plan. / / Transitions of care is a "hot topic" in healthcare currently, and incorporating this into the medical student clerkship provides a wonderful opportunity to introduce this subject to students, allow them to become proficient in therapeutics relating to the discharge process, and attendings can utilize this as a better way to evaluate them in the three competencies: systems-based practice, practice-based learning and improvement and interpersonal and communication skills.

RATIONALE

Research shows poor transitions of care lead to hospital readmission, medication errors, and patient dissatisfaction¹. However, there is a paucity of literature showing similar curricula for students in the pediatric setting.

METHOD

We aim to develop a pilot study so that we can determine if student's needs are met; by implementing and teaching a curriculum that focuses on transitions of care from hospital to home as this can satisfy the COMSEP core competency in therapeutics. We can assume that the students' confidence and proficiency in therapeutics related to the discharge process will be low initially and hope to show that this will improve at the end of the rotation. / We will create 4 interactive on-line modules on specific topics: overview of TOC, prescription writing, medication errors, and medication reconciliation facilitated by attendings and pharmacists and 1 self-directed online module of clinical cases. Medical students will participate in discharge rounds once weekly and be integral in family-centered rounds when dealing with any patient being discharged. Other educational strategies include utilizing a discharge planning checklist which will include providing medication education.

EVALUATION PLAN

We will employ a needs assessment of our targeted learners via a questionnaire at the beginning of the rotation to identify their attitudes regarding proficiency in therapeutics- calculating drug doses, writing prescriptions and negotiating a therapeutic plan with a family upon discharge to see how prepared students feel in these areas. They will complete a pre- and post-test designed to measure knowledge. To assess for change in behavior, attendings will supervise the students performing discharge education using a standardized assessment tool through direct observation and then provide immediate feedback at the beginning and end of the rotation². / We will evaluate the curriculum by requesting qualitative feedback from the students at the end of the rotation by allowing them to comment on the modules. We will incorporate this feedback into our revisions before finalizing our project.

POTENTIAL IMPACT TO THE FIELD

The global impact of the curriculum on patient satisfaction and other outcomes may be assessed as the project evolves³. Once we have determined there is a need for such a curriculum, we hope to recruit other institutions to participate and further study the effects of the curriculum through randomized control trials.

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POSTER #: 30

Use of Mind Maps in Faculty Development

Julie G. Nyquist, Ph.D.

Keck School of Medicine of USC

IDEA

Use of a visual representation (mind map) to help faculty build understanding of the ACGME Milestones across specialties.

RATIONALE

Metacognitive knowledge is one of the four types of knowledge integrated in the revised Bloom's Taxonomy.¹ The others are factual, conceptual and procedural knowledge. Metacognitive knowledge is defined as "knowledge of cognition in general as well as awareness and knowledge of one's own cognition," and includes knowledge about strategies for learning and thinking, like use of mind maps.^{1,2} Metacognitive strategies include: 1) rehearsal strategies to memorize (eg. use of flash cards); 2) elaboration strategies to deepen learning (eg. mnemonics); and 3) organization strategies to scaffold knowledge (eg., mind maps, concepts maps). The current innovation utilizes mind maps, which have been shown to be effective in health professions education.³ The topic for this "innovation" is the ACGME Core competencies, which provided a common language for all specialties; six competencies with well defined sub-competencies. That common language is less clear with the specialty-specific milestones. Thus we were prompted to try to create a common picture of each of the four competency areas that cross all specialties: Professionalism, Practice-Based Learning and Improvement (PBLI), Systems-Based Practice (SBP), and Interpersonal & Communication Skills (ICS). The goal is for faculty members to utilize these mind maps to see the big picture in comparison to their own specialty, to recognize the tool of mind maps as useful, and possibly be stimulated to make their own mind maps and to teach the strategy to others.

METHOD

In July 2013 the author developed four mind maps (Professionalism, PBLI, SBP and ICS). The author worked to incorporate all major elements from the milestones (final or draft versions) of seven specialties: Anesthesiology, Emergency Medicine, Family Medicine, General Surgery, Internal Medicine, Pediatrics and Psychiatry. These maps were then utilized as a part of regular teaching sessions with faculty members (n=35) as part of helping them learn more about teaching and assessing the ACGME competencies and milestones. Faculty were encourage to examine the milestones in their own specialty, to consider making their own mind map (or concept map) for something they would like to teach, and to learn more about metacognition and metacognitive strategies.

EVALUATION PLAN

In November 2013, faculty members that have participated in the teaching sessions will be invited to take an anonymous survey utilizing survey monkey. The survey will explore 1) reaction: their opinion about how useful the strategy was for them; 2) attitude: how likely are they to utilize these strategies for themselves or their learners; and 3) behavior: what, if anything, have they done as a result of participation and any barriers to utilization of this or other metacognitive strategies. The actual mind maps and results of the survey will be included in the poster or presentation at the IME conference.

POTENTIAL IMPACT TO THE FIELD

If effective, this example usage of a metacognitive tool may stimulate other health professions' faculty to incorporate usage of similar tools into their teaching, and ultimately to teach their learners how to utilize these tools to enhance and deepen learning.

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POSTER #: 31

A Multiple Jump Station to Assess Communication Milestones with Second Year Residents

Julie G. Nyquist, PhD, Stephanie Gates, MEd; Juan Barrio, MD; Cinna Wohlmuth, MD; Ernie Guzman, MD; Luis Samaniego, MD; and Leroy Reese, MD.

IDEA

To assess resident skills in conducting a “difficult conversation with a patient” through addition of a station to an existing multi-station case in a mid-second year MSCE.

RATIONALE

All residency-training programs will need to assess residents in relation to milestones across all six ACGME competencies beginning in July 2014.¹ To accomplish this requires expertise, faculty time and residency resources.² Many individual programs lack expertise. Additionally, these requirements are being mandated at a time of increasing strain on the resources of most training programs, particularly in terms of faculty time. Combining resources to produce hospital-wide multi-station clinical examinations (MSCE) to assess performance in relation to ACGME milestones can provide a partial solution for many small academic health centers.

METHOD

White Memorial Medical Center (four residencies – Family Medicine, Internal Medicine, Pediatrics, Obstetrics/Gynecology) implemented a Mid-Second Year MSCE for all residents in 2009 to assess resident performance in relation to the ACGME sub-competencies. In January 2014 the revised examination has incorporated modified stations and rating forms to better assess common milestones. The change highlighted here is the addition of a fourth station to a three-station case added to better assess the more advanced communication skill of the “difficult conversation with a patient. The four stations are: a) gather a history from a teenager presenting with headaches; b) develop a written assessment and plan utilizing data gathered and additional data provided; c) present the assessment and plan to a “preceptor” and receive feedback; and the new station d) discuss with the patient her prior suicide attempts and current state of mind and incorporate the patient in the plan for initiating a 72-hour psychiatric hold for her safety and to begin treatment for her depression. The same faculty rater will follow the resident through the four stations and provide feedback after the case presentation (station c) and after the difficult patient conversation (station d).

EVALUATION PLAN

A visual representation of how each station links to the relevant communication milestones in the four specialties will be shown. The 2014 results will also be shared for the case (all four stations) for the 24 residents taking the multi-station exam. The multi-year trends in performance across years (up to six years) will be reported for the first three stations in the case. A graphic representation of resident performance in relation to the milestones will be shown. Resident reaction to each station related to the case will also be gathered and reported.

POTENTIAL IMPACT TO THE FIELD

The multiple-station case may assist programs in examining more advanced communication skills that are part of the ICS milestones for most specialties. As all programs incorporate milestones this may provide a model for other residency programs and medical centers nationally.

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POSTER #: 32

Athens to Hollywood: Helping inexperienced faculty produce instructional videos

Pressley, Thomas A. and Fowler, John C.

Depts. of Medical Education and Cell Physiology & Molecular Biophysics, Texas Tech Univ. Health Sciences Center, Lubbock, TX

IDEA

Despite the increasing popularity of instructional videos among students, many of our faculty members have been reluctant to develop their own custom-made videos. Thinking that this hesitancy originates in part from inexperience with the techniques, we developed an approach to the technology that builds on our instructors' existing familiarity with lecture preparation. Using low-cost technology, we prepared a series of videos to use as teaching resources for cardiovascular physiology in our school's Major Organ Systems block. These videos are designed to augment in-class content, often as preparation for a didactic class activity.

RATIONALE

Although there are a variety of medical subjects available on popular video websites, we found that few existing videos were appropriate or relevant to our needs when teaching physiology to first-year medical students. Moreover, we believed that our own institution should be well represented in any collection of videos that we recommended to our class. Accordingly, we undertook a deliberate effort to encourage faculty in the development of their own instructional videos as part of our preparation for teaching physiology in the Spring of 2014.

METHOD

Video Planning Process: To create our video series, our strategy was to leverage the existing experience of faculty members' with traditional lecture so that they would feel comfortable producing their own videos. We first developed a set of visual guidelines for titles and backgrounds featuring the university's logo. We also suggested the use of an aspect ratio of 16:9 for a more contemporary look. Faculty members were then asked to select topics appropriate for delivery by a video of no more than 10 minutes. Ideal topics elaborated on content discussed in classroom activities or applied basic principles to the practice of medicine. For example, we selected a discussion of the arterial wave form as a candidate for a video. / / **Video Production Process:** Faculty members started each video by creating a PowerPoint presentation using the video guidelines and writing a script of the narration comparable to classroom lecture. Scripts were peer reviewed to avoid mistakes or potentially misleading statements. Faculty members recorded the narration digitally using free software such as Audacity. With the recorded narration as a guide for timing, the faculty member then stepped through the PowerPoint presentation while recording the video with screen-capture software such as Microsoft Expression Encoder (free for short videos) or Camtasia Recorder. Finally, video editing software such as CyberLink PowerDirector was used to join the captured presentation and audio into a single video file in mp4 format, which could then be posted to our online classroom environment for streaming to students. /

EVALUATION PLAN

Our assessment strategy consists of comparisons of examination performance on concepts covered in these videos with previous years that covered the same material in traditional lecture. These comparisons will be supplemented with pre- and post-instruction surveys of student opinion on the effectiveness of the videos in improving their studies and interviews with participating faculty.

POTENTIAL IMPACT TO THE FIELD

Strategies that leverage existing faculty experience with lecture into the production of custom-made, online videos will encourage more frequent use of this content delivery format.

REFERENCES

POSTER #: 33

Acting Natural: Training to Increase Realism in Standardized Patients

Richards, Anita; Souder, Denise; May, Win

Keck School of Medicine of University of southern California

IDEA

Can we improve realism in patient portrayals by standardized patients?

RATIONALE

The use of standardized patients (SPs) for teaching and assessing clinical skills is well-established. The realism of an SP is particularly important during assessments of clinical skills, as the quality of the simulation modulates the experience of the learners and impacts their performance. Learners are more likely to demonstrate their “true” clinical and interaction skills, (i.e., the same skills they use in clinic), if the SP is authentic. One challenge for SPs is acting as if they have not been coached. After repeated student/learner encounters, SPs may interact with learners as though they are “expert” patients, not real patients. / / A review of the literature on perceptions of SP realism and how to improve it yielded mixed results. Several studies involving unannounced SPs reported that health care providers were unable to distinguish well-trained SPs from real patients.^{1, 2} On the other hand, in a pilot study comparing student and faculty responses to both real and simulated patients, students reported that when symptoms were too “clear-cut” or shallow, they suspected a simulated patient, and faculty participants were always able to detect the SPs, partially because the SPs offered clear symptoms, direct answers, and cooperated with the interviewer.³ / / The National Board of Medical Examiners created a training package consisting of a video and realism assessment tool to increase the realism of SPs. The video and tool focus on behaviors that are representative of “generic” patient interaction qualities, and are not focused on case-specific behaviors. No studies to date have reported the effectiveness of this training package for improving realism of patient portrayals. /

METHOD

Eight SPs will be trained to perform for an assessment of clinical skills of second year medical students. Four SPs will be randomly chosen to receive an additional training session that includes the verisimilitude training package. Four other randomly chosen SPs will participate in our standard training procedures, but will receive an additional training session so that both groups receive a total of 12 hours of training. Following completion of the assessment, trained raters who are blinded to the training condition of the SPs, will rate the realism of 20 randomly selected video-recorded SP portrayals from the control group and the experimental group (a total of 40 encounters).

EVALUATION PLAN

Data will be collected regarding 1) ratings of realism provided by trained raters; and 2) ratings of realism provided by medical students. Descriptive statistics will be used to establish outcome measures and nonparametric methods will be used to compare the control and experimental groups. We expect that the SPs trained using the verisimilitude training package will be rated as more realistic than SPs trained in our standard manner.

POTENTIAL IMPACT TO THE FIELD

Since the literature on SP training practices is sparse, this study could add to the growing body of literature on SP training practices.

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Time: Saturday, 2:00 – 3:30 pm

Session: FIME Workshop

Small Group Teaching

Cha-Chi Fung, PhD; Denise Souder, EdD

Keck School of Medicine of USC

WORKSHOP RATIONALE

Small group instruction is an essential teaching modality in the context of medical education. When designed and facilitated properly, it is a very powerful tool to enhance the transfer of knowledge learned in a more didactic setting. Participants of this workshop will learn the essential steps in setting the tone for a productive group discussion as well as skills necessary to handle issues that are disruptive to the effectiveness of the group discussion.

INTENDED PARTICIPANTS

Junior and senior faculty who wish to improve their small group teaching skills.

LEARNER OBJECTIVES

Participants should be better able to:

1. Facilitate small group discussions to meet the objectives of the discussion
2. Identify methods to resolve issues that affect the effectiveness of the discussion

METHOD/ACTIVITIES

25 min – Introduction & the fundamentals

30 min – Activity: Design a small group experience

25 min – Group presentation

10 min – Debrief & Wrap-up

TAKE-HOME TOOL

Handout: Activity Planning Template, Strategies for Handling Disruptive Participants

Cards: How to Start & End a session, Facilitator's characteristics, Sample activities, Questions strategies

The Effect of Audience Response Systems on Metacognition in Graduate Students

Brady, Melanie; Rosenthal, Jane; Forest, Christopher

USC Rossier School of Education, USC Keck School of Medicine, USC Keck School of Medicine,

PROBLEM STATEMENT

Research suggests when clickers are utilized with instructional strategies (e.g., questioning and peer instruction), performance outcomes increase and metacognition may be affected. Metacognition, the regulation of cognition and self-knowledge, is an essential component in the learning process in order to become a self-regulated learner. This study attempts to extend results of research conducted with undergraduates¹ (n = 198) to graduate students (n = 54) in a health sciences program. This mixed methods comparative study examines the extent to which high-tech devices (clickers) and low-tech devices (paddles) affect learner metacognition.

METHODS

Data were collected from 52 graduate candidates. Clickers were used during weeks 1-5 of the course and paddles during weeks 8-12. Paddles are handmade signs candidates can hold up to indicate preferred answers (A-E); this method was selected for comparison as an analogous system to clickers in that it provides a quick visual check of student responses. This contrasting system allows participants to be polled once as opposed to raising hands several times for a multiple choice question. Raising hands would take more time to assess accurately. This comparative, mixed-methods study employs several measurement instruments and a pre- and post-test design to compare the two response systems. / Quantitative instrument. In the first week of the course, pre-test data and demographic information were collected. Questions from the metacognitive self-regulation sections of the Motivated Strategies for Learning Questionnaire (MSLQ)² served as the pre-post-test instrument. Two instruments that measure feedback systems and metacognition³ were administered at week 5 (experimental/clickers) and following week 10 (comparison/paddles). Mean quiz scores from the first 5-week session served as the measure of performance outcomes for clicker use, and the mean quiz scores for weeks 6-10, for the comparison treatment (paddles). / Qualitative instrumentation. Participants completed an on-line qualitative survey using Qualtrics®, that consisted of open-ended questions to elicit reflections about response device use. Interviews were conducted using purposeful sampling and the following criteria were used for the selection process: 1) low mean scores indicating little metacognitive influence attributed to clicker/paddle use; 2) mean scores in the median range indicating a moderate-to-neutral influence; and 3) high mean scores indicating a strong influence. / Hypothesis / The response device with the greater influence on metacognition is expected to be associated with higher performance outcomes. We predicted that use of clickers would lead to less social comparison which could enable more productive learning; use of paddles would lead to more social comparisons that could interfere with the learning process. /

RESULTS

Results / Approximately 60% of students indicated feeling very comfortable with clicker use on the initial survey. Preliminary results indicate that clickers influence understanding of course concepts, monitoring comprehension, refocusing attention, and peer comparisons. Understanding questions to ask for difficult concepts was not influenced much by clickers. Clickers' influence on note-taking and paraphrasing of concepts was minimal. Seeing immediate clicker results influenced note-taking techniques such as selecting key concepts to highlight, underline, or circle; and how learners phrased concepts. Quantitative findings indicate that metacognitive self-regulation (e.g., self-monitoring, note-taking, peer comparisons, and conceptual understanding) is influenced significantly more with clickers than with paddles ($t(14) = 3.96, p = .001$), and participants attribute greater influence to clickers on metacognition than to paddles ($t(7) = 4.88, p = .001$). /

LESSONS LEARNED

Preliminary results support research indicating that conceptual understanding may be clarified through use of clicker items and learning strategies; instructors gain insight on selecting appropriate learning strategies based on perceived need. However, preliminary results indicate that when concepts are difficult, learners may struggle to ascertain how to form questions or to determine what questions to ask for clarification. The process of paraphrasing concepts presented during clickers sessions or the need to write concepts in one's own words continues to elude students.

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The use of video before arthroscopic shoulder surgery to enhance patient recall and satisfaction: a randomized-controlled study.

Daniel J. Hoppe MD MEd, Matthew Denkers MD FRCS(C), Fred M. Hoppe PhD, Ivan H. Wong MD FRCS(C); ;

McMasters University, McMasters University, McMasters University, Dahousie University

PROBLEM STATEMENT

Historically, explanation of surgical procedures during the preoperative consultation has consisted of a discussion between the patient and the surgeon. Unfortunately, patient retention and recall of information discussed have been shown to be poor [1-4]. Because of this, there is a growing interest in integrating modalities such as multimedia to improve surgical patient education [5,6]. This study aimed to assess the efficacy of an educational video tutorial on early learning of information specific to patients undergoing shoulder arthroscopy when it was used as an adjunct to the standard preoperative consultation.

METHODS

The study was a surgeon-blinded, randomized controlled trial involving 40 consecutive patients requiring shoulder arthroscopy. After a preoperative consultation with an orthopaedic surgeon, patients were randomized in a 1:1 ratio to either a control group or a treatment group. The treatment group viewed a 10-minute video, which covered the expected preoperative, intraoperative, and postoperative experience. Immediately afterward, both groups completed a questionnaire measuring satisfaction and recall of information received. All patients completed a second questionnaire at the first postoperative visit that assessed overall satisfaction with their experience.

RESULTS

Thirty-four patients were available for follow-up. The video group (N = 15) answered 87% of the knowledge questions correctly, whereas the control group (N = 19) answered only 56% (P = .000). There was stronger agreement in the video group that the preoperative consultation contained an appropriate amount of information (P = .039). Postoperatively, there was agreement that the video was an effective preparation tool for all stages of the surgical experience. However, there was no difference between the groups in satisfaction with their overall surgical experience.

LESSONS LEARNED

Video can show promise as an educational tool to enhance patients' operative experiences and improve their retained knowledge when used as an adjunct to the preoperative consultation. Further research needs to be done to determine whether this will improve patient actions such as compliance with pre-operative and post-operative rehabilitation instructions.

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GME HUB: One-Stop-Shopping for GME Program Administration Resources

Kokas, Maria S; Stromberg, Erica

Henry Ford Health System; Henry Ford Health System

PROBLEM STATEMENT

Every Graduate Medical Education Program is governed by a dense overlay of accreditation requirements; supported by dozens of processes, documents and forms aggregated at various time points. Most new requirements along with annual updates of existing resources include serial changes. The problems of organization and maintenance; as well as easy access to current and new documents, forms, links and institutional policies are often complicated by poorly organized archives which leads to duplication of effort. This combination is further complicated by unintentional use of outdated materials and excessive administrative loads due to unnecessary searching for the most current 'sources of truth.' Through its Learning Systems Programming Henry Ford Health System has successfully resolved most of the stated problems by internally developing the GME HUB, an intranet site designed around the needs and usage of residency administration.

METHODS

Four stakeholder groups were identified (Program Directors, Program Coordinators, GME Administrative Staff, House Officers). Collaborative work of stakeholders was coordinated to build this resource site. The following steps were involved in the HUB's design, development and implementation: / The concept of a three-click-maximum; user-friendly, 'one-stop-shopping' intranet site with minimal maintenance requirements was presented to the HFHS IT department for discussion and direction. / A series of brief needs analysis activities was conducted. User analysis included individual as well as cross-functional focus groups in combination with calls for functionality and content 'wish-lists.' / Based on feedback, naming conventions and site hierarchy were proposed. / After integrating stakeholder input, a partially populated site was built, allowing stakeholders to take it for a 'test drive.' Suggestions were captured and integrated. / End-users and partnering departments were asked to submit documents, forms, links to be included on the HUB. / The HUB was built and a small cross-functional group retested its functionality before final rollout. /

RESULTS

This site is easily managed and updated, user-friendly, low cost, and user-driven. It affords ready access to a required, broad cross-section of current and updated resources. Training for the HUB takes approximately five minutes. / Within one year since its launch, the GME Hub has been accessed by 650 unique visitors and has received over 13,000 total page views. There are approximately 950 individuals associated with medical education which include house officers, program directors, coordinators, administrators as well as Wayne State University medical students. Therefore, the Hub has received an adoption rate of about 70% of all individuals associated with Henry Ford Health System medical education. Additionally, monthly analytic reports indicate that 90% of all traffic coming to the Hub is from returning visitors. Its accommodating and built-in feedback mechanism aids in its widespread use. /

LESSONS LEARNED

Impact of the GME HUB on administrative efficiencies is difficult to measure. However, the positive quality of feedback and levels of enthusiasm point to its value. / For this type of site to be of value, all elements must be functionally evaluated by end-users. For this project, how resources are used was as important as what was included. / The open-ended, structured data gathering methodology, supported efficiently collecting and integrating all information, hence ensuring construction of a fully functional, easy-to-maintain site. / Two key factors have proven critical in maintaining the HUB's integrity: 1) Users have to know their feedback will be acted upon, thus encourages them to act as proofreaders and recommenders of change and improvements. 2) One person has to have turnkey responsibility for managing the HUB. /

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HD Video Teaching Module for Selective Neck Dissection

Mendez, Adrian; Ansari, Kal; Cote, David

Division of Otolaryngology-Head and Neck Surgery, Department of Surgery, University of Alberta, Edmonton, Canada

PROBLEM STATEMENT

Video teaching modules are proven effective tools for enhancing student competencies and technical skills in the operating room. Integration into post-graduate surgical curricula, however, continues to pose a challenge in modern surgical education. To date, video teaching modules for neck dissection have yet to be described in the literature. To purpose of this study was to develop and validate an HD video-based teaching module (HDVM) to help instruct post-graduate otolaryngology trainees in performing neck dissection.

METHODS

This prospective study included 6 intermediate to senior otolaryngology residents. All consented subjects first performed a control selective neck dissection on a previously untreated live patient. Subjects were then exposed to the video teaching module. Following a washout period, a repeat procedure was performed on a previously untreated live patient. Recordings of the both sets of neck dissections were de-identified and reviewed by an independent evaluator and scored using the Observational Clinical Human Reliability Assessment (OCHRA) system. A secondary outcome of the number of times a staff surgeon needed to intervene surgically was also recorded (staff takeover events).

RESULTS

In total 91 surgical errors were made prior to the HDVM and 41 after exposure, representing a 55% decrease in error occurrence. The two groups were found to be significantly different. Similarly, 66 and 24 staff takeover events occurred pre and post HDVM exposure, respectively, representing a statistically significant 64% decrease.

LESSONS LEARNED

HDVM is a useful adjunct to classical surgical training. Residents performed significantly less errors following exposure to the HD-video module. Similarly, significantly less staff takeover events occurred following exposure to the HDVM.

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You Can Take it With You: Computer Tablet Usage by Students in Medical Education and Implications for Learning Outcomes

Nezami, Elahe; Florin, Andrew; Patel, Keval

Keck School of Medicine of the University of Southern California

PROBLEM STATEMENT

Medical education has a longstanding reputation for demanding much from students both in class and in study between classes. The amount of material covered in brief amounts of time requires exceptional note taking and consistent review and study for students to master and retain the information necessary to succeed in the medical school curriculum. New technologies such as electronic tablets allow students to contain access to video recordings of lectures, notes offered by professors, a course schedule of lecture topics, and, with a keyboard attachment, note taking capabilities, all in one device. It is therefore compelling to examine whether student use of tablets during medical education would be helpful to both a student sense of ease of study and learning, and to learning outcomes in the course work itself.

METHODS

In the 2013 fall semester, students in the Master of Science in Global Medicine program were given iPads as part of their learning tools for the courses MEDS 503 and MEDS 504, Core Principles Systems I and II. The aforementioned courses follow the first-year medical school curriculum offered by the Keck School of Medicine. Students were able to access lectures, notes, course schedules, updates from professors, and presentations in both Microsoft Excel and PowerPoint formats. Additionally, the Blackboard application used by USC was also available by iPad for students to gain information online without needing to access a personal computer, ideally allowing more mobility and flexibility in study schedule and location. Students were then asked to complete a survey indicating their satisfaction with the device, as well as evaluating how, how often, and for what tasks they actually used the iPads.

RESULTS

All students used the iPad in their academic work at least once a week, with the majority using their devices every day. Sixty percent of the students gave their experiences using the iPad the highest possible rating, while only one student gave the experience the lowest possible rating. Note taking applications were deemed the most helpful application, while accessing lectures was deemed the most used functionality of the iPad. / But the most important datum gained from the survey was that 94% of students would like to see the iPad integrated into the rest of their Global Medicine course work to optimize learning effectiveness /

LESSONS LEARNED

The student survey results suggest widespread student interest in expanding the use of iPads and their applications across course work of varied topics, given interactions using iPads with first-year medical school core science course work. Students ability to access lecture notes and take notes during lectures with iPad applications are deemed the most useful in the initial pilot study. Further analysis of student performance in the course and attitudes toward iPad use after the completion of the semester is necessary. Likewise, more investigations into the feasibility of iPad or other tablet use in other courses that do not subscribe to the lecture lab format will be involved in attempting to integrate tablets across the master's program curriculum, if appropriate. Interest in exploring the potential for more use of iPads and other tablets in medical school coursework is growing among medical educators, and the results of the initial survey support student satisfaction with iPad use and a desire for expanding its role in learning environments. More comprehensive review of student feedback and comments is necessary to make meaningful changes to the current use of iPads, and will be given consideration in aims for iPad use expansion

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Medical Improv: Creating exceptional physician communicators through improvisational theatre training techniques

Fu, Belinda

University of Washington

WORKSHOP RATIONALE

Current medical education methods fall short of successfully training physicians to high levels of proficiency in professionalism and communication skills, as defined by the ACGME competencies and NAS milestones (Weiss KB, et al., JAMA 2013 Apr 24;309(16)). Medical improv is an emerging field in which the principles and training techniques of improvisational theatre are used to improve communication in the field of medicine. There is substantial overlap between the performance skills required for successful theatrical improvisation and the communication skills required of physicians. The term "medical improv" was introduced into the literature in 2011, in an article describing a well-received course taught to medical students at Northwestern since 2002 (Watson, Acad Med. 2011;86). Review of the literature shows that improvisational theatre techniques have been used effectively at the medical student or graduate student level at only a handful of institutions, including Northwestern, Johns Hopkins, UCSF, Mount Sinai, and the University of Arizona. In this workshop, participants will be introduced to the fundamental principles and skills of medical improv through active participation in improvisational theatre exercises, supplemented by discussion of theory, application, history, and exploration of models of curricular development for implementing medical improv programs in their own institutions. The workshop facilitator is a faculty member at a family medicine residency program and a professional improviser.

INTENDED PARTICIPANTS

Practicing physicians, Physician educators, Fellows, Residents, Medical students

LEARNER OBJECTIVES

After attending this session, participants will be able to:

- 1) Describe core improvisational theatre principles and their relevance to communication skills for family physicians
- 2) Demonstrate improvisation-based communication skills
- 3) Initiate steps to implement a medical improv training program in their home institutions

METHOD/ACTIVITIES

The workshop begins with a discussion exploring communication challenges in medical education, and the fundamentals of medical improv. It then moves into activity-based group training exercises introducing participants to a selection of core medical improv skills. The first exercise teaches participants how to perform the fundamental communication technique of "Yes, and" in order to enhance listening skills and create constructive conversations. The second exercise teaches participants performance techniques for "whole listening," which enhances successful transfer of information, and facilitates creation of supportive teamwork environments. The third exercise explores the concept of status behaviors, and teaches participants how to modulate their non-verbal communication to improve interpersonal interactions. All attendees then reconvene to reflect on their skill acquisition, and discuss how medical improv curricula can be incorporated into medical education at their home institutions.

TAKEHOME TOOL

Participants will take home the ability to perform these communication and cognitive tools:

- 1) "Yes, and"
- 2) "Whole listening"
- 3) Status behavior modulation

PREPARATION

None

Incorporating Ethical Principles into Clinical Training

Rao, Sheela; Simonson, Jean; Zia, Stephanie

Children's Hospital Los Angeles, Keck School of Medicine of USC, University of Nebraska Medical Center

WORKSHOP RATIONALE

While ACGME's 2013 common program requirements stipulate that residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles, assessing one's application of ethics in residency training can seem challenging and indescribable. This learning activity will provide a simple example of how clinical faculty could incorporate discussion and assessment of medical ethics principles into the patient care setting through the process of informed consent.

INTENDED PARTICIPANTS

Faculty of any medical specialty who are interested in incorporating ethical principles into resident education

LEARNER OBJECTIVES

1. Discuss the four key concepts of medical ethics as it pertains to informed consent.
2. Demonstrate application of medical ethics concepts to an informed consent situation/vignette.
3. Describe steps to prepare an instructional session on informed consent
4. Use a tool to assess adherence to medical ethics through the informed consent activity

METHOD/ACTIVITIES

After reviewing concepts of bioethics and informed consent and assent, learners will divide into small groups and explore informed consent vignettes using the assessment worksheet provided.

TAKEHOME TOOL

Take home tools will include the informed consent case vignettes, an assessment worksheet, and a worksheet summarizing ethical principles explored in the workshop.

PREPARATION

Learners need to review their institutional requirements/policies related to informed consent.

How to tell your patient... communication skills teaching made explicit.

Ganster, Anna

Center for Fetal and Neonatal Medicine / USC Division of Neonatal Medicine, Children's Hospital Los Angeles / Keck School of Medicine / University of Southern California

IDEA

Use of a "Communication Champion" with pediatric subspecialty fellows to build parent-physician communication skills.

RATIONALE

Excellent communication with patients and family members is an essential skill for physicians and key to patient-centered care. Parents of neonatal intensive care unit patients emphasize how important it is for physicians to help them to decipher medical information, articulate goals and values, and maintain focus on making collaborative decisions in the best interest of the infant. (1,2) Despite these data, most neonatal-perinatal medicine fellowship programs are not addressing the need for teaching those skills. A large number of neonatal fellows graduate with limited opportunity for participation in family meetings, let alone training in how to approach this basic tool of neonatal care. (3) Workshop formats have been utilized to address this gap. However, the application of acquired skills at the bedside remains unsupervised and opportunities for reinforcement are missing. To address these needs we propose a curriculum that combines formal classroom experience with structured mentoring in the clinical setting.

METHOD

Junior fellows (n=12) at a large neonatal-perinatal medicine fellowship program will participate in a curriculum consisting of a one-day intensive course followed by scheduled family encounters throughout their training under the guidance of a dedicated faculty mentor – the "communication champion." In the intensive course, participants will practice basic approaches to physician-patient communication using large group, small group and individual activities. Practical application will utilize role play and simulated patient encounters. After attending the intensive course, the fellows' transfer of "new" skills to the bedside will be followed throughout the year. The "communication champion" will be responsible for reinforcing concepts and assessment of trainees in the clinical environment. This dedicated faculty mentor will provide direct observation of family encounters using performance checklists and a rubric as guidance for structured and documented feedback and assessment of the learner. After participating, the trainee will be better able to educate family members about common illnesses and issues in neonatal medicine including prognosis and outcomes for their infants, and to review, share and negotiate treatment plans and goals with family members. The project will administered from July 2014 – July 2015.

EVALUATION PLAN

The evaluation will have multiple elements. To assess fellow confidence in utilizing the targeted skills a web-based survey and reflection exercise will be administered before and after completion of the curriculum. Fellows will complete a rating form to assess the quality of the intensive course and of the activities with the champion. Fellows will be required to keep a family encounter log to document applied communication tools and other relevant practice behaviors. The log will also serve as a self-reflection tool for fellows to track their application of learned skills. Fellows will serve as their own control group by undergoing a series of observed actual and simulated parent encounters prior to starting the curriculum and then again during and after completion of this pilot study.

POTENTIAL IMPACT TO THE FIELD

This curriculum could potentially serve as model for teaching and assessing effective communication skills of neonatal fellows, and may be transferable to other specialties.

REFERENCES

- (8) Boss RD, Hutton N, Sulpar LJ, West AM, Donohue PK. Values parents apply to decision-making regarding delivery room resuscitation for high-risk newborns. *Pediatrics*. 2008 Sep;122(3):583-9. PubMed PMID: 18762529.
- (9) Meert KL, Thurston CS, Thomas R. Parental coping and bereavement outcome after the death of a child in the pediatric intensive care unit. *Pediatr Crit Care Med*. 2001 Oct;2(4):324-8. PubMed PMID: 12793935.
- (3) Boss RD, Hutton N, Donohue PK, Arnold RM. Neonatologist training to guide family decision making for critically ill infants. *Arch Pediatr Adolesc Med*. 2009 Sep;163(9):783-8. doi: 10.1001/archpediatrics.2009.155. PubMed PMID: 19736330

Time: Saturday, 3:50 – 5:20 pm

Session: ACIME Workshop

Learners in Difficulty

Jane Rosenthal, EdD; Donna Elliott, MD, EdD

Keck School of Medicine of USC

WORKSHOP RATIONALE

Learners in academic difficulty can consume significant time, resources and energy for faculty, yet often without demonstrating significant improvement. Learner sub-par performance can affect student advancement, team efficiency, and patient safety. Those responsible for learners in difficulty often feel frustrated and conflicted about what to do in these challenging situations. This workshop will include a guided discussion on strategies for overcoming academic performance problems. Diagnostic tools will be presented that will enable the identification of the type of difficulty the learner is experiencing, how to set goals and timelines with the learner, and development of a learning or remediation plan.

INTENDED PARTICIPANTS

Basic and clinical science faculty, clerkship directors, residency directors, administrators, and support staff

LEARNER OBJECTIVES

1. Differentiate potential explanations for poor performance, including gaps in knowledge, behavior and professionalism;
2. Develop strategies to improve performance for learners who demonstrate these gaps
3. Create an effective plan to work with a learner in difficulty.
4. Describe approaches to primary prevention of learners in difficulty in health professions training, including early intervention strategies;
5. Describe the institutional policies and procedures that must be in place to deal with problem learners in difficulty.

METHOD/ACTIVITIES

Short presentations, discussion, hands-on activities

TAKE-HOME TOOL

Handouts

Is "Doing a Good Job for Psychiatry Residents" Good Enough?

Crapanzano, Kathleen Vath, Richard J

LSU Health Sciences Center (KC); Our Lady of the Lake Regional Medical Center (RV)

IDEA

A psychiatric residency includes 6 months of primary care and neurology rotations. No universal outcomes for psychiatry residents have been developed for these rotations, and the Milestones project is not going to address those disciplines as they specifically relate to Psychiatry. As a result, we propose the selection of field-specific goals and outcomes of primary care and neurology rotations, particularly with respect to patient care and medical knowledge competencies.

RATIONALE

The recently finalized psychiatry milestones lay out a developmental trajectory for programs to evaluate resident progress towards becoming competent psychiatrists. One-eighth of psychiatry training is in primary care and neurology, and yet as a field we have not clearly defined what our expectations are for resident development in these areas. Communication with the Psychiatry Milestones project leader as well as an initial literature review show little movement on this issue. By developing psychiatry-specific goals and outcomes for the primary care and neurology months, we can begin to define the foundation a psychiatrist must have as a physician.

METHOD

A systematic literature review will be conducted to determine how other specialties with transitional first years define the goals and outcomes of their residents' time in primary care. To develop field-specific goals and outcomes, we propose the following: following a systematic literature review of other fields, members of the milestone committee for psychiatry will be consulted to identify their work-to-date on milestones related to the primary care and neurology domains. This combined corpus of data will then inform a group of 10 to 15 academic leaders in primary care and neurology, as they develop a comprehensive list of potential learning and practice outcomes for these rotations. Using the Delphi method, this list will then be winnowed for consensus around key outcomes for primary care rotations by a group of 15 to 20 national leaders in psychiatry training.

EVALUATION PLAN

The final result of this project would be a set of outcomes that would represent a consensus from experts in the field. Initial evaluation of the proposed idea would involve soliciting feedback on the developed goals and outcomes from a pool of psychiatry residency directors. Secondly, the goals and outcomes would be piloted locally for feasibility. Refinement of the goals and outcomes, along with the development of corresponding assessment tools, would then lead to broader implementation across multiple participating psychiatry residency programs to explore and establish validity.

POTENTIAL IMPACT TO THE FIELD

Developing outcomes for primary care and neurology rotations that programs could use to evaluate the readiness of their interns to move forward as physicians as well as psychiatrists would have a profound impact. These outcomes could also better inform the design of remedial training for individual residents or inform how rotations could be better structured. Although psychiatry training is different from other specialties in only requiring a 6 month primary care foundation, the proposed approach to the development of these outcomes could inform other disciplines such as dermatology, neurology and physical medicine and rehab.

REFERENCES

ten Cate O, Schelle F: *Competency-based postgraduate training: can we bridge the gap between theory and clinical practice?* *Acad Med.* 2007;82(6):542-547 / /

Carraccio C, Burke AE: *Beyond competencies and milestones: adding meaning through context.* *J Grad Med Educ.* 2010;2(3):419-422.

ten Cate, O: *Nuts and bolts of Entrustable Professional Activities.* *J Grad Med Ed.* 2013; 5(1):157-158.

Ownership of decisions in training of medical residents

Dubov, Alex

Duquesne University Center for Healthcare Ethics

IDEA

The main assumption of this presentation is that increased shiftwork in medicine has resulted in decreased ownership of treatment decisions and poor quality of care. Many essential objectives of residency may be vanishing in the new system of limited hours, including important components of accountability and responsibility. Residents are expected to take increasing ownership of patient care as they progress through their training. The shiftwork mentality and lack of decision ownership disrupts the narrative of a patient's illness, leaving no opportunities for a resident to understand disease processes and make responsible decisions foreseeing some long-term consequences. This presentation reviews some potential components of decision-ownership in treatment context and suggests possible ways in which absence of decision-ownership may lead to deficient decisions about one's care.

RATIONALE

There is a need to consider the impact of the new resident-hours regulations on the variety of aspects of medical education and patient care. Most of the existing literature on this subject has focused on the role of fatigue in resident performance, education and healthcare delivery. Increasingly more stringent rules are implemented in response to concerns that fatigued residents led to substandard patient care. However, there is a lack of scholarship on the concept of decision ownership as it relates to issues in patient care and resident-hours limitation.

METHOD

The presentation will open with a historical overview of changes in resident duty hours, especially focusing on the Accreditation Council for Graduate Medical Education (ACGME) and Institute of Medicine (IOM) recommendations of 2003, 2009, and 2011. Next part will discuss decision-ownership in medical care from the perspective of "diffusion of responsibility" in medical care. Lack of decision-ownership will be linked to the notion of conscientious action in the next part. It is assumed that to act conscientiously means to act out of a responsibility and commitment that develop over time. Therefore a conscientious action cannot be done ad hoc and under conditions of discontinuity. Some researchers go even further, claiming that that short-term thinking is one of the main determinants of unethical behavior. They question quality of choices made within short horizons and stress the importance of future component or "connection to future version of self" as philosopher Parfit calls it. The last part of the presentation will focus on the possibility that residents during their shifts make more ad hoc decisions and have less chance of making sequential choices. The problematic aspect of ad hoc decisions is that their consequences can rarely be fully appreciated. Some other aspects of sequential versus ad hoc decisions will be discussed.

EVALUATION PLAN

In the consecutive empirical study this author will be comparing the decisional effort in two contexts: one that promotes high decision ownership (continuity clinic where the provider is certain that he or she will see the patient again multiple times in the future) and one with low ownership (urgent care or walk in clinic - no chance of seeing the patient again).

POTENTIAL IMPACT TO THE FIELD

The mastering of clinical skill is two-dimensional. It involves horizontal integration or developing competency by linking learning experiences in clinical settings, and vertical integration or linking of scientific knowledge and evidence to clinical problem solving. Ownership of decisions is crucial for both of these aspects, giving residents opportunities for integrating important educational themes and providing them with more possibilities for connections with patients. For many decades, the ability to connect with patients and a sense of deep commitment to them have been used as powerful motivators for learning the art of medicine. Furthermore, decision-ownership benefits health system as a whole leading to less incidents of unnecessary testing and empirical treatment.

REFERENCES

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Fletcher KE, Saint S, Mangrulkar RS. *Balancing continuity of care with residents' limited work hours: defining the implications. Academic Medicine*, 80(1):39-43, 2005.

Cantillon P, Macdermott M. *Does responsibility drive learning? Lessons from intern rotations in general practice. Medical Teacher*, 30(3): 254-259, 2008.

Fundoscopy de-mystified: presenting an innovative tool for learning and assessment

Schulz, Christopher

Brighton and Sussex Medical School, United Kingdom

IDEA

In an attempt to demystify the 'lost art' of direct ophthalmoscopy, the idea was to develop a 'teaching ophthalmoscope'.

RATIONALE

Medical students and junior doctors lack confidence in the use of the handheld ophthalmoscope, and have been shown to avoid its use in clinical practice (1,2). It has been suggested that the assessment of student technique and the provision of feedback is thought to be an important factor in improving student confidence in this skill (3). Teaching mirrors and cameras have been successfully incorporated into slitlamp biomicroscopy and microsurgery, but have not yet been used in direct ophthalmoscopy. This begs the question 'could this concept have a role in teaching and assessing direct ophthalmoscopy?'

METHOD

The design of this teaching ophthalmoscope was modeled using an existing optical principle. A semi-reflective mirror has been incorporated into a traditional handheld ophthalmoscope, and used to split the light coming from the patient's fundus into two perpendicular pathways. One light beam continues through the viewing hole and the image of the patient's fundus is focused on the student's retina in the conventional manner. The second beam is redirected toward a miniature video camera built into the ophthalmoscope. The camera is plugged into a nearby computer, allowing a third person to observe a live image of the student's view of the fundus. This observer might be a tutor, who can give personalized and specific feedback to each student, or they might be an assessor, allowing a more objective and accurate assessment of the student's competence.

EVALUATION PLAN

A working prototype has been developed and has undergone initial testing, with positive feedback from both educators and students. Formal evaluation will involve randomizing two groups of students to receive funduscopy teaching, either with a traditional ophthalmoscope (control), or with the new 'teaching ophthalmoscope' (intervention). Student competence will be assessed objectively and compared between the two groups. This will be supplemented by qualitative feedback from both students and tutors in each group. / A second study will evaluate the device as an assessment tool, by randomizing two groups of students to receive an obstructive structured clinical examination (OSCE) using either a traditional ophthalmoscope, or the teaching ophthalmoscope. Both quantitative and qualitative data will be collected and analyzed. /

POTENTIAL IMPACT TO THE FIELD

Graduating doctors should be equipped with the necessary skills to recognize important clinical signs. The handheld ophthalmoscope remains the most readily available tool for identifying many life- and sight-threatening conditions, but is often regarded as a difficult skill to master. It is believed that this innovative device might have two distinct roles: 1) It may empower tutors to provide directed, relevant feedback, helping students to grasp this difficult skill more efficiently; 2) It might also be used in assessment and help to provide a more accurate evaluation of the student's competence.

REFERENCES

Dalay S, Umar F, Saeed S. Fundoscopy: a reflection upon medical training? Clinical Teacher 10(2013):103-106

Gupta RR, Lam WC. Medical students' self confidence in performing direct ophthalmoscopy in clinical training. Can J Ophthalmol 41(2006):169-74

Schulz C, Hodgkins P. Factors associated with confidence in fundoscopy. Clinical Teacher (in press).

The Human Rights and Social Justice Scholars Program: The Impact of a Pre-Clinical Track on 3rd Year Clinical Experiences

Bakshi, Salina MSIV; Hennelly, Marie MSIV; Jakubowski, Andrea MSIV; James, Aisha MSIV; Palermo, Ann-Gel DrPH; Karani, Reena MD; Atkinson, Holly MD

Icahn School of Medicine at Mount Sinai, New York, NY.

PROBLEM STATEMENT

Traditional medical school curricula place little emphasis on human rights and social justice frameworks of health. Students who enter medical school with these interests may have difficulty developing them while navigating the rigors and culture of the biomedically oriented training program. [1] The Human Rights and Social Justice Scholars Program (HRSJSP) aims to train medical students committed to working with health equity, advocacy, and social justice throughout their careers by giving them the tools, resources, and mentors while in medical school. [2] The program consists of five components: an eight-week didactic "Health, Human Rights and Advocacy" course; faculty and student mentorship; research projects in social justice; policy and advocacy service projects with local community-based organizations; and a career seminar series. Individual HRSJ scholars objectives include: (A) gaining knowledge in a human rights-based approach to health and skills in advocacy, (B) understanding approaches to conducting research related to human rights and social justice issues in health, (C) gaining skills in advocacy, policy analysis, and partnering with community based organizations, (D) receiving individualized faculty and student mentorship and (E) learning how physicians develop careers dedicated to promoting social justice and health equity. Now in its third year, we aim to understand the enduring impact of the HRSJSP. Specifically, we hope to understand how the HRSJSP, a preclinical curricular track, has affected scholars' clinical experiences and self-perceptions.

METHODS

In a competitive application process, 11-12 first-year medical students were selected to participate in HRSJSP each year. To assess the downstream impact of the preclinical curriculum HRSJP provides, scholars now in their third year of medical school were surveyed. The survey, a 16-question open and closed-ended questionnaire, examines scholars' clinical experiences specifically in regards to professional interests, advocacy knowledge and skills in the 3rd year of medical school, and attitudes towards social justice in medicine.

RESULTS

In preliminary survey results, in examining professional interests, scholars all either 'agreed' or 'strongly agreed' that their preclinical experiences through HRSJ influenced their desire to do social justice work in the future. In regards to knowledge and skills, the majority of scholars believed that HRSJ impacted their clinical encounters and provided them with a knowledge base or skill set that they have used during third year. Qualitatively, students responded that HRSJ increased their confidence in having the necessary skills to plan an advocacy campaign and to advocate on behalf of their future patients. Additionally, in assessing attitudes towards social justice in medicine, scholars have also qualitatively reported that HRSJSP has influenced the way they perceive their roles as physician-advocates in the healthcare system.

LESSONS LEARNED

Through the implementation of HRSJSP, we demonstrated its fulfillment of an unmet need in medical education, feasibility in implementing a human rights curriculum, and an enduring impact in participant professional interests, knowledge and skills, and attitudes.

REFERENCES

[1] Croft D et al, "Perspective: is it time for advocacy training in medical education?" *Acad Med*, 2012 Sep; 87(9):1165-70.

[2] Irby D et al, "Calls for Reform of Medical Education by the Carnegie Foundation for the Advancement of Teaching: 1910 and 2010" *Acad Med*, 2010 Feb; 85(2): 220-227.

Multiple mini-interview and medical student personality

Chang, Jiwoon; Uijtdehaage, Sebastian

UCLA; UCLA

PROBLEM STATEMENT

The Multiple Mini-Interview (MMI) was introduced in 2004 as a more reliable method for assessing medical school applicants' non-cognitive characteristics, such as empathy, communication and leadership skills. Recent studies and anecdotal evidence reported by our faculty suggest that the MMI may favor applicants who are extraverted. Thus, MMI may result in relatively less diverse medical school classes and may affect specialty choice. Using the five-factor model of personality, we compared the distribution of personality factor scores of medical students selected with the MMI versus the traditional admissions interview.

METHODS

In this cross-sectional observational study we surveyed the classes of 2013 and 2014 (no-MMI) as well as the classes of 2015 and 2016 (MMI) with an online version of the Big Five Inventory. This inventory consists of 44 five-point Likert-scale items assessing agreeableness, conscientiousness, extraversion, neuroticism, and openness. Participation was solicited by email and was voluntary. Distributions were compared with non-parametric Mann-Whitney Tests. UCLA IRB reviewed and approved this protocol.

RESULTS

A total of 146 students in no-MMI group (response rate = 42%) and 174 students in the MMI group (response rate 60%) participated. Distribution differences were found for extraversion score only ($p = 0.04$; no-MMI group median = 3.25 vs MMI group median = 3.56). The range of scores did not appear to differ. A marginally significant difference ($p=0.07$) was found for conscientiousness with lower scores in the MMI group.

LESSONS LEARNED

The introduction of the MMI in the admissions review process may have led to selection of students that tend to be more extraverted and perhaps less conscientious compared to previous cohorts--a finding that may or may not be desirable. We found no evidence, however, that MMI resulted in more homogeneous classes given the similar ranges of scores. A limitation of this study is the relatively low response rate in the no-MMI group that may have resulted in response bias.

REFERENCES

Unveiling the Hidden Curriculum: The Power of Positive Role Modeling

Crapanzano, Kathleen; Talbot Encinas, Jennifer; Haber, Jordana

Louisiana State University, USC, Maimonides Medical Center

PROBLEM STATEMENT

The description of the ACGME competency of Professionalism includes the following: "Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; responsiveness to patient needs that supersedes self-interest; respect for patient privacy and autonomy; accountability to patients, society and the profession; and sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation." Just as we ask our residents and medical students to be aware of the hidden curriculum and carry out their duties in a professional manner, so we expect the same of those in charge of teaching and guiding learners through the professional development process. Although there are a number of ways to teach and assess these sub-competencies, one likely place residents will get exposed to approaches and commonly used techniques is in the hidden curriculum.

METHODS

In this workshop participants will identify personal values that can be engaged to support a sustainable professional practice/environment by way of a commitment to act. Learners are exposed to approaches and commonly used techniques via the hidden curriculum.

RESULTS

As Inui defined it, "Within the experience of students, but outside the courses lies the 'hidden curriculum', the students' exposure to what we actually do in our day-to-day work with patients and one another - not what we say should be done when we stand behind podiums in lecture halls. It is this modeling, not only by the faculty but by the residents, that constitutes the most powerful influence on students' understanding of professionalism in medicine."¹ In this lesson we will discuss the hidden curriculum, its value, and influence, and develop commitments to improve how we impact our learners and future physicians. There will also be a followup of all workshop participants after two months to assess workshop impact through a change of practice and implementation of commitment to act.

LESSONS LEARNED

This hidden curriculum can be a positive source, but has been blamed for the development and perpetuation of many of the negative attitudes and behaviors found in today's medical residents and students.² What is formally taught in the classroom to residents and students often contradicts the culture they are exposed to in the hospital, the hidden curriculum.³

REFERENCES

Inui D. A Flag in the Wind: Educating for Professionalism in Medicine, AAMC, 2003

Aultman JM: Uncovering the Hidden Medical Curriculum through a Pedagogy of Discomfort. Advances in Health Sciences Education. 2005;10:263-273.

Rabow MW, Remen RN, Parmelee DX, Inui TS. Professional Formation: Extending Medicine's Lineage of Service Into the Next Century. Acad Med. 2010; 85:310-317.

Time: 2/22/2014, 3:50 pm - 5:20 pm

Session Theme: Potpourri

Preceptors As Teachers: How Do Preceptors Perceive Clinical Site Visits From PA Programs?

D'Aquila, Mitzi PA-C

Keck School of Medicine of USC, Division of PA Studies

PROBLEM STATEMENT

The perceived value and desired frequency of clinical site visits has not been adequately described in physician assistant education. As part of a preceptor needs assessment, we will examine previous clinical site visits and further ascertain the role and perception of these visits to the preceptors. With the goal of designing optimal site visit duration and frequency, we will determine if preceptors perceive site visits as valuable for improving their teaching skills and strengthening their relationship with the PA program.

METHODS

At the USC PA program, after completion of three didactic semesters, students begin their clinical year in the second year of training, from January to December of the same calendar year. Preceptors are visited by a clinical coordinator conducting the site visit. The participants are 106 clinical preceptors that actively train our students and have had a site visit between January and December 2013. These preceptors are identified as either a physician, physician assistant or nurse practitioner. The preceptor survey identified demographics and length of time as a preceptor. Quantitative and qualitative information related to the preceptor's comfort during the site visit, the frequency of site visits and most valuable function of the site visit was collected. The study obtained approval from Keck School of Medicine of USC's Institutional Review Board.

RESULTS

The response rate to the survey to date is a little over 50%. I am hoping that the response rate will reach 80% by the end of February for analyses.

LESSONS LEARNED

Pending

REFERENCES

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Facilitating Transition: A Care Notebook for Adolescents with Chronic Illness

Xi, Cindy; DeQuattro, Kimberly; Vaikunth, Sumeet; Canlas, Shelley; Ho, Cynthia; Cornman-Thomas, Michelle

LAC + USC Medical Center, Department of Internal Medicine and Pediatrics; Keck School of Medicine of the University of Southern California

PROBLEM STATEMENT

The transition of patients from pediatric to adult medical homes often occurs as “a drift away from pediatric care rather than a clearly planned and executed handoff.”¹ In particular, young adults with chronic illness have poor health outcomes following this transition.² Many factors contribute to impaired access and continuation of coordinated care including decreased familial support, poor health literacy, changes in health care coverage, inadequate communication among providers, and fragmented medical records. Compounding this problem, adult providers often feel unprepared to care for patients with complex conditions and have financial disincentives to do so.¹ Although the need for improved transfers of care has been recognized by national organizations (American Academy of Pediatrics, American Academy of Family Physicians, American College of Physicians), there remains a lack of evidence on how to perform a smooth transition.¹ / / We introduce a Care Notebook, a tool used to communicate information among providers, promote patient self-care, and assist in transition of care from pediatric to adult providers. We hypothesize that the Notebook will improve health literacy, patient empowerment, physician sensitivity, and physician comfort in caring for these complex patients. /

METHODS

Patients between 12 to 18 years old with chronic illness presenting to the inpatient pediatric service are included. 100 patients will be included in the initial study. / / The care notebook has several sections: / (1) Introduction / (2) Getting to know me / (3) My Medical History / (4) About Me / (5) Appointments, Reminders, Questions for my Doctor, Post-appointment Plan / (6) Contact information for my healthcare team and family / (7) Hospital tracking form, disease monitoring / (8) Insurance and bills / (9) Glossary / / Prior to introducing the Notebook, patients are asked questions to assess baseline health literacy and patient empowerment, such as “What is your medical condition?” and “How confident do you feel about being able to stay healthy?” A resident physician caring for the patient then introduces the Notebook shortly after hospital admission. The patient is encouraged to complete as much of the notebook as possible and to write down questions for the physician. On the day of discharge, the physician checks on the progress made, answers questions, and administers a modified version of the Patient Enablement Instrument (PEI) to assess the patient’s understanding and ability to cope with their illness.³ /

RESULTS

- At the initial post-discharge visit, patients receive surveys to assess health literacy and empowerment. This is also assessed by 2 and 6 month telephone follow-up. /
- Residents complete a quantitative survey before and after the experience of introducing the Notebook to assess their understanding about and comfort with the challenges of adolescents as they transition care. /
- Patients and residents are asked how we could improve the Notebook. /

LESSONS LEARNED

- Many adolescents have little insight into their illnesses and treatments. /
- Each patient requires an individualized approach for introduction of the care notebook. The Notebook provides a framework for patients to “grow into” as they grow up and transition to adult medical providers. /
- The Notebook is most effective when introduced by a health care provider with established rapport. /

REFERENCES

Supporting the Health Care Transition From Adolescence to Adulthood in the Medical Home. American Academy of Pediatrics, American Academy of Family Physicians, and American College of Physicians, Transitions Clinical Report Authoring Group. Pediatrics 2011;128;182.

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Teaching and Assessing Medical Professionalism through the Use of Reflection

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Keck School of Medicine of USC

WORKSHOP RATIONALE

As the ACGME transitions into the New Accreditation system and residencies utilize specialty-specific milestones, faculty are adapting to new ways in which to assess learners in the core competencies. The objective methods to assess medical professionalism still remain somewhat elusive. A very helpful practice during one's professional development is to reflect on one's progress in skill development and professional growth. This workshop and its activities will provide a construct for how to utilize reflection to teach and assess medical professionalism.

INTENDED PARTICIPANTS

Faculty and instructors interested in promoting professionalism and professional behaviors in their learners.

LEARNER OBJECTIVES

Upon completion of the workshop, participants should be able to:

1. Describe reflection
2. Explore various techniques used for teaching and assessing learners' professionalism.
3. Discuss challenges in relation to professionalism, provide personal case-based examples, and suggest solutions.
4. Determine ways to build reflection skills in learners.

METHOD/ACTIVITIES

Participants will engage in individual reflection, small group activities, and large group discussion, all designed to hone the skills of evaluation required for faculty to assess professionalism, detect problematic issues early and offer strategies for remediation. They will critique sample student work, apply a rubric to assess reflection, and identify nascent signs of professionalism challenges in their students. They will then relate their own case-based examples, discuss possible responses, and outline an action plan. Participants will leave with handouts and resources that can be tailored to their respective teaching environments..

TAKEHOME TOOL

Reflection tools and rubric

PREPARATION

(Optional) Participants can prepare an example of encounters with learners or colleagues in which lapses of professionalism occurred.

Time: Sunday, 8:00 – 9:30 am

Session: ACIME Workshop

LEARNING STRATEGIES AND MIND MAPPING

Julie G. Nyquist, PhD and Win May, MD, PhD

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WORKSHOP RATIONALE

Metacognitive knowledge is one of the four types of knowledge integrated in the revised Bloom's Taxonomy (Krathwohl, 2002). The others are factual, conceptual and procedural knowledge. Metacognitive knowledge is defined as "knowledge of cognition in general as well as awareness and knowledge of one's own cognition," and includes knowledge about strategies for learning and thinking, like use of mind maps (Pintrich, 2002). Mind maps have been shown to be effective in health professions education (Spencer, 2013).

INTENDED PARTICIPANTS

Participants in the Advanced Concepts In Medical Education track (USC mini-faculty-development fellowship)

LEARNER OBJECTIVES

Participants should be able to: 1) discuss the usefulness of metacognitive learning strategies including mind maps; 2) utilize the materials provided to incorporate the revised Bloom's taxonomy into their own teaching; and 3) develop their own metacognitive teaching tools.

METHOD/ACTIVITIES

The methods will include 1) Brief presentation to provide background on the revised Bloom's Taxonomy, metacognitive knowledge and metacognitive learning strategies; 2) provision of examples of mnemonics, mind maps and a cognitive map; 3) work completed in pairs to select an everyday topic for their focus and to develop example tools; 4) sharing of their visual products; and 5) take home messages and commitments to act.

TAKE-HOME TOOL

1) a worksheet to utilize with their program's objectives to categorize them within the cognitive process dimension (remember, understand, apply, analyze, evaluate, create) and knowledge dimension (factual, conceptual, procedural, metacognitive); 2) Example mind maps and resource sheet; 3) worksheet to develop their own tools to promote metacognitive strategies.

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Case Based Teaching – Does this teaching method have a role in the education of 3rd year medical students in the field of gynecology?

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PROBLEM STATEMENT

PROBLEM STATEMENT: Although passive learning strategies have been broadly criticized (Singh 2010), traditional lectures are still commonly used as instructional tools for medical students (Veerapen 2010). In order to create a successful learning environment, the implementation of engaging teaching methods is needed that encourage active learning, translate into better performance and increase satisfaction. Case based teaching (CBT) fulfills this need by fostering active participation and studying in small groups leading to increased acquisition of knowledge, skills, and professional attitude among medical students (Williams 2005). / / PURPOSE: The purpose of this study was / 1. to investigate what teaching styles 3rd year medical students, who begin their clinical rotation in the OB/GYN Department at Los Angeles County + University of Southern California Medical Center (LAC+USC), perceive as most effective for their learning / 2. to develop a workshop covering high yield GYN topics tailored to the stated needs and / 3. to explore whether medical students feel better prepared for the Objective Structured Clinical Examination (OSCE) after participating in this workshop. / / NEEDS ASSESSMENT: After completing a questionnaire, 76% of students stated CBT as most preferable for their individual learning, followed by bed-side teaching (46%), lectures (32%), hand-on training (34%) and simulations (29%). 71% of students also liked to receive current literature related to the topics taught. /

METHODS

METHODS: A CBT workshop was developed specifically tailored to the stated needs of our 3rd year medical students. During their OB/GYN rotation, the students experienced 5 sessions lasting 90 minutes each. High yield OB/GYN topics were presented in case based clinical vignettes. Students developed assessments of patients based on differential diagnoses and justified any reasonable plans for diagnostic steps and treatment. Each session was concluded with the review of case related image material - such as pictures of ultrasound examinations or operative procedures - allowing application of the knowledge and linking of the discussed facts with clinical practice. / After completion of the rotation and before their OSCE exam, 160 students received a questionnaire containing 5 questions to assess their perception of the relevance of the workshop sessions and their satisfaction with the teaching method. /

RESULTS

RESULTS: 94% of students reported that the CBT workshop was helpful to learn OB/GYN related topics in general, 96% perceived an improvement of their clinical problem-solving skills due to the workshop. By attending the CBT sessions, 97% of students perceived a benefit for their OSCE preparation. 84% of students felt their rotation experience was enhanced, and 90% stated that they preferred more CBT during their rotation.

LESSONS LEARNED

LESSONS LEARNED: Exposure to CBT leads to a perceived improvement of knowledge acquisition and clinical problem solving skills. Students reported feeling better prepared for their OSCE. Also, our CBT based workshop enhanced the clinical rotation experience at LAC+USC. Overall, students experiencing CBT in the field of OB/GYN reported high satisfaction with this method of teaching. Hence, CBT should be increasingly incorporated into clerkship curricula.

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A peer-mentorship program to prepare third year medical students for a longitudinal integrated clerkship (LIC)

Jillian Nickerson MSIV, Salina Bakshi MSIV, Elana Bloomfield MSIV, Thomas McBride MSIV, Aisha James MSIV, Maira Fonseca MSIV, Pamela Daher MSIV, Anne Levenson MSIV, Temitope Awosogba MSIV, Sar Medoff MSIV, Allison Gault MD, Yasmin Meah MD

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PROBLEM STATEMENT

Longitudinal integrated clerkships (LICs) are gaining momentum as innovative platforms to educate students in the care of patients over time. Students's successful mastery of various represented disciplines requires specific training given little prior exposure to psychiatry, pediatrics and surgery.[1] At the Icahn School of Medicine, the Interclerkship Ambulatory Care Clerkship (InterACT) offers 12 students a 13 week LIC interspersed throughout the third year. Like many students in LICs, ours felt disoriented and overwhelmed by the multitude of disciplines they encountered all at once.[2] Feedback from students noted the need to strengthen the curriculum in approaching a variety of patient populations and clinical contexts. Additionally, though students noted the mentorship from attending physicians in the LIC was strong, they craved peer mentorship to guide them through daily challenges and skills unique to participating in a year-long clerkship with heavy demands on autonomy and advocacy.

METHODS

Focus groups were conducted with ten students at the conclusion of the InterACT clerkship. They highlighted student challenges at the beginning of the clerkship and useful tools for successful practice in various specialty clinics. The students involved in this focus group then took the lead in developing the subsequent orientation curriculum for the incoming class and a structured peer-mentorship program. During the orientation, they trained students to understand the expectations of each clinic, where to access pertinent information and how to maximize utility of the electronic medical record. They provided students with discipline-specific templates of histories and physicals, ideal assessments and plans and the most high yield resources. Through the mentorship piece, fourth year InterACT graduates were paired with incoming third year students. Mentors met with mentees six times throughout the clerkship for one hour to work on specific skills such as note writing, constructing a relevant differential diagnosis and performing a physical exam in a time-crunched ambulatory care setting. We conducted online surveys to assess effectiveness of the curriculum and to evaluate the third year students' perception of the orientation.

RESULTS

Quantitatively, students overall impression of the psychiatry, surgery, and pediatrics workshops were 4.6, 4.3, and 4.4 out of 5, respectively. Qualitatively, most students remarked that the orientation reduced their anxieties about the clerkship making their transition to specific clinics easier and equipping them to take a detailed and relevant history in each discipline earlier in the year.

LESSONS LEARNED

Within a LIC, senior students can provide peers with successful preparation for diverse ambulatory clinical venues through unique longitudinal mentorship that specifically targets skills and expectations for each discipline. Such peer mentorship can reduce student anxiety and increase student ability to master the basics of each discipline earlier in the year.

REFERENCES

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Introduction of 2nd Simulation Session during 3rd year undergraduate University of Toronto Anaesthesia Core rotation: "Exit Simulation"

Sarmah, Anita

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PROBLEM STATEMENT

University of Toronto 3rd year medical students rotate through the Simulation Centre on day 2 of core Anaesthesiology. Consistently, learner feedback highlighted the wish for "more simulation". Due to the core seminars, no time was available for a second simulation day, until our recent adoption of the Flipped Classroom.

METHODS

We converted core seminars to interactive e-modules, freeing an extra half-day. As the first simulation day occurred early in the rotation, it was felt the second session should be an "Exit Sim". This would enable consolidating learning objectives and act as revision for the course examination. / Course objectives were mapped for three clinical areas where Anaesthesiologists care for patients: Preoperative, Intraoperative and Postoperative. The working party included simulation coordinators, anaesthesiology residents, staff and fellows. Innovative educational tools were developed through presentation of original work (1), participation at international simulation conferences and a literature review. / During the preoperative scenario, risk analysis and critical thinking are incorporated. Students perform real time assessment of a Standardized Patient and a management plan is generated after student collaboration and communication. / In the Intraoperative scenario, mental practice is introduced (2) before facilitator feedback. Roles are assigned to reflect a working operating room team, including physical barriers to communication and increased cognitive load. / Postoperatively we utilise Situational Awareness Group Awareness Technique (SAGAT stops) to provide perceptual and cognitive feedback. (3) /

RESULTS

We have run three Exit Simulation sessions using the new curriculum with positive learner feedback. / Preoperative: "Very realistic patient and co-morbidities"; "Great to have the opportunity to think through the patient plan on our own"; "I liked the complexity of the case, it incorporated a number of important anaesthetic considerations" / Intraoperative: "Good at giving first-hand look at intra-op communication. I will remember some valuable lessons from this scenario"; "The visualization before the simulation was helpful and a good exercise for us to practice"; "I enjoyed thinking through the case before it started, I will use this technique in the future"; "Scenario demonstrated the importance of inter-team communication well"; "Reinforced what we have seen throughout the rotation". / Postoperative: "Taught me to avoid fixating on a problem maintaining the big picture"; "Reinforced the learning done throughout (our rotation)"; "highlighted many good learning points". /

LESSONS LEARNED

We are excited about our new Undergraduate Anaesthesia curriculum after the initial positive feedback and we are optimistic that this additional simulation day will "close the loop" on their rotation. We look forward to sharing our experience and hope to provide evidence of its potential application outside of our institution.

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Giving Feedback to Superiors Within Medical Education

Shara Steiner Brody, DO; Richard G. Tiberius, PhD

University of Miami Miller School of Medicine, Miami, Florida

PROBLEM STATEMENT

In the context of medical education, it is well-established that giving feedback is an essential skill that can be both challenging and rewarding. Optimally, feedback would be bidirectional, flowing from both teacher to learner and learner to teacher. The latter type of feedback is known in the literature as "upward feedback," and has been studied extensively in the context of business and leadership. The lack of literature regarding giving feedback to superiors in medical education led physicians and educators at the University of Miami Miller School of Medicine (UMMSM) to dig deeper to understand the barriers to giving feedback to superiors and how they can be overcome. After preliminary qualitative analysis, UMMSM researchers have identified the barriers to giving feedback to superiors and described effective strategies for bidirectional feedback between teachers and learners.

METHODS

Focus groups were organized with residents from six different residency programs at the University of Miami/Jackson Health System. The primary criterion for recruitment and inclusion was participants' year of residency training. The de-identified focus group data was transcribed by the research team and analyzed preliminarily by hand to identify the core coding themes. The transcriptions were then coded with QSR NVivo 10 software and analyzed for inter-rater reliability. The coding process with NVivo is proceeding in a series of iterative steps.

RESULTS

The two most commonly mentioned barriers to giving feedback to superiors within medical education are: 1) Relationship between the potentially threatening nature of the message and the receptivity of the recipient and; 2) Cultural aspects within the organization that do not support giving feedback to superiors. Strategies teachers can use to solicit and elicit feedback from their learners within medical education include: 1) Ask about specific behaviors instead of global performance; 2) Ask learners to help you make a specific behavioral change; 3) Ask to "borrow good ideas" used by other teachers and; 4) Establish a Pilot/Co-Pilot relationship. Strategies for learners to use when giving feedback to superiors include: 1) Testing the waters; 2) Turning feedback into a question and; 3) Proposing a solution to accompany the stated problem.

LESSONS LEARNED

Currently, there is scant literature addressing this issue as it relates to medical education. Our research illustrates the significant challenges learners face when offering corrective feedback up the hierarchy. The two most common barriers mentioned above are borne out of both the learners' concern for repercussions and teachers' unwillingness or disinterest in receiving feedback from learners. Structural and cultural barriers are especially influential within our institution. The next step in this line of investigation is to create and implement an intervention based on the strategies learned from the residents. Our intervention will include training teachers in the value and skills of soliciting and eliciting feedback, training residents to give upward feedback, and implementing structural changes such as providing protected time for feedback. Ideally, such interventions will foster a cultural shift that could increase the likelihood that feedback will be given, accepted, and then used by teachers to improve their teaching skills.

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Medical Student Self-Assessment and Faculty Assessment During OSCE Review: Part Three

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Keck School of Medicine, University of Southern California

PROBLEM STATEMENT

Schon's (1983) seminal work regarding reflection-on-action provides the theoretical framework for medical students at the Keck School of Medicine (KSOM) to review their own performance. Self-assessment is recognized as a major component in medical education and professional development (Blanch-Hartigan, 2011). To promote reflective learning, KSOM has incorporated a precepted video review for the past three years on an Objective Structured Clinical Exam (OSCE) station, early in the third year of medical school. / / Objectives / 1. To determine student perception at this point in training (early third year) of any problem areas in clinical skills. / 2. To find out areas in communication skills that students would like to improve upon. / 3. To examine the kinds of activities students list as "things you would do to enhance your clinical skills". / 4. To determine faculty perception regarding a) student's level of organization and b) receptivity to feedback. / /

METHODS

In the Fall 2013 Intersessions course, 176 third year medical students met with a faculty member to review one of their OSCE videos, complete a guided OSCE self-review form, and receive faculty feedback. During orientation to OSCE review, students received instructions on the review process, were shown an example OSCE video, and completed a sample self-review form. Over three half-days, faculty met individually with students for 45 minutes each and provided one-on-one feedback on students' performance a) within the station and b) on their reflective skills. Students completed an OSCE Self-Review form, which guided them through the video review process. Faculty completed a feedback form similar to the student self-review form. The faculty form included suggestions on what the faculty should observe during the video review. Frequency counts were utilized to determine outcomes.

RESULTS

Students identified content (65%), time management (56%) and organization (26%) as problem areas. Twenty-five percent of students identified jargon as a communication skill needing improvement. Activities students listed to enhance clinical skills included working on organization, decreasing medical jargon, taking a more complete history, and practicing and performing a more complete or accurate physical examination. Faculty perceptions indicated that 20% of students could improve their organizational skills, and 4% were not receptive to feedback.

LESSONS LEARNED

The use of a formal feedback form for faculty with suggestions on what to observe was new this year and faculty found this to be useful. Students were able to identify areas of deficiency, strategies for improvement, and were open to faculty feedback.

REFERENCES

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Unveiling the Hidden Curriculum: The Power of Positive Role Modeling

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LSU Health Sciences Center; USC; Maimonides Medical Center in Brooklyn, NY

WORKSHOP RATIONALE

The description of the ACGME competency of Professionalism includes the following: "Residents must demonstrate a commitment to carrying out professional responsibilities and an adherence to ethical principles. Residents are expected to demonstrate: compassion, integrity, and respect for others; responsiveness to patient needs that supersedes self-interest; respect for patient privacy and autonomy; accountability to patients, society and the profession; and sensitivity and responsiveness to a diverse patient population, including but not limited to diversity in gender, age, culture, race, religion, disabilities, and sexual orientation." As faculty we are responsible for the formal and informal curriculum, but more importantly for the environment or hidden curriculum. This hidden curriculum can be a positive source, but has been blamed for the development and perpetuation of many of the negative attitudes and behaviors found in today's medical residents and students.¹ Current models of professionalism hold the academic community and faculty responsible to act as stewards of the professional development of physicians.² However what is formally taught in the classroom to residents and students often contradict the culture they are exposed to in the hospital, the hidden curriculum.³

References

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2. Lucey C. Souba W. Perspective: The Problem With the Problem of Professionalism. *Acad Med*. 2010; 85:1018-1024.
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INTENDED PARTICIPANTS

Multispecialty GME educators

LEARNER OBJECTIVES

1. Identify areas in your home institution and/or practice and share ideas of, where a change can be made to improve/enhance what is taught through the hidden curriculum
2. Develop a commitment to creating a positive hidden curriculum in your institution or practice, and a plan to carry it through

METHOD/ACTIVITIES

In this workshop participants will, identify personal values that can be engaged to support a sustainable professional practice/environment by way of a commitment to act. Learners are exposed to approaches and commonly used techniques via the hidden curriculum. In this session we will discuss the hidden curriculum, its value, and influence, and develop commitments to improve how we impact our learners and future physicians.

00:00-10:00 Ice Breaker

10:00-20:00 Didactic

20:00-70:00 Regroup

70:00-80:00 Commitment to Act

80:00-90:00 Final Questions/Evaluation

TAKEHOME TOOL

List of references on hidden curriculum

Commitment to Act Cards

Follow-up Questions

PREPARATION

None

Cooperative Learning: Review, Reinforce, and Reiterate Acquired Knowledge in Medical Education

Wegler, Jennifer; D'Aquila, Mitzi; Schultz, Ann

Keck School of Medicine of USC, Division of PA Studies

WORKSHOP RATIONALE

This 1.5 hour workshop is intended to assist faculty instructors in utilizing cooperative learning to reorganize the traditional classroom into a social learning experience. This type of group sharing moves beyond what the student has merely memorized. The goal is to develop learners who can engage in complex reasoning as a group, capitalizing on one-another's resources and skills. Instead of giving information and or reviewing concepts in the traditional format, the faculty instructor becomes a facilitator in the student learning environment. The instructor creates a structure of individual responsibility and cooperative interdependence. Current trend in education emphasizes team-based learning. Cooperative learning in medical education allows the instructor to break away from the traditional lecture format to an active learning environment. The students review and analyze cases together; they discuss what they know; they make an informed decision as a team. Using it as a review/reinforcement technique assures that all participants getting the same information.

INTENDED PARTICIPANTS

Academic medical and health profession faculty who are focused on the education of health care professionals.

LEARNER OBJECTIVES

At the conclusion of the workshop, participants will be able to:

1. Demonstrate knowledge of basic principles of cooperative learning and the use of the jigsaw technique to implement active learning in the classroom.
2. Describe how cooperative learning promotes the 5 key elements inherent to a successful cooperative learning experience.
 - Positive interdependence
 - Individual accountability
 - Face to face (promotive) interaction
 - Interpersonal and small group social skill
 - Group processing
3. Explain the potential advantages and limitations of cooperative learning.
4. Identify opportunities in their curriculum to implement cooperative learning.
5. Design a cooperative learning experience for their students using the jigsaw technique. /

METHOD/ACTIVITIES

The session will begin with a brief presentation on cooperative learning and the jigsaw technique. The attendees will participate in a jigsaw learning activity. In the jigsaw technique, each group member becomes the "expert" on a pre-assigned group of objectives or learning points, and all group members have a different pre-assignment. They complete their research prior to class, study the material they have been assigned, and come to class prepared to be the "expert" on those topics. The participants will further reflect on the cooperative learning process and possible application to their own curriculum.

TAKEHOME TOOL

PREPARATION

Time: Sunday, 9:50 – 11:20 am

Session: ACIME Workshop

Turn Innovations into Publications

Dixie Fisher, PhD; Cha-Chi Fung, PhD

Keck School of Medicine of USC

WORKSHOP RATIONALE

Faculty members often explore or implement changes in their teaching methods or educational programs without "prospectively" planning for scholarly dissemination. This workshop is designed to help faculty members make their efforts count twice—first as innovations, and secondly as scholarly products. Whenever a needs assessment, literature review, survey, or educational intervention is being considered, there are certain steps to be taken in order to produce outcomes worthy of publication. This workshop will outline the necessary steps and share resources helpful with educational designs, data analyses, journal selection, and manuscript preparation.

INTENDED PARTICIPANTS

This workshop is designed for those in education who wish to turn their idea for an exploratory study, quality improvement project, or innovation into a scholarly product for dissemination. Participants should come with a project idea and one or more ideal outcomes in mind. If time permits, we will also discuss projects that have already been implemented and might be able to be turned into a scholarly product.

LEARNER OBJECTIVES

By the end of the workshop, participants will:

1. Be better able to prospectively design a variety of educational projects worthy of publication
2. Construct a workable plan for an idea that could result in publication
3. Choose/Develop valid measurement instruments (critical element)
4. Be able to identify and use resources, which can assist in planning a study, analyzing data, and writing a manuscript

METHOD/ACTIVITIES

Because this workshop is hands-on and includes individual help, it will be limited to 12 participants. The workshop will provide didactic mini-lectures, but will consist mostly of faculty/participant interaction while participants work on turning their own project into a scholarly product.

Large group activities will include lectures on:

1. 7 steps for educational intervention studies
2. Describing the sample
3. Instrument validity
4. IRB navigation

Small group activities will include:

1. Turning an idea into a scholarly project—one step at a time.
2. Typical sections of a published paper
3. Seven Steps in planning a scholarly relational or experimental study.
4. OVMI template
5. List of human and other resources for help in planning and conducting educational innovations.

PREPARATION

Participation requires bringing an idea for a project with one or more ideal outcomes or anticipated relationships, or description of a completed project wishing to be written up for scholarly dissemination.

Utilizing the RESPECT model to Assess and Improve Cultural Competency in Residency Education

Gonsalves

University of Kentucky

IDEA

Utilizing Interactive sessions and the RESPECT model to improve Knowledge, Skills and Attitudes (KSA) of cultural competency training

RATIONALE

Health disparities continue to be a major issue in the United States (1). Cultural competency has been suggested as a method to reduce health disparities as well as being mandated by LCME and the ACGME. A survey sent to the Medical University of South Carolina program directors including the AAMC's Tool for Assessing Cultural Competency Training (TAACT) instrument identified the need for more training in cultural competence. The TAACT revealed that most PD's struggled to identify topics that related to cultural competence and that most aspects of cultural competence instruction were in the informal curriculum or were part of the hidden culture. The lack of cultural competency in residency education has been noted in the literature (2). Most faculty members also lacked sufficient awareness and capacity to teach cultural competency and their ability to assess residents' delivery of cross-cultural patient-centered care. (3) What is proposed is a faculty development program using the RESPECT model.

METHOD

This pilot project provided two one-hour sessions for all faculty members within the six targeted clerkships. These two interactive faculty development sessions focused on increased awareness of and knowledge about key concepts related to teaching cultural competence by incorporating the principles of motivation – helping faculty see the “importance” of the topic, trying to show them that they “are able” to teach it, and providing a supportive environment by making resources available to them digitally or in person utilizing the RESPECT model. The RESPECT model is a simple model to guide teaching of a culturally responsive interview (Respect, Explanatory model, Social context, Power, Empathy, Concerns, and Trust). After the intervention, directors of the major core clerkships were interviewed and the TAACT was repeated.

EVALUATION PLAN

The evaluation is still underway and incorporated the following: initial TACCT survey completion and follow-up TACCT survey (in progress) to examine any changes. Follow-up interview meetings with each of the six clerkship directors to discuss which changes were made within the curriculum. The results will include 1) changes that have been made and 2) barriers to change

POTENTIAL IMPACT TO THE FIELD

Our pilot study may uncover both barriers and enabling factors toward positive change in relation to incorporating cultural competence education for faculty and residents.

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Building a Milestones Savvy Culturally Responsive Healthcare Curriculum in a Family Medicine Residency

Newman, Nancy

Hennepin County Medical Center

IDEA

An integrated cultural medicine curriculum designed to improve residents' culturally responsive knowledge, attitudes and patient care skills.

RATIONALE

In the context of US health disparities and patient diversity, residents and faculty in our family medicine residency program desire improved training in culturally responsive healthcare (CRHC). Nationally there is need for more training in CRHC and leaders have called for research about effective teaching methods in this curricular area (1). Multimodal methods show promise (2). With these realities in mind, we plan to implement a new CHRC curriculum in July 2014 as part of our HRSA grant to promote Patient Centered Medical Home training. We will structure the curriculum based on the principle that learners benefit from multiple opportunities for practice and feedback over time. (3) Furthermore, the new ACGME "milestones" for family medicine will be integrated into the evaluation methods.

METHOD

1. Weekly didactic teaching: Our current teaching sessions will be enhanced with relevant CRHC content. These sessions include internal medicine and perinatal Mortality & Morbidity, preventive health and core topic lectures. Guidelines, references and questions to consider when preparing presentations will help presenters with the integration process. / 2. Direct observation: Currently we have three behaviorally oriented faculty members that provide video review and shadow precepting during resident continuity clinic. These faculty members will include Cultural competence SOAP grid questions (2) in these direct observation sessions as well as written feedback reports. Questions relate to elements of health disparities, avoiding medical errors and patient-centered care. This process will provide targeted feedback about the elements of culturally responsive health care. / 3. Continuity clinic precepting: All faculty will include questions relevant to CRHC in precepting encounters in residency continuity clinics. To support faculty in this task we will provide a training session related to the Cultural Competence SOAP Grid, and offer practice using two questions of each faculty member's choosing. / 4. Annual cultural medicine reflection seminar: A new seminar for all residents will facilitate resident written self-reflection about a specific patient experience. Residents will share in small groups about their written reflection and personal plan of action. They will receive written feedback from faculty that will invite residents to continue discussion with peers and faculty. /

EVALUATION PLAN

Weekly didactic presentations will be evaluated through review of resident responses to a question about what residents learned about CRHC. Presence of comments/recommendations about CRHC will be reviewed in written feedback from direct observation sessions. A resident survey two months after implementation will assess perceptions about the usefulness of faculty use of CRHC questions in precepting. Annual written reflections about patient cases with cultural issues will be monitored for depth of reflection and for content. Overall improvement in knowledge, attitudes and skills will be measured by CRHC relevant ACGME milestones, as well as by pre and post testing of residents with the Intercultural Developmental Inventory.

POTENTIAL IMPACT TO THE FIELD

Implementation of these changes will highlight both barriers and successes that can inform the efforts of other institutions to improve culturally responsive health care education.

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Sorting through the noise: modules to improve students' study of cardiovascular physiology

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IDEA

First-year medical students at our institution often struggle with physiology, which is covered in the spring semester Major Organ Systems block of our school's integrated curriculum. In part, the block presents challenges because it offers fewer rewards for the memorization skills that students have used thus far in medical school. To improve students' study efficiency and to help them identify and take better advantage of available resources, we developed web-based, interactive modules, initially focusing on Cardiovascular Physiology. Using feedback and results from these modules, we plan to extend the approach to each of the remaining organ systems, with a goal of providing students with guidelines for study and review as they progress through the material.

RATIONALE

First-year medical students at our institution often struggle with physiology, which is covered in the spring semester Major Organ Systems block of our school's integrated curriculum. In part, the block presents challenges because it offers fewer rewards for the memorization skills that students have used thus far in medical school. To improve students' study efficiency and to help them identify and take better advantage of available resources, we developed web-based, interactive modules, initially focusing on Cardiovascular Physiology. Using feedback and results from these modules, we plan to extend the approach to each of the remaining organ systems, with a goal of providing students with guidelines for study and review as they progress through the material.

METHOD

The Cardiovascular Physiology modules consist of three interlocking components, available to students through the school's online classroom environment: 1) A suggested schedule for reviewing material discussed in earlier class activities, preparing for upcoming subjects, and making time for relaxation or recreation. In developing these schedules, we treat the day as if the students were working at a demanding, full-time job. For example, a typical schedule includes morning class activities, time for lunch, a review of the morning's material, faculty-facilitated Q&A, and preparation for the next day. 2) An interactive flow chart that organizes each subject into discrete, easily-integrated topics, which students are expected to follow as preparation for flipped-classroom, problem-solving sessions focusing on relevant clinical cases. Each flow chart identifies essential material with embedded hyperlinks, extension of essential material with links to detailed or alternative explanations, and short on-line self-assessments to test mastery and guide students toward the extension and reference content. For example, preparation for a class discussion of edema associated with nephrotic syndrome includes a flow chart with an "essential" on-line description of capillary exchange, a short video that explains in more detail the Starling equation, and references to reviews of the lymphatic system, edema, and plasma proteins. 3) An annotated list of faculty-reviewed alternative resources that are available online, selected to appeal to multiple learning styles, such as material from the NIH and CDC.

EVALUATION PLAN

Our assessment strategy consists of comparisons of examination performance on cardiovascular concepts after use of these revisions with similar questions from previous years that did not provide such specific suggestions for individual study. These comparisons will be supplemented with pre- and post-instruction surveys of student opinion on the effectiveness of the various components in improving their studies.

POTENTIAL IMPACT TO THE FIELD

As medical educators address the need for innovation in content delivery and in determining the best use of the diverse resources available for learning and test preparation, modules like ours can provide guidance to students and faculty alike.

REFERENCES

After the motivational interviewing workshop: Improving faculty and resident proficiency with feedback and coaching

Strohm, Maureen

Eisenhower Medical Center; Keck School of Medicine of USC

IDEA

Faculty and first year resident motivational interviewing (MI) proficiency will increase after completion of introductory motivational interviewing (MI) workshop followed by objective feedback and coaching.

RATIONALE

Motivational interviewing is an evidence-based means of communication that promotes health behavior change and provides many benefits to health care providers, patients and health care systems (Miller and Rollnick 2013). From its initial successful development in substance abuse treatment it has been applied to a variety of clinical and research settings. Because of its empathic, patient-centered orientation and process, it is applicable across different cultures (Hettema, et al 2005). However, for medical educators and primary care providers, a significant challenge exists to efficiently and effectively learn how to apply MI to busy office based practices (Madson, et al 2009). It is also a skill and thus requires focused practice with feedback. Miller et al. (2004) demonstrated that a structured training session plus follow up practice with feedback is most effective. Utilization of iterative practice with feedback to enhance skill development is an established principle of learning (Ambrose et al. 2011). However, many residency programs do not have a local expert to conduct these sessions. Our intervention provides the cognitive base then allows for expert feedback and coaching using audio recordings of patient encounters.

METHOD

The subjects are 12 volunteer faculty from 5 family medicine residencies and 20 residents from 2 programs within California. After in-person workshops and seminars with additional online education, participants will use digital recorders to audio record and send one patient-practitioner visit per month to an independent MI coding agency. This study explores the value of expert feedback and coaching using a standardized coding system, Motivational Interviewing Treatment Integrity Coding, version 3.1.1., (M.I.T.I. 3.1.1) to facilitate preceptor and resident education and practice (Moyers, et al. 2005). Participants will receive feedback and coaching for 5 months, from December 2013 through April 2014. A local faculty member in each program will track each learner's progress. A pre- and post-confidence and monthly frequency of MI practice surveys will be gathered in December and then April 2014. The project has received IRB approval by the CCRMC/HCs Institutional Review Committee and will receive IRB approval in the 4 other programs and all participants will complete the approved informed consent form.

EVALUATION PLAN

Evaluation of proficiency will be based on the M.I.T.I. 3.1,1, which is a validated tool for assessing MI fidelity (Moyers, et al. 2005). In addition, because our numbers will be relatively small, we will observe for trends and changes in confidence, satisfaction and self-reported frequency of practice via provider logs and online surveys. All residents in the five programs will be surveyed in May 2014 to assess utilization of MI and compare participants as a group to all non-participants in those programs.

POTENTIAL IMPACT TO THE FIELD

We will determine if this project will provide a model for any program that wishes to promote learning and increased proficiency of motivational interviewing skills in direct patient care.

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Mindfulness Meditation for Medical Students: A Pilot Study

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USC Keck School of Medicine; Anesthesiology Critical Care Medicine at CHLA

IDEA

Can Guided Mindfulness Meditation Decrease Stress and Improve Wellbeing for Medical Students?

RATIONALE

Medical students have been shown to have higher rates of depression, burnout and psychological distress relative to the general population, with increasing rates of those factors as students progress in medical training. (2,6,9,10) Because of the rigors of the medical school curriculum, students may also have less time for self-care activities that have been shown to reduce stress. This may negatively impact academic performance and professional conduct. A general well-being survey of the first-year medical school class at Keck School of Medicine in February 2013 revealed that 22.3% of respondents were in a state of stress and another 20.1% were in a state of distress.(7) These findings warrant better efforts to manage student stress while under the constraints of an already extensive curriculum. Mindfulness is a purposeful and nonjudgmental attentiveness to one's own experience, thoughts, and feelings.(1,4) Healthcare professionals who engage in mindfulness practice report improved patient-centered communication and more job satisfaction.(1) This study aimed to determine whether the addition of 10-20 minutes of guided meditation daily for 30 days using a mobile phone application could improve stress levels and overall quality of life. The study also assessed the feasibility of using a mobile phone application as a delivery method. Finally, the investigators hoped to determine whether students would continue to practice the meditation technique and report decreased stress levels after the intervention period.

METHOD

We recruited 88 medical students (Mage = 25.11, SD = 3.39; 63.6% female), stratified them by class year, and randomized each to either intervention or control groups. The intervention group was asked to download the mobile application Headspace and follow an audio-guided mindfulness meditation program for as many days as possible within a 30 day period, with each session initially lasting for ten minutes and increasing incrementally to twenty minutes per day. Participants completed the following questionnaires on Qualtrics, an online survey system, at baseline (T1), 30 days (T2) and 60 days (T3): Perceived Stress Scale, Five-Facet Mindfulness Questionnaire, General Well-Being Scale, and demographics questionnaire.

EVALUATION PLAN

Similar to previous findings,(7) most students were stressed. At baseline, 93% were stressed, 4.6% were in a state of distress, and 2% were marginally stressed. Repeated measures ANOVAs were conducted to examine changes in well-being, stress, and mindfulness for both groups across T1, T2, and T3. Stress significantly decreased for the intervention group, but not the control group from T1 to T3, $F(2,142) = 3.98, p = .02$. Mindfulness significantly increased for both groups from T1 to T3 for three subscales: observing ($F(2,140) = 6.33, p = .02$), acting with awareness ($F(2,138) = 4.29, p = .02$), and non-reactivity to inner experience ($F(2,138) = 11.45, p = .00$). Well-being did not significantly change across both groups.

POTENTIAL IMPACT TO THE FIELD

These results point to mindfulness training as an effective means to decrease stress levels, which may have implications for patient care.(1,3,5) Integrating mindfulness activities in the medical school curricula may further improve future physicians' emotional health as they receive tools to help cope with stress and work-related hardships earlier in training.

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Faculty as Teachers (FasT)

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WORKSHOP RATIONALE

Most faculty in academic institutions are there because they want to and love to teach. However, many medical school faculty are not trained educators and lack the skills and experience that often drive the quality of teaching and learning. This workshop, through use of brief presentations followed immediately by active and interactive exercises and practice, provides attendees with foundational skills in understanding how their own beliefs influence their teaching, writing effective learning objectives, choosing pedagogical methods that engage learners, and choosing assessment tools that provide both learners and teachers with critical information about achievement of learning objectives.

INTENDED PARTICIPANTS

Anyone in the health sciences who teaches and wants to learn new or sharpen existing teaching/learning skills (and learn a bit of learning theory along the way).

LEARNER OBJECTIVES

At the end of the workshop, participants will be able to:

1. Write effective learning objectives (LOs)
2. Distinguish between effective and ineffective LOs
3. Evaluate/critique LOs
4. Recognize the value – for the learner and the teacher – of effective LOs
5. Describe their beliefs about learning
6. Apply those beliefs to their own teaching & learning
7. Distinguish between active and passive learning (theory)
8. Describe passive methodologies and active methodologies (applied)
9. Compare and contrast active and passive learning (advantages and disadvantages of both)
10. Describe the role of assessment in contemporary medical education
11. Identify methods of assessment
12. Determine which method of assessment is most appropriate in specific scenarios

METHOD/ACTIVITIES

Before each element of the workshop (beliefs about learning, learning objectives, learning methods, assessment), the authors make a very brief presentation and then the attendees work on a variety of exercises (that are quite fun) and then practice on their own and in small groups. This is an extremely interactive workshop that has received very high praise.

TAKEHOME TOOL

Links to websites with resources will be provided, along with handouts/tools to be used for exercises and practice in class and for support at home after the workshop as they continue refining skills.

PREPARATION

None.

POSTER #: 1

Using advanced technologies to create simulated, case-based learning in ultrasound: a new frontier in continuing medical education.

Berona, Kristin

USC+LAC

IDEA

We aimed to create an ultrasound educational experience for a large audience at a national emergency medicine conference utilizing a narrated, case based simulation with real time multimedia and filming.

RATIONALE

Large conferences are the mainstay of continuing medical education (CME) for physicians after completion of their residency. While these conferences are convenient and effective for delivering a lot of content to a large group of people, they rely mostly on a traditional lecture format and passive learning. While bedside ultrasound requires a baseline understanding amenable to didactic format, ultimately it is an interactive skill better taught with hands on training. With audiences of 100-2000 people, it is not practical to involve every learner: hence ultrasound simulation scenarios evolved. / / Case based simulations are ideal for showing physicians how bedside ultrasound can be invaluable in the management of critically ill patients by creating a scenario, showing ultrasound images, and encouraging critical thinking on the part of the learner. Studies have shown that observer knowledge and skills improved even when not directly involved in the simulation. However, with a large audience much of the action and key teaching points of a simulation are lost. We aimed to overcome this obstacle using state of the art technology to create a more individualized experience. /

METHOD

We created two ultrasound simulation cases and employed real time filming of the patient scenario with live actors, projected ultrasound images perfectly synced with the on stage action, and a narrator who ensured the critical decision points in ultrasound were conveyed to the audience. This production involved multiple physicians on stage, cameramen, and a sophisticated audio-visual display technology. Large screens projected at the front of the auditorium with each of the components-- narrator, simulation action, and clinical and ultrasound findings— were visible throughout the session.

EVALUATION PLAN

Evaluation of the educational intervention was through a voluntary survey on the part of the participants. We assessed satisfaction with the key components of the course as well as their interest in seeing future case based simulation scenarios as a model for bedside ultrasound education. Furthermore, we compared their self-reported likelihood of using bedside ultrasound before and after the intervention with a paired t-test. We found that 94% of participants found the session helpful, and the individual components of the session were well received (evaluated with Likert scale). There was a statistically significant increase in self-reported likelihood of using bedside ultrasound in similar scenarios after the session.

POTENTIAL IMPACT TO THE FIELD

This was a pilot educational experience with voluntary survey evaluation, so further studies are needed to evaluate the true impact and efficacy of this high tech simulation session model. We were lucky to have the technological support and funding from HippoEM to carry out this intervention. If feasible, technologically advanced narrated simulation scenarios with real time multimedia images could be a new model for ultrasound education at large CME conferences.

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POSTER #: 2

SHARP Feedback-Implementation of a structured debriefing tool after neonatal transport for neonatal-perinatal medicine fellows.

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Duke University Medical Center

IDEA

Implement a previously validated structured debriefing tool to provide feedback to neonatology fellows after transport of critically ill neonates to improve quality and consistency of feedback and for overall process improvement. Objectively assess a previously validated debriefing tool in a novel setting.

RATIONALE

Neonatology fellows at Duke University Medical Center participate in the transport of critically ill neonates with the clinical staff of the Duke Life Flight Transport team. While participating in neonatal transport is an important component of the training program, no structure exists for debriefing of fellows after transport. Fellows do not receive consistent quality feedback on their performance, specifically towards improvement of future performance. / / Feedback is a critical element towards developing competent physicians. Most teachers and learners lack formal structure for debriefing in the clinical setting¹. No structured debriefing tool exists for trainees participating in transport services. Prior research on debriefing of trainees has occurred largely in the surgical subspecialties. The "SHARP" debriefing tool is a validated tool used to debrief surgical residents after operating room cases². The use of the SHARP debriefing tool was validated using the Objective Structured Assessment of Debriefing (OSAD) tool³. While SHARP is designed for operating room cases, we believe it can be modified to the setting of neonatal transport. /

METHOD

We will use the SHARP debriefing tool to debrief neonatology fellows after transport and to use a validated assessment tool assess the outcomes of the intervention. Fellows will complete a pre-assessment survey. Faculty and fellows will be introduced to both the SHARP debriefing tool and the OSAD instrument. Debriefing will occur within 24 hours of the neonatal transport and the debriefing will be observed and scored on the OSAD tool. After the intervention, fellows and faculty will complete a post-assessment survey. / /

EVALUATION PLAN

Evaluation Plan: / / 1) Quality of Debriefing: Effectiveness of the SHARP debriefing tool will be measured using OSAD. For the OSAD, each category is rated regarding how well that element of the debriefing is conducted. A total score rates overall effectiveness. OSAD will provide an objective assessment of the experimental tool when used in a novel environment. / 2) Trainee assessment: A Likert-type survey will be distributed to fellows. This provides subjective assessment of trainee's perceptions of the quality of debriefing pre and post intervention. / 3) Faculty assessment: A Likert-type survey will be distributed to faculty to assess faculty perceptions of the debriefing tool. / / Preliminary Results: The pre-assessment phase has been completed, with a response rate of 100%. Results reveal that feedback is almost never formalized. Feedback is sometimes allowed to be self-reflective, and often provides trainees with strategies on how to improve performance in future cases. Feedback is offered in a non-threatening way, but overall trainees are dissatisfied with its effectiveness. / / Faculty have been introduced to SHARP, and the structured debriefing of fellows after neonatal transport has begun. Data collection with the OSAD is underway. Our goal is to complete the OSAD on 30 debriefings. /

POTENTIAL IMPACT TO THE FIELD

This study objectively and subjectively assesses a validated debriefing tool in a novel setting. There are likely other post-graduate training programs whose trainees would benefit from implementation of a validated debriefing tool to provide feedback after a variety of clinical care, critical incident, procedural or simulation scenarios. We expect to introduce this feedback tool to other training programs at Duke.

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POSTER #: 3

Web-Based Lectures in Point of Care Ultrasound: An Alternative to the Classroom?

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University of Sothern California

IDEA

1. Introduce an alternative method of teaching Point of Care ultrasound (POC US) to attendings and fellows from various specialties of Medicine at LAC + USC. / 2. Create a web-based curriculum for POC US teaching and learning in the LAC +USC Department of Emergency Medicine.

RATIONALE

Point of Care Ultrasound (POC US) is a widely used clinical modality in the emergency department (ED). Over 95% of emergency medicine (EM) residency programs have incorporated POC US into their curriculum to bolster resident US training. A traditional method of teaching POC US at this institution is to hold a lecture-based course on POC US applications followed by small hands-on groups on hired models. These courses are time consuming and expensive to plan, and often require multiple lecturers, models, and machines. An alternative which allows participants to watch the lectures online and meet in small groups to practice the applications may be a more efficient and equally effective alternative to classroom lecture teaching. /

METHOD

This study will be performed in 2 phases. In phase I, Approximately 60 fellow and attending level physicians from various specialties will be randomly assigned based on schedules to one of 2 groups. Group A who will be required to watch a four hour web-based lecture series on the basic applications POC US. Group A participants will then participate in a four hour small group hands-on session (4 learners to a group) on patients in the ED. Group B will undergo approximately four hours of traditional lectures in a classroom setting and four hours of hands-on training (4 to a group) during a one day 9-hour course. Participants will be emergency medicine, internal medicine, nephrology, pediatric, and pulmonary critical care fellows and attendings. The lectures for viewing online for participants in Group B will be recorded from the traditional classroom lectures given during the course for Group A. Phase II will involve evaluation of performance of both groups.

EVALUATION PLAN

Participants will be evaluated by exams via the web-based exam program ExamBuilder.com™. Participants will be required to take a pre-test before taking the course and hands-on training, a post test immediately after the course, and 6 months after the conclusion of the course. A follow up survey will be sent to participants asking their opinions about the course structure and use of ultrasound after the course.

POTENTIAL IMPACT TO THE FIELD

Point of Care Ultrasound is a clinical skill that a growing number of physicians are expected to know and use at the patient's bedside. The traditional classroom teaching model with classroom style lectures and hired models for scanning is a popular way to teach large groups of learners, however preparation for such courses in the academic setting is costly, time consuming, and difficult due to varying schedules of the participants. Web-based lectures followed by small group hands on training in the hospital at the bedside may offer an equally educational and more efficient way to train physicians POC US.

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POSTER #: 4

Raising the Bar of Professionalism in a Fellowship Program: From Discipline/Enforcement to Prevention

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All are affiliated with Keck School of Medicine, USC

IDEA

The author is program director for the child and adolescent psychiatry fellowship at USC. The fellowship is a two year fellowship that accepts 6 residents per year. This is her 6th year. She recently observed that her residents were happy and learning skills and knowledge at a faster clip than earlier years' residents. She began to ask herself, "why is everything going so well?"

RATIONALE

Lack of dependability and collegiality by just 1 fellow in a program can result in poor morale and worsened training experience for all fellows in a program. The author was surprised to see that interventions mediated primarily between program director and fellows were effective in changing culture.

METHOD

The author retrospectively identified 4 interventions that contributed to the improvements in fellow collegiality and dependability: 1) The program director articulated the value of a positive culture in which residents treat each other fairly and are dependable in carrying out their duties as one in which fellows can learn better and treat their patients more competently, 2) The program director wrote and enforced policies that support the premium placed on dependability and fairness in treatment of peers, 3) The program director mentored chief fellows, who create the on-call schedules, in how to create fair schedules and approve change request from fellows, all with an eye towards maintaining fairness, and 4) The program director empowered fellows to play a key role in recruitment and selection of the next class of residents, with an eye to selecting candidates who display outstanding interpersonal behaviors with peers

EVALUATION PLAN

Measures of resident achievement: 1) Faculty Evaluations During Residency—patient care and medical knowledge; 2) PRITE scores. Measures of fellow satisfaction with the program: 1) ACGME surveys of fellows; 2) internal evaluations of program by fellow. Measures of fellow collegiality and dependability: 1) faculty evaluations during residency—dependability/reliability and interpersonal relationships with peers; 2) number of disciplinary cmt meetings; 3) referrals to resident well-being committee; 4) residents being counseled by program dir/ receiving l.o.w.; 5) faculty members' recall of residents with poor dependability/reliability and collegiality; 6) program director's recall of time spend on disciplinary issues. Measures of graduate achievement: 1) Board certification post residency; 2) Faculty evaluation of who would I send a patient to?

POTENTIAL IMPACT TO THE FIELD

Attention to behavior between physicians-in-training, in both professionalism and interpersonal skills, may help raise achievement among physicians in training at multiple levels and in many specialties.

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POSTER #: 5

"Dream Teams" -- A Peer-to-Peer Mentorship Program for Adult Learners in an Emergency Medicine Residency Training Program

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University of Southern California, Department of Emergency Medicine

IDEA

The traditional, hierarchical form of mentoring in academic medicine, whereby a senior faculty mentor instructs a junior protégé, may be more effective when augmented by a peer-mentoring group. Peer groups share generational values, an absence of power differentials, and provide a nurturing environment that facilitates learning and sharing personal concerns.¹ Such groups are effective in leadership development, and many organizations and companies are now providing support for young, developing leaders to have a safe place among peers to share their experiences, challenges, frustrations, and receive honest feedback in confidential settings.

RATIONALE

Residency is a period of intense work demands. Many residents who readily embraced hard work in premedical and undergraduate medical education experience high levels of professional burnout during this crucible period. Residents may be emotionally exhausted, overwhelmed by work demands, and may become cynical and depersonalize their work.³ A value-based, small peer group that is established early in residency may provide an opportunity for better self care, more work control, and support for career development. Such groups may not only augment traditional mentorship, but also may support residents' early aspirations as physicians and prevent burnout.

METHOD

During the first week of internship, as part of the intern orientation for a large, academic Emergency Medicine residency program, participants were asked to write a one-page reflection on what their goals were for residency and to describe their dreams for the future. Participants were split into small groups of 4 or 5 participants, with the explicit purpose to develop a longitudinal strategy to hold each member accountable for their dreams. These peer-to-peer mentorship groups or "Dream Teams," will last throughout residency and will be supported with protected time to meet and discuss shared strategies for work-life-balance, career development, resident research projects, and provide emotional skill development and collaboration.

EVALUATION PLAN

We plan on evaluating resident satisfaction with their "Dream Team" experience, as well as completing a literature search to identify a robust tool to quantify resident burnout. A uniform tool of measurement will allow us to compare residents who went through the dream team process to historical controls.

POTENTIAL IMPACT TO THE FIELD

It is our hope that resident "Dream Teams" continue to meet even after their post-graduate training is complete. In these groups, residents may find group associates who feel comfortable challenging members who may lose their bearings or deviate from their previous beliefs and values. Establishing this network early on in career development may have a significant, long-lasting impact on residents' future careers and goal setting behaviors. Furthermore, if other residency programs establish such peer groups early, perhaps the traditional, hierarchical leadership structure that has defined academic medicine in the past may evolve to become a more collaborative, value-based environment.

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POSTER #: 6

Implementation of an E-learning Curriculum for Pediatric Residents in Antimicrobial Drug Selection: Improving Knowledge, Communication, and Patient Safety

Trost, Margaret; Christman, Grant

USC/Keck School of Medicine / Children's Hospital Los Angeles

IDEA

Drug-resistant microorganisms are commonly encountered in pediatric hospitals. Infections caused by such organisms lead to longer, costlier hospitalization, increased stress on families, and in some cases death. Pediatric residents are responsible for prescribing antimicrobials at Children's Hospital Los Angeles (CHLA), but gaps in knowledge may prevent choosing the optimal drug. Recent work hour restrictions limit the time residents are available for in-person teaching sessions. Therefore, we propose an online supplemental curriculum to enhance antimicrobial education.

RATIONALE

In a survey of John Hopkins residents, 90% wanted more antimicrobial education, and their average score on an associated aptitude test was 28%. Antibiotic choice in pediatric (versus adult) hospitals is further complicated by age-specific pharmacokinetics, need for liquid drug formulations, and different spectrum of disease-causing organisms. Online teaching courses have successfully augmented similar gaps in knowledge for pediatric gastroenterology, emergency medicine, and dermatology trainees. Up to 72% of hospitalized children receive antimicrobials, and many of these are inappropriate. Part of our project will focus on controlling hospital-wide antibiotic misuse, which is occasionally prompted by parental request. One parent survey showed the majority (>58%) believed antibiotics were always or sometimes required for ear infections, throat infections, cough, and fever. Training residents to engage in an educated dialogue with families may decrease misuse while satisfying all parties.

METHOD

We will design and test an online curriculum addressing antimicrobial use in the pediatric inpatient setting. We hypothesize participation in the curriculum will result in improved antimicrobial knowledge and prescriber confidence as measured by before and after quizzes. The antimicrobial stewardship program currently in place at CHLA will be used to monitor whether participation results in decreased use of inappropriate medications.

EVALUATION PLAN

We will develop a multiple choice antimicrobial quiz, validated by pediatric infectious disease specialists, to assess participants' knowledge. We will then pilot all questions with pediatric hospitalists to determine test quality including item difficulty. Our aim is to create questions applicable to general practitioners. Additionally, we will design a 10-question Likert scale-based survey to define participant attitudes and comfort with antibiotic use. / / The intervention will be a series of six online modules delivered via a web-based virtual learning environment. They will incorporate a variety of e-lesson formats including multimedia presentations, podcasts, and interactive case studies. Learning modules will be no more than 30 minutes long and cover general antimicrobial concepts, in-depth reviews of commonly prescribed drugs, antimicrobial stewardship, and talking to families. / / This will be a randomized controlled trial with a crossover design. Each group will take the same quiz at the beginning, middle, and end of the study period (32 weeks) after receiving the intervention in either the 1st or 2nd 16-week block. We plan to recruit a total of 70 participants to ensure adequate power. At the end of the study, we will repeat the attitude survey in both groups to see if knowledge self-assessment and prescribing confidence is improved. /

POTENTIAL IMPACT TO THE FIELD

1) Increased knowledge as measured by change in test scores (2) Increased confidence in applying learned principles and communication skills (3) Reduction in inappropriate use of antimicrobials.

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POSTER #: 7

Residents' Use of Statin In The CCU

Abdelnour, Shadi

University of Nevada School of Medicine

IDEA

A quality improvement project to enhance resident usage of statins in the inpatient setting.

RATIONALE

Residents treat patients with acute coronary syndrome (ACS). Based on direct observation in the CCU, the residents do not use a specific guide to identify the appropriate dose or potency of the statin. A meta-analysis of data from 170000 participants in 26 randomized trials showed that further LDL reduction can reduce the risk of major vascular events (1). Other studies showed the benefits of intensive versus usual treatment with a statin (2,3). This QI project should help all CCU residents recognize the importance of addressing the baseline LDL level and the appropriate treatment options through the chart review outcome, lipid lecture and a self-assessment test.

METHOD

All residents who attend the rotation in the CCU will participate in the proposed quality improvement effort. All charts of the patients with ACS who were admitted to the cardiac care unit between July 01, 2012 and June 30, 2013 will be reviewed by two residents. The review will include each patient's baseline LDL, initial and discharge dose/name of statin. Residents will be tested on their current medical knowledge of this topic by taking a quiz that will include real-case scenarios from the reviewed charts. Residents will receive feedback on their performance and case-based practice in choosing the right statin and the right dose. The residents will work to plan, track and evaluate an intervention to enhance statin usage in the inpatient setting. Changes might include 1) additional of onsite educational materials for the CCU residents that will guide them to choose the right statin and the right dose; 2) collaboration with CCU pharmacists who can also identify/review residents' choice and provide feedback; and 3) enhancement of CCU attending ongoing teaching, and supervising residents' performance. The quality improvement and education effort will be implemented in July 2014 with follow-up chart review after 12 months.

EVALUATION PLAN

The first phase of our pilot will identify the actual management of ACS with statin. In light of these results, we will be able to proceed to the next step which is the evaluation of residents' knowledge in lipid management in ACS. This will identify the gap between current practice and residents' medical knowledge. Following the interventions we will gather data on resident perceptions of their own learning in the activity, as well as the perception of the other team members in the CCU. The follow-up review of charts from 2014-15 will demonstrate the impact of the resident-designed intervention on their own usage of statins and on patient outcomes.

POTENTIAL IMPACT TO THE FIELD

This pilot can provide a model for resident engagement in quality improvement in the inpatient setting that could be utilized by other programs nationally.

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POSTER #: 8

The Journey of A Thousand Miles: Improving Resident Communication Skills on the Road to Effective Team Care

Flores, Teresa, MD and Austin, Armaity Vaghaiwalla, MD, MPH, FAAFP

USC Family Medicine Residency Program at California Hospital Medical Center

IDEA

The goal of this project is to improve residents' ability to function as effective healthcare team members by focusing on developing effective resident communication skills under the guidance and evaluation of Family Medicine (FM) faculty.

RATIONALE

Research on reducing errors in critical fields outside of medicine has shown that teams working together effectively make fewer mistakes than individuals working alone. Thus, focus has been placed on enhancing the skills needed to function well for team-based healthcare¹. Of these various skills, communication skills have been found by a 2005 Joint Commission Report to be implicated in 80% of cases as the number one root cause of sentinel events². Both the ACGME Core Competencies and the new FM Milestones highlight communication as an essential skill for the FM resident. However, few residency programs have formalized curricula for assessing or improving communication skills for residents. Communication skills can be considered as a procedural competency that can be taught, learned and assessed by faculty³. The goal is to prepare a more formalized process for improving communication skills and assessing level of Interpersonal and Communication Skills (ICS) competency for the incoming intern class.

METHOD

The subjects are the 24 residents in the CHMC/USC FM residency program at California Hospital. A needs assessment survey was developed using the FM Milestones document. FM postgraduate resident years 1-to-3 and core Faculty members were surveyed. Results demonstrated that residents would benefit from additional training in conflict resolution from preceptors and peers and improving information exchange in the clinic among residents. / / A plan was developed to target these resident communication deficiencies which include: 1) Faculty development on direct observation of resident-to-resident interaction and feedback 2) Faculty training on a formal rubric which documents their observations of resident communication skills using the FM Milestones as a guide 3) Development of role playing exercises for the residents and faculty which emphasize practice communication and conflict management skills. This will be conducted in the next six months. 4) An in-training resident presentation on the importance of communication skills, 5) A brainstorming session on how to use the EMR to support resident-to-resident communication and continuity of care during handoffs and transitions of care.

EVALUATION PLAN

After brainstorming and role-playing sessions, data from residents will be collected using a satisfaction survey and commitment to change. Faculty will evaluate resident's performance through direct observation of resident's communication skills in both the clinic and in their hospital team interactions. Using standardized templates created from the FM Communication Milestones faculty will evaluate each resident at 3 intervals: at one month, 3 months and 6 months after the communication intervention plan is implemented. The long term evaluation goal would be to assess each resident's interpersonal communication skills scores at each level of training (R1, R2 and R3) and compare their recorded scores to years' prior and to their colleagues. Further evaluation would include faculty evaluation of resident interactions with standardized patients in the OSCE.

POTENTIAL IMPACT TO THE FIELD

Results from our project could be used as a model for other Residency programs who chose to implement curricula to assess and improve resident communication skills.

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POSTER #: 9

Teaching Patient Centered Care Through Guided Self-Reflection

Hales, Kathleen MD; Harper, Daubney PhD

Southern New Mexico Family Medicine Residency Program

IDEA

Can we "speed up" the process of clinical judgment leading to individualization of evidence-based medicine through a guided self-reflection based curriculum in cultural responsiveness?

RATIONALE

The final step in evidence-based medicine, adapting to the needs and preferences of the individual patient, has been difficult to achieve. In most instances, providers need the accumulated experience of years in practice to develop those skills, and some providers never do. Training in cultural competency/cultural responsiveness has been put forth as a means of enhancing the ability to provide patient centered care but has not clearly been shown to improve patient outcomes. It is not clear if that is related to the slow assimilation of CC concepts into practice, or if the two processes are independent. Reflective writing has been used to develop critical thinking and inform clinical reasoning. We have designed an intervention to test the value of problem-based guided self-reflection in learning and applying culturally responsive knowledge, attitudes and skills in a community based Family Medicine residency. Furthermore, we will evaluate the effect of this teaching on outcomes by assessing glycemic control in our diverse population of type 2 diabetics.

METHOD

We administer a standard questionnaire to assess the pre- and post intervention learner knowledge, attitudes, and skills; and a patient satisfaction survey to assess patient perceptions of resident attention to their individual needs and beliefs. The cultural competency/responsiveness curriculum consists of a modification of Ring, Nyquist, & Mitchell's "Curriculum for Culturally Responsive Health Care". We present basic themes and concepts in quarterly mini-workshops rotating the curricular elements through a 3 year recurring cycle. Each subsequent month learners are asked to use specific related problems they have encountered in their continuity clinics to prepare a self-reflection describing the problem and a potential solution which they then incorporate into their personal practice and later share their experiences with the group as a whole. The expectation is that, through focused, mentored self-reflection, learners will internalize the concepts and skills of culturally responsive patient centered care that continues for a lifetime of practice.

EVALUATION PLAN

Pre- and post intervention questionnaires for learners and patients regarding cultural responsiveness are described above. The effect of the new curriculum on outcomes will be assessed through monitoring of HBA1c levels in addition to patient satisfaction questionnaires collected for the practice as a whole before and after the initiation of the new curriculum. If we are seeing improvement at the end of the first year, as compared to pre-curricular change data already obtained as part of an internal diabetes QI project, we will extend the evaluation portion to program graduates at year 1 and year 3, comparing their KSA to graduates prior to initiation of the new curriculum.

POTENTIAL IMPACT TO THE FIELD

The speeding up of regular incorporation of culturally responsive patient centered care from years of post graduate experience to "out of the gate" can improve patient and provider satisfaction and, ideally, patient outcomes and overall health care costs.

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POSTER #: 10

A PROPOSED REMEDIATION STRATEGY OF POORLY PREPARED FAMILY MEDICINE RESIDENTS: STRUCTURED INTENSIVE READING, MENTORSHIP AND ROLE MODELING

Loubeau-Magnet, Helene

South Jersey Family Medicine

IDEA

Use of small group sessions utilizing mentoring, positive role modeling, published materials intended for the specialty of Family medicine to remediate prior knowledge gap and build knowledge scaffolding and develop metacognitive skills in poorly prepared family medicine resident. /

RATIONALE

There is a clear difference in preparation to residency between the American educated physician (our residents who went to school in the US) and the foreign educated physician (our residents who went to college in US for one reason or other ended went to foreign medical school and return to the US for residency). It is a known fact that a number of these foreign graduates do take residency positions in primary care. A clear majority of these foreign graduates end up in small community family residency programs. It then falls on the residency program to get these residents to American standards of training and turn them into competent, safe practicing physicians. These deficits are clear from their transcripts in medical school, their scores in the medical steps 1 and 2 (which often had to be repeated 2 to 3 times to obtain a passing score). This is our reality of our small community residency program in South Jersey, years after years (record reviewed for the past 10 years). In the past 10 years we hardly match any American Grad, when we do, they excel. The star foreign grad has always been the residents who immigrate to the US to make a better life for their family. These learners often have poor baseline knowledge, poor study strategies and poor knowledge structures. They are not simply lacking medical knowledge but also lacking metacognitive skills (including usage of multiple learning modalities). Institutional failure to do adequate or appropriate remediation often does become apparent in the failure of their medical step 3 and licensure examinations. I must however make a distinction, which is to state that we do have some Foreign medical graduates who excel; they differ in one thing they went to school all their life outside the US and only come to the US to retrain or for residency. / Following is a 3 steps method which I used with my advisees 3 foreign graduates and my control was the remaining 9 foreign graduates which made up our residency program of 12 residents. The problem is and has been the inability of our residents to achieve the national average on ITE exams, the inability to pass the Step 3 of medical licensing and finally passing the board exam at first try.

METHOD

The resident's progress will be monitored during precepting of office hours, participation at morning report, the result of the ITE exam, the passing of medical Step 3 and ultimately the passing of the licensure examination. Currently my three advisees have shown a dramatic improvement, in which all three achieved the national average on year two and one surpassed the national average (all three advisee were below the national average during the year one of the ITE). All three have taken their USMLE step 3 and passed, which I made mandatory for them to take at the end of PGYI and no later than September of being a PGYII. They are all 3rd year and I am anxiously awaiting the ITE exam result and they all have for goal to take their licensing examination in April and be announce as board certified family medicine physicians at graduation. We are continuing with Step A & B and actively incorporating step C. I am encouraged to report that the residents are coming to my house and volunteering their own time to this endeavor. The ITE results improvement is sustained in my former advisee and they are well working on the goal of taking their board this coming April prior to graduation. compared to the remainder of the residents who remains below the national average

EVALUATION PLAN

Perform a post graduate survey to find out how these residents are continuing to learn and self evaluate. We would have trained highly motivated physicians who seek to improve themselves always and attune to their limits. We would have transformed novice and beginners into advanced learners. / Using these same technique we could use the same strategy to help bring to par other residents in different field of medicine. /

POTENTIAL IMPACT TO THE FIELD

REFERENCES

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POSTER #: 11

Family Medicine Gynecology Procedures Clinic: Filling Unmet Needs for Resident Education and Patient Care.

Meraz, Sofia

Kaiser Permanente

IDEA

After participation for one year in the longitudinal gynecology procedures clinic precepted by a family physician the Family Medicine Residents (PGY1-PGY3) should be able to perform specified gynecologic procedures competently and independently with indirect supervision.

RATIONALE

According to ACGME program requirements for graduate medical education in family medicine (approved 9/29/13) section IV.A.5.a).(2): "Residents must be able to competently perform all medical, diagnostic and surgical procedures considered essential for the area of practice." / There is often limited time in continuity clinic to train in general clinical procedures, and gynecological procedures in particular. The variety and number of opportunities to practice the different procedures can vary widely between residents, as can the experience and comfort of different faculty members. Murdoch et al (2012) set out to evaluate their incoming PGY-1 residents experience and comfort with basic procedures and found these to vary widely among residents. Finhaber et al (2012) addressed the challenge of providing adequate procedural skills training to residents by opening a minor procedures clinic in a community clinic. After the study, residents reported that participating in this clinic improved their likelihood of performing procedures in their clinical practice. This proposed separate gynecology procedures clinic pilot within family medicine at the Kaiser Orange County Family Medicine program will provide an opportunity for supervised practice with feedback from direct faculty observation. It is longitudinal with a single faculty member so that tracking of resident performance is optimized. Competency for each procedure in the pilot will be determined by direct observation of the resident performing each procedure. This will also provide an opportunity to create and try out different types of evaluation instruments with the goal of finding the most generalizable and objective evaluation method. We use electronic medical records and plan to work with our IT department on tracking procedures for the residents in the pilot study. If data is available for years prior to pilot implementation that data will be used for comparison. / / This is a cost-effective solution utilizing available space and personnel within the department. In addition it will provide role modeling (a FM physician that is comfortable in performing these procedures in regular clinic). The goal is to increase resident comfort and competency in performing these gynecologic procedures that will make it more likely that the residents will perform the procedures in their everyday practice beyond residency. /

METHOD

The learners in this pilot are 24 family medicine PGY1, PGY2 and PGY3 residents at the Kaiser Permanente Orange County FM residency program. Two residents at a time will rotate in this gynecology procedures clinic with the same FM faculty preceptor one half day a week as a longitudinal experience throughout their 3 years of residency.

EVALUATION PLAN

During the first six months of operation of the clinic the progress made toward competency in performing informed consent and in performing each procedure for each of the seven key procedures (intrauterine device insertion/removal, subcutaneous contraceptive insertion/removal, endometrial biopsy, vulvar biopsy, cervical polyp excision, bartholin's cyst management, breast cyst aspiration) will be collected for each resident, along with keeping track on the frequency of each procedure. The data will be obtained from the electronic medical record and attending physician's evaluation of each resident. A pre and post questionnaire will be administered to the residents to gauge their comfort level with each procedure. The number of procedures for two key procedures (endometrial biopsy and IUD insertion) performed by all residents will be compared for the six months prior to this clinic versus the first six months of clinic operation to assess the impact of the special clinic educational intervention.

POTENTIAL IMPACT TO THE FIELD

We anticipate that our clinic will serve as a model for training residents in common office gynecology procedures which can be expanded to training of other minor surgery procedures to maintain and perhaps expand the scope of practice of graduating Family Medicine residents.

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POSTER #: 12

Enhancing the use of Veno-thromboembolic SMART sets to Improve Patient Safety and Systems-Based Learning of Resident Physicians and Attending Physicians

Navarro, Christine

Kaiser Permanent Los Angeles Medical Center

IDEA

The use of SMART sets has been shown in the past to improve patient outcomes with diagnoses such as beta blockers for acute myocardial infarction, thrombolytics for stroke and appropriate antibiotic administration in community acquired pneumonia. The education of resident physicians and attending physicians in the use of veno-thromboembolism (VTE) SMART sets will, likewise, improve outcomes for patient safety in the area of prevention of fatal pulmonary embolism (PE) and symptomatic deep venous thrombosis DVT. The education protocol will start with an awareness campaign followed by educational seminars on the elements of the VTE SMART sets and finally, posters in strategic areas of the hospital

RATIONALE

There is good evidence the appropriately used thrombo-prophylaxis is an opportunity to improve patient outcomes and reduce hospital costs. The use of prophylaxis has desirable risk/benefit ratio and has been proven to be cost effective. Education of residents and admitting hospitalist staff on use of SMART sets for VTE prophylaxis will improve systems practice, improve patient safety and outcomes.

METHOD

The learners will participate in educational sessions in September and October about the use of the VTE Smart sets. Posters will be placed where hospital admissions are completed as well as the resident lounges. Compliance will be monitored and tracked daily starting in April 2013 through December 2013 by faculty review of patient records. Residents will receive an electronic reminder to use the SMART sets when they fail to comply with the SMART set starting in October through December 2013.

EVALUATION PLAN

All admissions to the target Med-Surg ward will be reviewed for compliance with the VTE SMART sets. The chart fallouts will be categorized based on the cause of the fallout: 1) failure to use VTE SMART sets, 2) failure to document appropriate risk for VTE, 3) failure to appropriately document rationale for the "Do Not Order VTE prophylaxis" order. Data before and after this intervention will be tracked and analyzed. A post intervention survey will be conducted to evaluate resident physicians and hospitalist staff's awareness of and use of the VTE SMART sets. Additionally, the survey will assess the degree of burden perceived by the resident physicians and hospitalists in the use of these SMART sets.

POTENTIAL IMPACT TO THE FIELD

The use of VTE SMART sets will improve patient safety and compliance with CMS VTE Core Measures and Systems-Based Practice. We hope our protocol will be easily implemented for success in other hospitals and training programs.

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POSTER #: 13
Complex Care Coordination Clinic

Nelson-Vasquez

Kaiser Permanente

IDEA

After completion of the complex care clinic module the PGY2 and PGY3 family medicine residents should be able to identify patients in need of additional planning, discuss advanced directives, and conduct a family meeting

RATIONALE

There is a general agreement among health care leaders and economists that discussions regarding advanced care planning should be a part of standard health care practices. (1) Many times physicians do not feel comfortable having these conversations ahead of time, in spite of family and patient desires to do so. A 2008 study shows that physicians were significantly less confident about their ability to discuss DNR orders than to discuss consents for procedures. (2) Greenberg et al developed a curriculum for medical students and successfully improved student knowledge and comfort level regarding advanced care directives. (3) In addition, some curricula for teaching these skills have been developed in the inpatient and ICU settings as well as in other primary care specialties such as pediatrics, but are uncommon in the outpatient clinic setting within residency training. (4) The proposed intervention intends to increase awareness and ease of residents with incorporating these discussions into their routine clinic visits in a time sensitive and proactive manner. The clinic will also address multiple ACGME Family Medicine milestones for patient care, medical knowledge, communication and cultural competency.

METHOD

The intervention will target 16 family medicine residents each year (8 second and 8 third year residents). The intervention will include three training sessions each for second and third year residents, each session to be 3 hours in length. During the pilot year both residents in each session will be doing identical activities. By the second year of implementation the third year residents will help teach in Session 1 and 2. / Session 1: Resident discussion of advanced directives and completion of Go Wish cards, resident self-evaluation, and role-play with each other in the development of their own advanced directives. Each resident will leave this session with an understanding of how to complete their own personal set of advanced directives. This session provides enhanced awareness, knowledge and skills. / Session 2: The session will be held in a conference room large enough to comfortably seat the patient, family members and physicians. Each resident is to recruit a patient to clinic, and will mostly observe a discussion led by faculty and ultimately by a senior resident. / Session 3: Each resident will lead a discussion with their own patient / / Sessions will then repeat for the second year, for a total of 6 sessions over the course of the R2 and R3 years. /

EVALUATION PLAN

Evaluation will incorporate the following: 1) faculty will monitor participation of residents and number of patients seen, 2) learner reaction – post survey and immediate feedback regarding newly learned skills, 3) learner confidence and behavior - Pre and post module evaluations of confidence in holding advanced care discussions as well as frequency of skills application in general FM clinic, Residents will track the number of patients with whom they have had these conversations and assign a "level of comfort" score to each 4) impact – although the initial project is designed to influence subjective attitudes and comfort levels among residents, long term implementation may incorporate additional goals such as monitoring rates of rehospitalization and use of palliative medicine services, both by patient and by resident physician.

POTENTIAL IMPACT TO THE FIELD

Residents will be able to use the skills obtained through this intervention to improve patient satisfaction and health outcomes, as well as personal satisfaction with patient care; the module can be incorporated into any training program that seeks to teach complex care management, especially those of pediatrics, internal medicine, and critical care subspecialties.

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POSTER #: 14

Smart-phone diabetic application help improve diabetic care

Nguyen, Tam

San Joaquin General Hospital Family Medicine Residency Program

IDEA

Using an interactive smart-phone diabetic application, can family medicine residents improve their patient's glycemic control as measured by A1c.

RATIONALE

Majority of diabetic patient are cared by primary care providers. However, many of them expressed discomfort with all of diabetic management especially with insulin therapy [1]. Even primary care providers who have a better grasp of diabetic management, they do not have the time to customize the individual medication regimen for the patients. One of the most difficult concepts is determining the right insulin regimen. Although there are several smart-phone applications on the market, there is no validated application for providers to confidently use to assist their diabetic patients [2]. In addition, most of the applications are geared to assist patients with self-monitoring and not to assist the providers [3, 4].

METHOD

In order to design a user-base smart-phone application, we want to have quality analysis of various learner stages focusing on novice to competent users as well considerations from proficient and expert users. We want an application that is simple to use and understand for the novice users but has the information easily assessable for the expert users. First, we will perform a need analysis by the following: / 1. Focus quality interview of the providers in various stages (medical students, interns, residents, attending, and endocrinologist) to determine what they want. We will try to have 6 members in each learner stage. / 2. Quality interview of diabetic patients to determine what they need help and how they can interact with their providers outside of the clinic. We want to interview at least 20 patients. / 3. Prototype the applications and rapid testing of the prototypes / 4. Have programmer design the application. / 5. Focus group analysis of the beta-version of the application. /

EVALUATION PLAN

Once the application has been created, a group of family medicine residents will be selected to test the application. Each provider will have baseline data of their average A1c as the primary outcome and other diabetic metrics such as microalbumin, lipids, and blood press as secondary measures. In addition, the providers will be given a pre-test using a on some basic concepts of diabetic management as well as Likert questionnaire about their comfort level with diabetic management. Once these baseline data has been obtained, the residents will be given the application to use with their patients. After a minimum of six months, the same metrics will be obtained for each provider to see if there is a difference. The same post-test and questionnaire will be given to the providers. / /

POTENTIAL IMPACT TO THE FIELD

Diabetes mellitus is a huge medical burden on our society and across the world. If we can develop a tool that assist all providers but especially primary care providers better take care of their diabetic patients will tremendously help better get this chronic disease under control. When providers are less anxious about diabetes, the patients' anxiety and fear may also be reduce further improving the overall medical care.

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POSTER #: 15

Improving neonatal circumcision teaching and competency

Parsa, Elyas

San Joaquin General Hospital

IDEA

Our goal is to create a module that is completed by family medicine resident prior to performing their first neonatal circumcision in procedure clinic. This module will consist of multiple layers of cognitive assessment as well as procedural assessment on low-fidelity model.

RATIONALE

Neonatal circumcision is the most widely performed surgical procedure on neonates. Per AAP it has enough health benefits to outweigh the risks, but not recommended routinely for all neonates. 85% of circumcisions are performed by family medicine practitioners or pediatricians, yet most of the practitioners never received a formal structured training program. Most complications of neonatal circumcisions can be reduced by formal structured teaching program (1). Residents and faculty in our family medicine program have variable knowledge and skill level. Residents are graduating with different experiences due to significant exposure and teaching variability. Our goal is to reduce teaching variability and cognitive and procedural skills while being able to certify residents as competent in this procedure.

METHOD

We propose a module to be created by faculty members with best practices on neonatal circumcisions, including a how to video filmed from multiple angles. A checklist will set the expectations and the residents participating PGY2-3, will go through a step wise graduating program before performing the procedure in clinic. After cognitive assessment the resident is videotaped while performing the procedure on low-fidelity model. After the checklist is completed the resident once again is filmed at least once at the beginning of the program on live neonate and once at the end of the program. Their skills are evaluated by assigned faculty member according to initial checklist.

EVALUATION PLAN

Pre and post surveys are performed for both the residents and faculty members participating. The focus will be to identify if residents will feel more comfortable performing this procedure after the completion of the module and to complete self assessment on improvement of procedural skills. The faculty will receive surveys focusing on improvement on procedural skills before and after the module is completed by residents and the ease in teaching procedure when the residents come in with same amount of required knowledge. Additionally assigned faculty evaluator will be surveyed regarding the ease of evaluations for this procedural skill. Complication rates prior to implementation of the modules and after implementation will also be assessed.

POTENTIAL IMPACT TO THE FIELD

Positive results will allow us to share developed module and decrease complications rates in residency and beyond. After reviewing literature there seems to be a void in CME on the subject of neonatal circumcisions. Additionally it will ease the evaluation process and certification of competence for the residents in this specific procedure and others once modules are developed for all procedures performed in FMC.

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POSTER #: 16

SUDIFM: Substance Use Disorder Intervention in Family Medicine

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Harbor-UCLA Medical Center

IDEA

Psychologist proctored sessions with family medicine residents and selected patients to address issues of substance use disorders.

RATIONALE

Although substance use disorders are common in primary care, family medicine residents often do not have a structured curriculum to disseminate tools to screen, risk stratify, and practice brief evidence-based interventions such as motivational interviewing. We have designed a program that will provide family medicine residents with the knowledge, attitudes, and skills necessary to effectively apply motivational interviewing with substance use disordered patients in primary care. The curriculum will involve instituting Substance Use Disorder Interventions in Family Medicine (SUDIFMs) into our residency program with our teaching psychologist directly observing and coaching the residents' using motivational interviewing with their patients.

METHOD

The curriculum will include 12 interns and 24 residents in the Family Medicine Residency Program at Harbor-UCLA who will be scheduled blocks that include full clinic sessions dedicated to behavioral interventions. The trainees will schedule patients into these sessions who they suspect or have identified to have substance use disorders alone or in combination with an uncontrolled medical or mental health diagnoses that the patient and provider agree to address during these approximate 45 minute visits. Each SUDIFM session will start with a "huddle" between our teaching psychologist and the resident to set an agenda for the visit (e.g., identify substance use disorder or lifestyle issues that the provider intends to address). In addition, the psychologist will observe the provider-patient interaction and will give the resident qualitative feedback on their use of motivational interviewing at the end of each clinic session.

EVALUATION PLAN

We plan to survey the resident's pre and post block session assignment for attitudes and medical knowledge regarding substance use disorders and motivational interviewing as well as formative feedback during each clinic session and a summative evaluation at the end of the block sessions. To further adjust our curriculum, a learner satisfaction interview will be conducted at the end of the block session. We also plan to have patients complete an evaluation of the session.

POTENTIAL IMPACT TO THE FIELD

Our model will introduce and re-enforce motivational interviewing giving residents another therapeutic modality to use in a medical home for patients with challenging medical and mental health issues.

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POSTER #: 17

An Innovative Poverty Medicine Curriculum to Train Future Physicians in the Care of Vulnerable Populations

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IDEA

An Innovative curriculum to enhance resident attitudes towards vulnerable patient populations and their skills in working with these populations.

RATIONALE

There are over 5,824 Medically Underserved Areas (MUAs).¹ Physicians likely to work in MUAs tend to be primary care physicians, ethnic minorities, mission driven and those having adequate training with the underserved.^{2,3} Even those who do work in these communities have high burnout rates. Underserved tracks have emerged in medical schools and residency programs to meet physician training needs. However, most of these focus predominantly on clinical experiences or medical management of illnesses in the underserved. We propose a longitudinal poverty medicine curriculum that will address the causes of vulnerability, and provide tools for community engagement, advocacy and burnout prevention.

METHOD

In addition to the existing extensive clinical experiences with vulnerable populations, second-year family medicine residents (N=12) will participate in 14 two-hour (28 hours) poverty medicine seminars as part of a 3-year longitudinal curriculum. Seminars will include discussions focusing on three main areas: 1) root causes of vulnerability, including health and human rights, social determinants of health, disparities in health and oppression in medicine; 2) tools to be used to address vulnerabilities including community diagnosis and engagement, health policy and advocacy, and cultural sensitivity training; and 3) self-care, burnout prevention, and an ongoing resiliency training curriculum will also be introduced. A values assessment survey will be used to evaluate individual's personal values, available resources and commitments to self-care and change. The curriculum will be participatory and learner-centered building each resident's presentation and community-based activities on their own interests and goals. Learners will also work on their own reflective and learning skills as part of self-care and lifelong learning.

EVALUATION PLAN

Participants knowledge and skills will be assessed using pre/post-tests, advocacy write-up and presentation on a poverty medicine topic of interest. Survey monkey and focus group will be used to assess learner satisfaction with the curriculum and its usefulness in promoting an understanding of poverty medicine. Behavior will be assessed by learner willingness to work with underserved in the future, their commitments to change and a value assessment survey, developed and adapted from existing surveys, to help individuals assess their own strengths, self-management skills, available resources and deficiencies to be able to continue to do this challenging work. Impact of the program will also be addressed specifically for those graduates choosing to work with under-resourced communities upon graduation. The mandatory exit interview will be used to assess these graduates' self-expressed understanding of the root causes of vulnerability, level of comfort and self-efficacy expressed in their ability to influence change without burn-out while working with vulnerable populations. /

POTENTIAL IMPACT TO THE FIELD

A formal curriculum addressing not only clinical experiences and medical management of illness among vulnerable populations, but also root causes of vulnerability, community engagement, advocacy and burnout prevention will add to the existing tools as an essential component of underserved medicine training for all health professions.

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POSTER #: 18

Needs assessment of the teaching and learning environment at an urban family med residency program based in an integrated health care system

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IDEA

Utilization of learning principles to assess and enhance the learning environment for family medicine residents.

RATIONALE

The Accreditation Council for Graduate Medical Education (ACGME) Family Medicine Residency Review Committee (RRC) is revising the program requirements for family medicine as of July 2013 to focus on milestones. The learning environment has a powerful impact on learners in relation to their professional formation as physicians and providers, as well as on their ability to meet many of the milestones (Dennick 2012). This project intends to evaluate how well our learning environment supports and motivates our residents to learn, and how frequently recommended teaching strategies are utilized. Our project will take this data and make changes in the formal and informal curriculum and work toward enhancing the overall learning environment for a new generation of learners (Roberts, 2012). Our interventions will also be based on key learning principles shown to be impactful, including focus on development of reflective and metacognitive skills (Ambrose, 2010).

METHOD

Our family medicine program has 27 residents, 5 core faculty and 15 part-time faculty who were recipients of this intervention. We conducted a cross-sectional survey of all residents (27) in all the three classes (PG1, PG2, PG3). The online survey includes a spectrum of questions to assess the current curriculum and learning environment. Both formal as well as informal forms of learning and the learning environment (hidden curriculum) were evaluated. The pre-intervention survey was conducted in October 2013 and results shared at our family medicine residency retreat November 2013. Focus group discussions allowed the development of suggested improvements for the learning environment. Groups were provided with tools, including learning principles and guidelines we have extracted from a review of the literature on clinical teaching, professional formation and the formal, informal and hidden curriculum. The core faculty selected three for implementation in January 2014. The results of the pre-survey and descriptions of the three interventions and any initial progress in implementing them will be shared at the IME Conference.

EVALUATION PLAN

A post-intervention online survey will be done in Fall 2014 to reevaluate the learning environment. In addition we will gather data on learner and faculty reaction to each of the three changes, as well as their confidence in key knowledge, skills, attitudes and practice behaviors targeted in the interventions. The program director will monitor and ensure that the planned data collection and interventions are completed. The post-study survey will also attempt to capture through narrative questions the perceived changes in behavior of faculty and residents in working to create an enhanced learning environment.

POTENTIAL IMPACT TO THE FIELD

Programs anywhere in the country, regardless of specialty, can benefit from a process to continually adapt to the learning needs of new generations of learners.

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POSTER #: 19

Using an Advocate for Clinical Education to Enhance QI/PS Curriculum

Rommereim-Madden, Daphne

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IDEA

To enhance the QI/PS skills of family medicine residents utilizing a multi-modal curriculum that incorporates use of an Advocate for Clinical Education (ACE).

RATIONALE

Quality and Safety have received increased and continued attention since publication of the now classic Institute of Medicine Reports Too Err is Human and Crossing the Quality Chasm. In July 2014 implementation of new ACGME milestones in Family Medicine begins. The specificity of performance requirements in quality improvement (QI) and patient safety (PS) has increased. All residencies need to find a method to meet these expanded requirements. In 2013 Schleyer et.al. (1) demonstrated one effective method of enhancing learning of QI/PS in the inpatient setting, using what they called an advocate in clinical education (ACE) who followed the residents and provided guidance in QI/PS as well as assessment of compliance with standards. In a needs assessment conducted with our residents, multiple evidence-based approaches to enhancing teaching of QI/PS were proposed. Use of an advocate of clinical education (ACE) in the outpatient setting was the method selected as most appealing.

METHOD

A plan has been developed that is based on learning principles (2) which recommend use of multiple modalities. Thus our 2-year curriculum will incorporate 1) establishment of the cognitive base of knowledge of QI/PS, 2) enhanced requirements for a QI project that is based on the Plan-Do-Study-Act (PDSA) model, and 3) use of an advocate within the resident's continuity clinic. Selected Institute of Healthcare Improvement (IHI) modules (3) on patient safety will be used to establish the cognitive base along with guided case-based discussion within the core curriculum of those materials and the skills required to utilize PDSA. Faculty will guide these projects using a structured tracking form. An Advocate for Clinical Education (a non-physician health professional) position will be established. The advocate will follow residents during their outpatient clinic sessions to observe and provide structured feedback in relation to QI/PS goals. The advocate will provide feedback immediately after each session accompanied by entries into New Innovations to facilitate tracking of performance.

EVALUATION PLAN

The evaluation of the effectiveness of this project will include 1) tracking to ensure all elements are implemented as planned; 2) documentation of resident reaction to all elements collected as part of the annual resident assessment of program elements; 3) documentation of resident achievement of the milestones related to QI/PS will be tracked as a normal part of resident evaluation, utilizing the New Innovations documentation; and 4) tracking of impact of the resident's QI studies on patient care and patient outcomes. Residents will also be queried annually on their perceived confidence in the independent utilization of the QI/PS skills within their future practice. Results from the 2013 graduates (with limited formal instruction) will be used as a baseline for future comparison.

POTENTIAL IMPACT TO THE FIELD

The overall program could serve as a model for others. In addition, our utilization of the Advocate for Clinical Education will provide an additional potential model for primary care education in any health profession

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POSTER #: 20

It's not what we teach, its how we teach it that impacts learner values.

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IDEA

Reformatting how we teach pediatric cardiology to residents to motivate pediatric residents to be ready, willing and able to care for special needs patients

RATIONALE

Pediatric cardiac patients are complex and time intensive; thus general pediatric practitioners will have to be motivated in order to consciously set aside time for those patients, to care for them, advocate for them and continuously update needed knowledge. To accomplish this the planned curriculum is built on basic learning principles related to 1) prior knowledge, beliefs, fears; 2) scaffolding of knowledge and utilization of metacognitive skills; and 3) the principles of motivation and physician resilience.1,2,3

METHOD

Twenty-six first year pediatric residents will participate in this 5-hour curriculum that supplements the material in the pediatric core curriculum. The method proposed incorporates the affective with the cognitive. The interactive sessions will provide 1) the cognitive base in pediatric cardiology through use of specific patient cases in order to structure their knowledge management more easily, and to connect them to the patients (pictures of the child, not just facts about him/her) and to the potential impact of their care or lack thereof; 2) exploration of their prior knowledge about cardiac patients and their fears about including them in their own primary care practices; 3) discussion of the importance of continuity and the vital role played by these providers in the care of special needs and chronic disease patients. In this course we will also help them build metacognitive strategies including horizontal scaffolding as they compare the cardiac patient cases to other special needs children they have cared for. The tools recommended for building resilient physicians will also be utilized as part of small group activities (e.g., using reflective questions to promote self-awareness).3 The core cases developed as part of this project will also be utilized within the pediatric core curriculum and inserted twice per year in the Friday case-conference attended by all 78 pediatric residents. These opportunities will be used to reinforce what is taught in the focused curriculum. / /

EVALUATION PLAN

The planned evaluation includes the following: / 1. Accountability: how many attended sessions, were teachers available, resources in place (track attendance and feedback from each session) / 2. Reaction: did the residents feel that the sessions were useful (brief feedback at the end of each session and end of series via rating form) / 3. Learning: did their learning of pediatric cardiology, pediatric cardiology skills improve (review of in service exam results for the "treatment" group versus prior learners over past two years) / 4. Projected behavior: pre-post questionnaire to specifically address questions of how comfortable they would be taking care of chronic cardiac patients, whether they plan to include these patients in their practice, how important they believe it is to keep up with knowledge and skills beyond what they learn in residency (compare "treatment" group to last year's group) /

POTENTIAL IMPACT TO THE FIELD

: If the idea works it could 1) provide a model for teaching subspecialty care that impacts values as well as knowledge, and 2) potentially result in improved primary care access to care for chronic/ special needs patients; and possibly improved patient outcomes (patient satisfaction and improved quality of life).

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POSTER #: 21

Longitudinal Clinical Research Curriculum During Residency Training

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IDEA

Implementation of a research curriculum for oral and maxillofacial surgery residents to improve the scholarship of discovery.

RATIONALE

A trainee's engagement in scholarly activity is an essential component of the future growth of oral and maxillofacial surgery (OMS) in the United States. It provides an opportunity for the discovery of innovative treatments, demonstrate the outcomes and effectiveness of established interventions and the development of critical analysis skills that impact the clinical decision-making process (1). Despite it being an accreditation standard and an overall agreement of the importance of the scholarship of discovery, a recent survey of OMS programs in the US found that only 75% of the programs who responded indicated that their residents participated in research, with most program directors and trainees feeling that this participation was only important for those entering an academic practice and none of the programs required a publication in a peer-reviewed journal prior to graduation (2). Research productivity has continued to decline in US OMS training programs, as reflected by the paucity of American authors in the specialty journal (3). The goals of this curriculum are to provide trainees in OMS with the knowledge and tools to complete a research project utilizing sound scientific method and to create a culture within the residency program that values the importance of research in the training of the next generation of surgeons.

METHOD

A one-year curriculum with one-hour sessions held twice a month will incorporate the following six areas: a) research mentoring b) clinical research design c) statistical analysis d) IRB process e) scientific writing and f) presentation skills. Trainees will also complete a research project under the supervision of a faculty mentor during the year, while providing periodic updates of their progress for feedback from peers and faculty. The teaching techniques will utilize a combination of interactive lectures, video-clips, brainstorming and hands-on sessions. The curriculum will be held every two years, allowing trainee participation twice during the 6-year residency program. By the end of the curriculum, the resident should be able to: a) identify the qualities of an effective research mentor b) define a clinical problem and formulate a research question c) identify the clinical research design to best address a research question d) demonstrate effective writing skills in a submission ready manuscript, and e) skillfully perform an oral presentation as demonstrated by having a satisfactory score in content, speaking style and delivery.

EVALUATION PLAN

Trainees performance and confidence will be evaluated through the use of a pre and post-curriculum test and the publication of the research project in a peer-reviewed journal or its presentation at a national meeting. An end of curriculum evaluation and a reflection will be completed and a debriefing session will be held to discuss areas of future curriculum improvement and impact on behavior.

POTENTIAL IMPACT TO THE FIELD

This curriculum will provide a basis for other OMS training programs to incorporate into their didactic schedule a research curriculum to foster research productivity and interest.

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POSTER #: 22

Ultrasound Training for Emergency Medicine Residents to Enhance Detection of Ectopic Pregnancy

Kim, Albert J

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IDEA

Enhance detection of ectopic pregnancy in Emergency Medicine Residents through use of the principles of scaffolding, targeted practice with feedback and self-assessment.

RATIONALE

Patients, residents and faculty agree that ectopic pregnancy is a "can't miss" diagnosis due to the high morbidity and mortality. The sensitivity of bedside pelvic ultrasound is 67-91% in identifying an intra-uterine pregnancy depending on the study.² The caveat with the studies showing high sensitivities included only exams performed by clinicians who had between 10-24hrs of dedicated training and between 10-20 proctored exams. After critical incident reviews at our own facility, the concern has been raised over missed obvious ectopic pregnancies and that a clear knowledge gap is present. In addition, our resident training does not involve dedicated instruction. Furthermore, a recent publication outlining common scenarios of missed ectopic pregnancies highlights the fact that this is still a serious issue.³ The Council of Residency directors Emergency Ultrasound Consensus Committee states that training should "include didactic and hands-on sessions covering critical EM US examinations."¹ The proposed curriculum will provide needed training utilizing research-based learning principles.

METHOD

The planned intervention will be incorporated into a one-month ultrasound rotation. This specific experience will include information on utilization of ultrasound for diagnosing ectopic pregnancy (indications, limitations, timeliness), the technical skills for conducting the transvaginal ultrasound, the interpretation of results (diagnosis, disposition, and implications) and the interaction skills needed to ensure patient comfort and appropriate patient education. The session will be built on basic learning principles including setting definitive expectations, use of scaffolding including mind mapping, guided practice with feedback, and the metacognitive skills related to self-reflection. Also incorporated will be common pitfalls in pelvic ultrasonography in the first trimester of pregnancy.⁴ The formal curriculum will include 1 hour of didactic lecture and introduction, 2 hours of interactive simulation, 2 hours of guided computer-based practice, and approximately 6 hours of guided practice during the weekly supervised one-on-one clinical instruction within the Emergency Department. Residents will utilize a formal checklist to self-assess and obtain structured feedback throughout the curriculum. The goal will be 10-20 proctored simulated and actual exams.

EVALUATION PLAN

A standardized checklist/assessment scale on pelvic ultrasound will be implemented measuring resident performance pre-intervention (initial assessment), post-intervention at the end of the rotation, and 6 months post-rotation to determine if improvement persists over time. We will also compare this to our current PGY2/3/4 residents on the same checklist/scale who have completed an ultrasound rotation but without formalized instruction in pelvic ultrasonography. / / This curricular element will also be assessed by the residents to determine the quality of instruction and their own confidence in their performance of the exam. The Emergency Department is also tracking the number of missed ectopic pregnancies to determine how the intervention impacts this occurrence over time. /

POTENTIAL IMPACT TO THE FIELD

This training module could provide a model for training in relationship to any diagnostic procedure, such as ultrasound, in all relevant specialties.

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POSTER #: 23

Crossword Puzzles as an Adjunct to Emergency Medicine Resident Teaching

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IDEA

To utilize topic-specific crossword puzzles as an adjunct to modular teaching sessions.

RATIONALE

Emergency medicine is a unique medical specialty dedicated to the diagnosis and treatment of unforeseen illness or injury. As such it requires a broad knowledge base over all age ranges and disease states. To become Board Certified in Emergency Medicine an applicant must pass both written and oral board examinations. The American Board of Emergency Medicine (ABEM) has developed the "Model of the Clinical Practice of Emergency Medicine." This is a document of the required topics in EM to be mastered during residency to successfully pass certification examinations. / EM resident education encompasses both direct patient care and various didactics based on the "Model" document. One of these didactic techniques is the modular-based teaching of specific topics. Once a year EM residents are required by the ABEM to take an in-service exam to assess current knowledge base and insure adequate progression of knowledge compared to peers in the nation. / New and exciting techniques other than standard lecture format should be employed to keep residents engaged in the process and facilitate retention of knowledge. Crossword puzzles are popular but also challenging. Crossword puzzles have been used in various areas of medical education to facilitate student learning including as an adjunct to other teaching methods to assist with knowledge retention. /

METHOD

Our EM residents participate in weekly teaching modules on a specific topic. At start of the module a Pre-Test multiple choice exam would be given. This is followed by a 45 minute lecture. At the conclusion of the lecture each half the residents are randomly assigned and given a crossword puzzle on the topic that had been discussed. The other residents receive no additional material. The crossword is to be completed and returned the following week. One month after the initial lecture a Post-Test is given to all of the residents on the initial topic but different questions than the Pre-Test to assess knowledge retention.

EVALUATION PLAN

To assess impact of the addition of the crossword puzzle the "Learning Gain" will be calculated after completion of 6 sessions. This is calculated using the following formula: $\text{Post-learning Score} - \text{Pre-learning Score} / \text{Maximum Score} - \text{Pre-learning Score} \times 100$ to show percentage learning gain. Residents will complete an anonymous survey to assess impressions of the addition of the crossword puzzle.

POTENTIAL IMPACT TO THE FIELD

If shown to consistently have increased learning gains, both grossly and statistically, this could be incorporated into all residency year teaching modules to facilitate residency education.

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POSTER #: 24

Reflection as a Vehicle to Improve Empathy in Emergency Medicine Residents

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IDEA

To implement a curriculum that would require residents to produce reflective writing pieces at regular intervals throughout an academic year with the goal to improve empathy.

RATIONALE

To be understood is a basic human need, and the backbone of patient-physician relationships, whereas, empathy can be defined as the ability to understand another person's perspectives, inner experiences and feelings. Recent work has shown that empathy, an essential element of professionalism, is both measurable and a significant factor in patient outcomes.(1) While medical schools may do an excellent job of choosing candidates that exhibit the quality of empathy, there is evidence from multiple studies that suggest that empathy declines during training.(2) In fact, it appears that the decline in empathy is greatest just as patient contact increases. This means that the house staff in a teaching facility, the physicians with the most patient contact, may be the ones least equipped to give our patients the kind of care that they need – empathic care.

METHOD

In this pre and post study, all first year residents will author one reflective writing piece during every four week block of the academic year in which they spend time having direct patient contact in the emergency department (total number 8). Instructions for producing reflective writing pieces will be given to all participants in a live didactic session during their orientation month at the beginning of residency training. In addition, they will have access to written instructions and expectations by email and in the on-line residency handbook. Each piece will be read and rated by a member of the residency leadership and placed in the resident's academic portfolio.

EVALUATION PLAN

Study participants will complete the Jefferson Scale of Empathy prior to the start of the curriculum and again at the completion of one year. Depth of reflection will be determined for each written piece using a predefined rubric. At the conclusion of one year, each resident will be given a survey that rates satisfaction with the curriculum.

POTENTIAL IMPACT TO THE FIELD

This curriculum is easily portable to other emergency medicine residencies and, if successful, could potentially improve patient outcomes on a wide scale. In addition, this curriculum may satisfy ACGME mandated measurements of resident progression in milestones based on interpersonal communication skills and professionalism.

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POSTER #: 25

Guidance in Professional Formation through Collaboration, Tracking and Feedback

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IDEA

To enhance self-directed learning of pediatric residents through use of collaborative development of individualized learning plans with ongoing tracking and feedback.

RATIONALE

The ACGME states "residents must demonstrate the ability to continuously improve patient care based on constant self-evaluation and life-long learning."¹ The ACGME Pediatric RRC requires pediatric residents complete an Individualized Learning Plan (ILP) annually focusing on the 6 competencies. Evidence has shown that the use of ILPs varies from program to program, and best use practices are not clear. Resident report difficulty in developing attainable goals with plans to implement them. Use of a system to track progress was associated with achievement of learning goals.² Collaboration on development of ILPs will build upon the principles of learning theory, specifically use of active learning, feedback and principles of motivation.³ Currently, our residents complete an ILP once per year, discuss goals with a program director and usually do not review the ILP again.

METHOD

Seventeen interns will develop learner objectives and expectations as part of their initial learning plan. Program directors will track the plans and provide periodic feedback focusing on inpatient skills. Two introductory two-hour sessions during intern orientation will be given to guide interns through ILP development. Interactive classroom techniques will include: small group activities, think-pair-share, facilitated discussion, reflective writing, and commitments to act. During the first inpatient rotation, a program director will have individual meetings with interns to develop ILP tracking sheets. Faculty will utilize the tracking sheets during direct observation, rotation feedback, and online written evaluations. At the start of each ward rotation (six times per year) program directors will remind interns of their ILPs and residents will summarize their progress on meeting their own plans. The program directors will review the educational portfolio with each intern at the semi-annual evaluation meetings. Education principles in the areas of feedback for performance improvement, motivating learners, and use of an electronic portfolio will be utilized. / / By the end of the year, the interns should be able to demonstrate how they have: Identified strengths, deficiencies, and limits to own knowledge and expertise; identified and performed appropriate learning activities and incorporate formative evaluation feedback into their growth. /

EVALUATION PLAN

Learner reaction will be assessed through program evaluation surveys before and after implementation and through written reflection. This can be compared with a control group of last year's interns using the ILP, without the study elements. A follow-up self-assessment form will evaluate how well ILP goals were achieved in both the pilot and control groups. Direct observation by multiple faculty members will provide evaluation of learning related to the target objectives. Behavior changes of interns will also be assessed through the periodic meetings with the program directors and through the annual program evaluation survey of faculty.

POTENTIAL IMPACT TO THE FIELD

This intervention can act as a model for other residency programs to guide and maximize lifelong learning through longitudinal utilization of ILPs.

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POSTER #: 26

Impact of Resilience Training for Pediatric Residents on Perceived Stress and Empathy

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IDEA

Resident participation in a program to cultivate coping strategies will promote physician resilience and global well-being.

RATIONALE

An informal needs assessment amongst the LAC + USC pediatric and combined internal medicine-pediatric residents established that they are experiencing work-related stress and are interested in learning strategies for coping with stress. The high levels of demand and responsibility residents face are stressors that potentially undermine professional practice on a daily basis. 1 Studies suggest that burnout levels are high among residents. 2 The consequences of resident physician burnout include poor quality of life, depression, decline in stability of physician workforce, and worse physician-patient relationships contributing to problematic patient care. 1,2 Other studies have demonstrated "an increase in cynicism, an erosion of humanitarian attitudes, and a decline in empathy." 1 Resilience can be defined as the capacity to respond to stress in a positive way that allows people to adapt and thrive in the face of challenges. 3 Employing strategies and interventions to decrease physician stress may enhance resilience and in turn decrease physician burnout. These include mindfulness-based stress reduction, guided imagery, narrative reflection, movement meditation, and debriefing. 1,2 We hypothesize that our intervention to cultivate coping strategies will decrease perceived stress, improve global well-being and increase empathy, which will ultimately, increase resident resilience.

METHOD

Pediatric and combined med-peds residents (PGY1-4) will participate on a voluntary basis at monthly one-hour sessions from 12 to 1 pm. The sessions will last for one academic year, with twelve total sessions. / / The sessions will rotate through the following interventions: / 1. Council: a community building practice of authentic expression and empathic, non-judgmental listening and receptivity / 2. Guided imagery / 3. Mindfulness-Based Stress Reduction / 4. Movement meditation (yoga, tai chi) / 3. Narrative Medicine including debriefing (opportunities for residents to discuss stressor and difficulties) and mythic story (use of metaphor and archetype in healing children) /

EVALUATION PLAN

Before initiation of the first session and after conclusion of all sessions, participating residents will complete 4 self-administered validated surveys on 1) perceived stress, 2) empathy, 3) global well-being, and 4) burnout. The residents who do not participate in the sessions will be a non-equivalent control group. Before and after each individual session, residents will undergo assessment of acute stress state with the Profile of Mood States. Residents will also complete a survey after completion of all sessions to evaluate perceived benefit of the program and changes in attitudes.

POTENTIAL IMPACT TO THE FIELD

This intervention could serve as a model for any residency program to help their residents build resilience to cope with the stress of being a physician.

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POSTER #: 27

Stepping (mile)Stones to Better Care: Helping Resident Apply Evidence-Based Practices to their Continuity Patients

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IDEA

Using structured, interactive curricula, electronic health records and patient-provider data with primary care residents to improve acquisition, analysis and application of evidence related to continuity patient care.

RATIONALE

Current practicing physicians and resident physicians routinely fail to provide proven, outcomes-based interventions to improve the health of their patients. Residents may pursue as few as 28% of the clinical questions they encounter and find answers to < 50% of queries attempted. Residency programs are required by supervising and accrediting bodies to provide outcomes demonstrating resident physicians are able to "locate, appraise and assimilate evidence" and "learn and improve at the point of care." Residents frequently cite time, lack of skills and lack of knowledge of resources as barriers to searching for clinical questions. With the use of Wi-Fi capable tablets, basic search strategy instruction and electronic records residents may improve their success and implementation of evidence-based medicine at the point of providing care to their patients.

METHOD

Twenty-five Primary Care residency learners will initially participate in 3 two-hour foundational sessions early in the academic year. 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 initial 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. During the subsequent 11 months, traditional journal clubs and new ambulatory lecture series based within the continuity clinic sessions will continually reinforce the skills acquired and provide new content material. With provider-patient specific chart abstraction, residents will be given benchmarked quality performance measures prior and subsequent to educational sessions.

EVALUATION PLAN

Data will be collected in relation to Kirkpatrick Levels 1-4: 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 as assessed by template tool; 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. Level 4 outcomes will also be used in relation to patient-specific outcomes referenced to specific resident provider pre/post educational intervention with benchmarking to controls. Additional comparisons will be made to learners not enrolled in the intervention group. Faculty will evaluate learners' performance using standardized templates.

POTENTIAL IMPACT TO THE FIELD

This innovation builds upon previous research and could demonstrate an effective, efficient model of implementing EBM education which potentially improves quality-care patient outcomes and is broadly applicable to residencies in the U. S.

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POSTER #: 28

Reflections on Advanced Care Discussions

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IDEA

While residents have opportunities to witness and lead discussions on advanced care options for their patients, there is no standard approach to providing them insight and feedback on their experiences. They may debrief with supervisors after such discussions, but especially since these instances are often sporadic and these teaching moments take place without predictability they may not have the same impact as programmed didactic sessions which direct residents to draw conclusions from these experiences (Sahler, 2000). This exercise represents an effort to standardize feedback on a resident's personal reflection on an advanced care discussion using the REFLECT rubric (Wald, 2012).

RATIONALE

A survey was conducted of CHLA pediatrics residency graduates from 2008-2012 to explore their perceptions of self-reported comfort with conducting advanced care discussions and to delineate the sorts of experiences that contributed to their skillsets. While more than half of respondents cited feeling comfortable or very comfortable with discussing goals of care with families, it was recognized that 45.5% of respondents were in academic clinical settings. Moreover, only 33% of respondents acknowledged attending formal didactic sessions provided on pediatric palliative care. Therefore, it is unclear how well versed the respondents were in the components of these discussions and whether they actually received meaningful feedback on their efforts in these discussions. Lastly, in these residency cohorts there were no formal opportunities for reflection. Reflection allows learners to experience true situated learning where they take ownership of the responses to the questions of what, how and why things are being done (Cruess, 2009). /

METHOD

1. Residents traversing through the ambulatory pediatrics rotation in their second year of residency will receive a didactic session from a member of the palliative care team and will subsequently submit a reflection in response to the following prompts: Describe a discussion that you conducted or witnessed in which you attempted to clarify the goals of care for a patient with their parents. Was the discussion successful in clarifying these goals? Specify your clues to the parents' perceptions of this conversation. What would you do differently if you had to rewind and start the whole conversation again? / 2. Independent graders will read and review the reflection using the REFLECT rubric. / 3. Rubric results will be provided to the resident and resident's feedback on insights provided will be elicited. /

EVALUATION PLAN

Graders will be trained in use of the REFLECT rubric. Their grading for each individual's reflection will be compared for reliability. The evaluation results will be provided to the individuals. /

POTENTIAL IMPACT TO THE FIELD

The purpose is to demonstrate how a standardized tool can build common foundations for feedback on an experience that takes place sporadically in training but is essential for meeting ACGME competencies in interpersonal and communication skills in relation to complex patients.

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POSTER #: 29

A Novel Curriculum Designed to Enhance the Quality Improvement and Patient Safety Skills of Pediatric Subspecialty Fellows

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IDEA

To enhance the quality improvement (QI) and patient safety (PS) skills of pediatric subspecialty fellows through formal instruction and mentored conduct of a QI project.

RATIONALE

Up to 400,000 deaths per year are associated with preventable harm in hospitals in the United States, with serious harm being 10 to 20 fold more common than lethal harm.¹ Children are at greater risk than adults of experiencing harm.² The Accreditation Council for Graduate Medical Education requires that all trainees receive instruction and participate in quality and safety work. The new Clinical Learning Environment Review (CLER) Program will examine the intersection between trainee education and institutional quality and safety efforts. A systematic review of QI and PS curricula for trainees (primarily medical students and residents) indicated that baseline attitudes towards quality and safety are positive, but knowledge of relevant topics and participation in relevant activities is generally low.³ Few studies regarding QI and PS curricula for fellows exist. This QI and PS curriculum was designed to bridge this gap for all subspecialty fellows in a children's hospital. Prior to its development, there was no standard approach among the fellowship programs.

METHOD

Approximately 25 pediatric subspecialty fellows (primarily first-year) will participate in a 10 month curriculum. The formal curriculum consists of monthly, 1-hour classroom sessions, 2 hours of on-line instruction, and ongoing, mentored, small group project completion. The classroom sessions incorporate a combination of techniques including brief didactics, guided practice with each step or skill in the Model for Improvement, and small group work. On-line instruction consists of completion of modules from the Institute for Healthcare Improvement (IHI) Open School. Fellows will work in small groups based on shared interests to develop, implement, and evaluate a QI project. Teams will be formed and a mentor assigned prior to the second session. Teams will work both during and outside of designated classroom time to identify a problem, identify measures, collect baseline data, and conduct PDSA (plan-do-study-act) cycles. Teams will prepare and present a poster highlighting the process and outcomes of their project at the end of the curriculum.

EVALUATION PLAN

1) Satisfaction: Participants will be asked to complete both individual session and curriculum evaluation forms. 2) Learning: Participants will complete a modified version of the Quality Assessment and Improvement Curriculum (QAIC) Toolkit at both the start and end of the curriculum. In addition, each IHI module contains a quiz. Successful completion of IHI modules will be tracked with a target of 80% completion. 3) Learner Application: Evidence of learner application of material will be demonstrated through completion of the QI projects and preparation and presentation of posters representing each QI project. Additional outcome measures include abstract or manuscript submission and acceptance. 4) Integration into Practice: Six months after completion of the curriculum, participating fellows will be contacted to determine the extent of their current involvement in QI and PS initiatives, as well as the goals and outcomes of these initiatives when relevant.

POTENTIAL IMPACT TO THE FIELD

This curriculum could provide a model for enhancing the QI and PS skills of pediatric subspecialty fellows, while simultaneously improving patient outcomes.

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POSTER #: 30
Quality Improvement and Patient Safety (QIPS)

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IDEA

Establishing a patient safety and quality improvement curriculum for anesthesiology residents to enhance care in the perioperative arena

RATIONALE

Anesthesia is necessary for the performance of most surgical procedures. However, providing anesthesia is an inherently dangerous activity. The manner in which an anesthetic is delivered determines its safety. Anesthetic delivery includes preoperative evaluation and risk assessment, induction and maintenance of anesthesia during the surgery, emergence from anesthesia and finally, post-operative care. Safety can be compromised during any of these steps.^{1,2} Given that errors and adverse events are associated with significant patient harm and death, it is evident that providers must be trained and educated to deliver safe anesthetic care. Medical errors in general can cause a tremendous economic burden. The cost of medical errors based on claims analysis was \$19.5 billion in the year 2008.³ This takes into account both the cost of treatment as well as short term disability costs. The American Society of Anesthesiology, The Anesthesia Patient Safety Foundation and the Joint Commission have set standards for all aspects of anesthetic care with the goal of improving patient safety.

METHOD

The subjects for this module will be 17 junior (CA-1) anesthesiology residents. By the end of the patient safety curriculum module, the CA1 residents will understand and adopt the safety mechanisms in place, identify factors contributing to errors, types of errors and learn methods of effectively communicating with the patient care team. The methods to be used in this 12 hour curriculum include: a) formal case-based presentations, b) structured practice with simulation, 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 PLAN

Each individual in the department of anesthesiology has a unique identifier to log into the department's QA website. Every resident's as well as the CA1 group's near misses and errors can be tracked using these identifiers. We will be able to compare the incidence of errors in the CA1 group before and after this module. We plan to administer a pre and post test to assess the improvement in their fund of knowledge, in addition to assessing their skills and attitude by their degree of participation in QA discussions, their understanding of the factors that lead to an adverse outcome and by the methods of implementation of practice guidelines. Learner reaction will be gathered with a standard program evaluation form to be administered at the end of the module.

POTENTIAL IMPACT TO THE FIELD

Successful implementation of this curriculum can lead to lower incidence of errors by junior residents and improve their overall confidence and ability to provide safe anesthetic care.

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POSTER #: 31

Pre-Anesthesia Quality and Safety Curriculum: Preparing to Provide Safe Anesthesia Care through Simulated Clinical Scenarios

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IDEA

To build a curriculum at the pre-anesthesia level of training (internship and orientation) to teach novices to recognize when events are not going well, calling for help, and managing patients for 2-3 minutes until help arrives.

RATIONALE

Currently, there is no formal simulation curriculum to prepare the new anesthesia residents for being safe "in-room" providers. Residents arrive with non-uniform training in anesthesia, and are given a 3-week orientation, which currently includes selected skills training and didactic lectures. / / We as resident educators are challenged to ensure that our training programs can rapidly advance the required abilities of novice anesthesia residents to work independently, without one-on-one supervision, very early in their anesthesia training. Early acquisition of cognitive skills, event specific critical skills, and communication training and are necessary to adequately respond to these infrequent events and prevent medical errors (1). Residents no longer have the luxury of the apprenticeship model of direct supervision by experienced practitioners until they reach competency (2). / / A cultural shift in medicine is thus necessary, and it is important to begin teamwork training as early as possible (3). Realistic simulation offers a potent immersive experience to teach these critical skills before our anesthesia residents begin their responsibilities in the operating room. /

METHOD

Eighteen PGY1 residents who matched in anesthesiology for their PGY2 year will participate in this Simulation curriculum. The curriculum will incorporate 2-hr sessions, one per month and then culminate in a "boot camp" which will include 16 hours of intensive training in order to fully prepare the resident for their work within anesthesiology. The training program will focus on two critical arenas, team-based communication skills and recognizing and managing critical events in the operating room (e.g hypotension, decreasing oxygen saturation).

EVALUATION PLAN

The curriculum will be evaluated in multiple ways. 1) learner evaluation of each of each session using a standard evaluation form; 2) assessment of learner knowledge will include quizzes on the cognitive base needed to handle critical events; evaluation of skills utilizing observer ratings with targeted checklists (peer and instructor); and 3) assessment of learner behaviors modeled after the MOCA (maintenance of competence) format used nationally where learners complete an online plan which will state how they will practice the information from the PASS curriculum, and then 60-90 days later have them complete an online survey to state what was actually utilized.

POTENTIAL IMPACT TO THE FIELD

As anesthesia residency programs begin simulation training to satisfy ACGME requirements, there is rapid recognition of the benefits of early training of team-based communication skills and managing critical events in the operating room. There is a need to share these curriculums, via MedED Portal, with other anesthesia programs and with other medical professions who are just beginning to use scenario based high fidelity simulation as a teaching method.

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POSTER #: 32

Promoting self-directed learning (SDL) skills in pediatric residents

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IDEA

The plan is to use learner developed worksheets accompanied by faculty coaching to enhance resident skills in self-regulation and planning own learning. /

RATIONALE

Demonstrating responsibility for lifelong learning is a sub-competency of practice based learning and improvement in medical education. Pediatric residents have reported significant barriers to successful achievement of learning goals, as well as dissatisfaction with the currently available Individual Learning Plan (ILP) format (Li et al, Acad Med 2010). Nothnagle et al (Acad Med 2010) demonstrated improved confidence and skills in SDL amongst residents using a single faculty learning coach as part of a multifaceted curriculum. Li et al (Academic Pediatrics 2010) established that pediatric residents who tracked progress on ILPs were more effective in SDL. However, only 26% of 772 residents surveyed actually did this consistently, and only 18% had a mechanism for doing so. A resident driven, faculty-facilitated process that uses worksheets to track progress towards goal achievement incorporates adult learner preferences and should promote the skills and attitudes necessary for SDL.

METHOD

Each resident in this pilot (n=12) will meet with his/her continuity clinic faculty coach at the start of the academic year to review self-perceived strengths and challenges, utilizing data from pre-existing clinic evaluations where possible. Residents will generate initial learning goals and plans in each of the 6 ACGME competencies. Resident and faculty partners will then meet on a monthly basis to review progress and complete the next month's plan utilizing resident reflections, faculty observations and weekly clinic feedback. Faculty coaches will document their observations and feedback on worksheets which will serve as tracking tools. Residents will be responsible for documenting reflections and responses to feedback, and reviewing goals and plans. By the end of 6 months it is expected that residents will be controlling their learning process as evidenced by the quality of the monthly plan and faculty reports on the guidance required during each session.

EVALUATION PLAN

The evaluation will utilize the Kirkpatrick levels. Reactions of participants regarding the intervention's utility and feasibility will be assessed via a survey at the end of 6 months. Learning will be assessed by blinded review of initial versus sixth month goals and plans using a SMART (Specific, Measurable, Achievable, Relevant, Timely) rubric. Residents will complete a validated pre and post Self-Directed Learning Readiness Scale and scores analyzed. Each month faculty coaches will document evidence of changes in resident behaviors related to utilization of feedback, tracking progress toward meeting goals and planning for future learning. Behavior change will be further assessed at a 3 month post-intervention meeting between the residents and coaches to determine which activities they have continued beyond the "training" period.

POTENTIAL IMPACT TO THE FIELD

This intervention can serve as a model of mentored practice in promoting professional formation and skills in self-directed learning.

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POSTER #: 33

Charting Progress on the Milestones: A Tool for Ambulatory Feedback and Evaluation

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US Navy

IDEA

Use of milestone assessment cards with internal medicine residents to structure frequent formative feedback and promote individualized planning.

RATIONALE

Evidence demonstrates an on-the-spot evaluation with immediate formative feedback is beneficial for resident development. This type of evaluation has been incorporated into successful teaching tools, such as the mini-CEX. Despite availability of these tools, feedback provided to residents does not meet their expectations or requirements. In the ambulatory setting, timely feedback to residents is reported to occur in just 3.5% to 19% of experiences, (Humphrey-Murto et al). While the Next Accreditation System (NAS) introduces the milestones as a new evaluation scheme, it was designed to advance the ACGME's ability to assess program outcomes and reduce administrative burden, not to provide the resident with improved feedback. This milestone card project will bridge the gap between new requirements and ongoing resident needs with a new tool for time-sensitive formative feedback and a format for structured individualized planning.

METHOD

Internal Medicine residents will be required to be evaluated on each milestone bi-annually. As a pilot program, the "milestone cards", will be used for post-graduate year 1 (PGY1) residents in the ambulatory internal medicine clinic. Each academic year, the residents will receive a packet of "milestone cards" with each card listing a single Internal Medicine milestone set, assessment scale with comments, and space for the resident's individual learning plan (ILP). Each learner will choose a single milestone card for each weekly clinic session, ideally pertaining to a skill addressed during that clinic session. After the last case presentation in clinic, the faculty will evaluate the resident on the individual milestone and provide brief formative verbal and written feedback. This feedback will encompass the faculty's interactions with the resident from the beginning of the academic year, and not be confined to the single interaction. The resident will finalize the card by creating an ILP for continuing progress on the milestone. The card and feedback process should take less than five minutes to complete. The use of "Milestone Cards" will be continued weekly until each milestone card has been completed. After completion, the cards will be returned to the program director for review and discussion at the bi-annual evaluation.

EVALUATION PLAN

Two residency programs work in the same clinic. The control group of residents will be the non-military residents in the same clinic as the study residents. At the bi-annual evaluation, all residents will be asked to self-assess their achievement on each milestone. Accuracy of self-assessment, determined by similarity to faculty evaluation, will be compared between the study and the control group. Furthermore, a survey will be completed to determine the residents' perception of the formative feedback provided in clinic and satisfaction with the process.

POTENTIAL IMPACT TO THE FIELD

As the NAS implementation continues to challenge residency programs, the "milestone cards" could provide a simple and time-sensitive tool for meeting new requirements, improving ambulatory evaluations, and enhancing formative feedback.

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POSTER #: 34

Delirium in Geriatric Patients Curriculum for Pulmonary Critical Care Fellows and Nurses

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IDEA

Provide training for pulmonary critical care fellow physicians and nurses in the appropriate provision of geriatric patient's with delirium.

RATIONALE

Geriatric patients admitted to the medical intensive care unit (ICU) are at high risk of developing delirium. Delirium is associated with increased length of ICU and hospital stays, time on the ventilator, mortality, and long term neuropsychological deficits. The American Geriatrics Society, Society of Critical Care Medicine and American Association of Critical Care Nurses recommend routine delirium assessment, to uncover delirium that would otherwise go undetected in patients. Furthermore, these societies recommend for pulmonary critical care health care providers to have essential data, knowledge, and tools to provide high-quality health care for geriatric patients with delirium (1). Many critical care physicians and nurses have been inadequately trained to meet the geriatric patient's health needs such as delirium because they spend very little time in specific geriatric experiences (2). As a result, geriatric patients may fail to be assessed for delirium (3). Of note, medical critical care physicians and nurses care for 30% of Medicare patients between the ages of 65-74 and 21% Medicare patients 85+ years old per year every year (4). Studies at our South Texas Veterans Health Care System medical intensive care unit (STVHCS MICU) for February 2012 revealed that 45% of the nurses (n=30) and fellows (n=9) felt inadequately prepared to assess for delirium. Furthermore, a chart audit of 50 patients revealed that delirium assessment in older adults in MICU was not being performed. An educational curricula and training program for pulmonary critical care fellow physicians and nurses in the appropriate provision of geriatric patients with delirium will be created. As a result of this educational curricula and training programs, the percent of older patients who are assessed for delirium in the STVHCS MICU, at least once every 12-hour shift may increase from 0% to 90%.

METHOD

6-hour discussion sessions about delirium content areas, such as prevention, screening, prevention, patient outcomes, and quality improvement strategies will be completed. 30-minute video-clips about delirium screening will be available on the hospital educational website and summary handouts/pocket cards will enhance teaching methods.

EVALUATION PLAN

Evaluation is focused on learner reaction and if the learners demonstrated an increase in knowledge, attitudes and skills in provision of safe care for geriatric patients with delirium. A multiple-choice knowledge test about the objectives will be administered at end of the discussion sessions. A 30-minute delirium screening Mini-Clinical Evaluation Exercise (mini-CEX) and Simulation about delirium management will provide formative and summative evaluation of learners.

POTENTIAL IMPACT TO THE FIELD

If the curriculum and program works it could be used to enhance knowledge, attitudes, and skills in provision of safe care for geriatric patients in other pulmonary critical care fellow physicians and nurses.

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Brody, Shara

Shara Steiner Brody, D.O. is an assistant professor in the Department of General Medicine at the University of Miami Miller School of Medicine, Fellow in the Educational Development Office, and Associate Director of the MD/MPH PBL program. She is currently working on projects exploring new applications of information technology within medical education, as well as projects exploring learners' clinical, diagnostic, and teaching skills. She also collaborates in the design and implementation of online learning modules for faculty and residents. Dr. Brody enjoys dedicating time to helping residents and faculty improve their teaching. Her scholarly work includes assessment of undergraduate and graduate educational initiatives, interpersonal communication, and student learning styles. She has conducted several analyses of evidence-based medicine and the implementation of practice-patterns. Her research has been presented at national and international conferences. Dr. Brody is an avid runner and swimmer, bookworm, and mother of three gorgeous little girls.

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Fung, Cha-Chi

Cha-Chi Fung, Ph.D. Vice-Chair of the Department of Medical Education and Assistant Dean of Educational Affairs received her PhD in educational psychology from USC in 2003. She has also completed two fellowships in conjunction with her doctorate degree: medical education and educational leadership. After receiving her doctorate, Dr. Fung was recruited as the educational researcher and the liaison to the Dean's office for the department of family medicine at UCLA. At the national level, Dr. Fung is the newly appointed Chair of the AAMC Medical Education Scholarship Research and Evaluation (MESRE) Section to provide strategic visions for the promotion of educational research in the Western region as well as at the national level. She is also a facilitator and member on the Steering Committee of the Medical Education Research Certificate program sponsored by the AAMC. Dr. Fung recently returned to USC to assume the leadership role in medical education.

Kumar, Shubha

Shubha Kumar, Ph.D., M.P.H., is an Assistant Professor in the Department of Preventive Medicine at the Keck School of Medicine at the University of Southern California (USC), as well as Director of the Business of Medicine Program and Director of the Master of Public Health (MPH) Online Program. Since joining Keck in 2012, she has led the launch and direction of the two afore-mentioned programs, building on her previous experience establishing various healthcare and education programs within

university and industry settings. Formerly the Chief Operating Officer of an international humanitarian NGO, she has also been a management consultant to various domestic and international non-profit agencies, governments, and private service providers. Her professional and research interests include management and leadership in healthcare, global health program planning & evaluation, and health systems strengthening. Dr. Kumar earned her M.P.H. and Ph.D. in Healthcare Management & Policy from the University of California Los Angeles. Shubha.Kumar@usc.edu

Leland, Hyuma

Hyuma Leland, MD is a Postdoctoral Research Fellow in the Division of Plastic and Reconstructive Surgery within the Keck School of Medicine of USC. He is a resident physician in the Department of Surgery at the University of California, San Diego. He is currently researching tissue engineering applications for congenital craniofacial defects and the use of technological solutions for obstacles in surgical training and education.

May, Win

Win May is currently a Professor in the Department of Medical Education, and the Director of the Clinical Skills Education and Evaluation Center. Dr. May is a distinguished faculty fellow of the USC Center for Excellence in Teaching, and a member of the California Consortium for the Assessment of Clinical Competence. She is a member of the AMA Learning Environment Study Advisory Committee. She is an instructor in the Masters of Academic Medicine program, in the Introduction to Clinical Medicine Program and has been a faculty mentor in the Professionalism and the Practice of Medicine (PPM) course since its inception. Prior to joining USC in May 2000, she worked for the World Health Organization (WHO) in Geneva, and in New Delhi. She was the founding Dean of the Institute of Nursing in Myanmar. Dr. May has written many journal articles and some book chapters in medical and nursing education. winmay@usc.edu

Swadron, Stuart

Stuart Swadron is an emergency physician and former program director of the LAC+USC residency in emergency medicine. He is currently the Assistant Dean for Undergraduate Health Care Studies at USC.

Villarreal, Deborah

I have committed my career to become an inter-professional educator. I am an Assistant Professor at the University of Texas Health Science Center-San Antonio and full staff physician at the South Texas Veterans Health Care System. I am active coordinator for the Residency Rotation in Geriatrics for the Department of Medicine and attending of Geriatric and Palliative Consultation (in-patient) team and Geriatric Evaluation and Management clinic. Since December 2013, I have been the acting program director of the Geriatric Medicine Fellowship program. I am appreciative to the Geriatric Academic Career Award (GACA) (awarded 2000-2015) from the Department of Health and Human Services because it allows me to develop a focused mentored career development plan, and subsequently allows me to provide clinical geriatrics training to healthcare providers in the medical intensive care units (MICU) at the South Texas Veterans Health Care System. My long-term goal is to establish models of care focused on improving the health care of critically ill older patients. I strive to be a leader of change who implements geriatric palliative care assessments for critically ill older patients.

Kokas, Maria

Maria specializes in making complex concepts come alive through practical program administration. By drawing on her background in learning and organizational systems Maria has worked in public health and institutional health care, higher and graduate medical education, private industry, and academic research settings. She has taught in traditional and on-line settings and has held chief administrator positions in two Detroit-area corporations as well as the National Institutes of Health. Her core belief is that: What we need is within each of us. Our job is to tap into those resources to enrich our lives and surroundings. / / As Henry Ford Hospital's Director of Learning Systems, Maria supports 48 accredited re

Abdelnour, Shadi

Shadi Abdelnour is assistant professor of internal medicine at the University of Nevada School of Medicine. He graduated from Damascus University Faculty of Medicine in Syria in 2000. He completed post graduate residency training in internal medicine at St. Luke's-Roosevelt Hospital in New York City. He worked as an attending physician at Barnes-Jewish Hospital in St. Louis for three years before pursuing a fellowship in diabetes, endocrinology and metabolism at Baylor College of Medicine and The University of Texas M.D. Anderson Cancer Center in Houston. / He is interested in quality improvement projects and the medical education of residents and medical students. / shadiabdelnour@yahoo.com

Ann L. Schultz

Ann Schultz, MPAS, PA-C, Instructor of Clinical Family Medicine in the Keck School of Medicine at USC Primary Care Physician Assistant Program since 2007 with 35 years clinical practice experience. She is a primary care provider with a focus in women's health, pediatrics and pulmonary medicine, spending the past 16 years working with the medically underserved in East Los Angeles and the San Gabriel Valley. She has been actively involved in the clinical training of students pursuing healthcare careers since 1982, training respiratory, nursing and physician assistant students. In addition to teaching and clinical practice Ms. Schultz is an Officer in the United States Army Reserve. She has been a volunteer member of the Medical Reserve Corp of Los Angeles County since its inception in 2003 and was recently appointed as a member of the Advisory Board with Los Angeles County Department of Public Health.

Arana, Tania

Tania Arana is Assistant Professor of Behavioral and Neurosciences in Medical Education and a Clinical Assistant Professor of Psychology in the Department of Psychiatry. She was one of the founding faculty members joining the Paul L. Foster School of Medicine in 2008. Before joining the PLFSOM Faculty, she was a postdoctoral fellow in Behavioral Neurosciences at UTHSCSA in the Department of Pharmacology. She obtained her Ph.D. in Behavioral Neurosciences at University of Ottawa in Canada. / / At PLFSOM, Tania serves as course co-director of Society, Community and the Individual, a course that she helped developed from its beginning. Her teaching interests include behavior, communication, culture, psychology and neurosciences related to psychiatric disorders. / / Her primary research interests are in the field of depression in the Hispanic population. She has also recently been appointed the Chair of the Committee on Diversity which aligns perfectly with her interests.

Arce, Kevin

Kevin Arce, D.M.D., M.D., is the Program Director in Oral and Maxillofacial Surgery and Assistant Professor of Surgery at Mayo Clinic, Rochester, Minnesota. After completing medical school and his oral and maxillofacial residency program at Mayo Clinic in 2002, he went on to complete a fellowship in Head and Neck Oncology at Legacy Emanuel Hospital and a Master of Clinical Research at Oregon Health & Science University in Portland, Oregon. He served as a faculty member at John Peter Smith Hospital in Fort Worth, Texas and at Oregon Health & Science University prior to returning to his alma mater in 2010. His clinical interests are in the areas of maxillofacial trauma, pathology and reconstruction and he is currently completing his Master of Academic Medicine at USC. arce.kevin@mayo.edu

Badran, Sarah

Sarah Badran, MBBCh is an assistant professor of pediatrics at the USC Keck School of Medicine, and is co-director of Cardiac catheterisation laboratory services at Childrens Hospital Los Angeles. She graduated from the Kuwait Univeristy medical school and completed post graduate training in pediatrics and pediatric cardiology at the Children's Hospital of Philadelphia. Her clinical interests are outcomes in single ventricle patients, patient and family education and innovation in transcatheter therapies. She is currently enrolled in the MACM at USC.

Bakshi, Salina

Salina Bakshi is a fourth year medical student at the Icahn School of Medicine at Mount Sinai in New York. Salina is currently doing a scholarly year at UNICEF, where she is analyzing the effectiveness of UNICEF's community health worker (CHW) programs in Africa to create policy recommendations. She previously conducted research with UNICEF examining the impact of traditional medicines on healthcare-seeking behavior as well as the use of mobile technology in CHW programs. Salina spent a

year between college and medical school working with Columbia University's Earth Institute to implement a CHW program in Kenya. She has also conducted research on HIV/AIDS and human rights in South Africa and Tanzania. In medical school, Salina developed a comprehensive curricular track focusing on health equity. She also serves in several leadership positions, as president of the student body and as a student advisory board member to Physicians for Human Rights.

Basha, El-Shimaa

Elshimaa Basha, B.S., is a Simulation Educator with the Center for Advancing Professional Excellence for the University of Colorado School of Medicine Anschutz Medical Campus (AMC). She is the Project Coordinator for the Simulation-Based Interprofessional Education and Development Curriculum Phase 2: Clinical Transformations where she is responsible for case design, simulation scenario design and training, and curriculum innovations. She also co-designed the first simulation curriculum for the AMC Physician Assistants Program to educate and assess clinical skills, clinical reasoning, and communication skills. She recently embarked on coordinating high-stakes assessments serving multiple health care learners on the Anschutz Medical Campus. Shimaa is currently pursuing an MPH at the Creighton University School of Medicine. She has also completed a graduate certificate in public health from the University of Florida and is interested in reducing health disparities, believing it starts with the collaborative efforts of health professionals and the community.

Berdahl, Carl

Dr. Berdahl is a second year resident in the Department of Emergency Medicine at Los Angeles County/University of Southern California Medical Center. A native of Walnut Creek, California, Dr. Berdahl studied music performance and completed pre-medical coursework as a Regents' Scholar at UCLA and at the United Kingdom's University of Manchester. In 2012, he graduated from the Yale University School of Medicine, where work on his thesis comparing health systems in the United States and Canada led him to develop interests in health policy, health services, and resource utilization. Currently, he is a co-instructor of the introductory undergraduate course "MEDS 220: Preparation for the Clinical Experience" at the University of Southern California.

Berona, Kristin

Kristin Berona, MD is an emergency physician and Ultrasound Fellow in the Department of Emergency Medicine at USC+LAC. She received her MD degree from Northwestern University, and completed her residency in Emergency Medicine at the combined UC San Francisco and San Francisco General Hospital program. During residency she became interested in medical education, and completed UCSF's Pathways to Discovery in Health Professions Education program. This year she is enjoying merging her two interests, ultrasound and medical education, via teaching sessions with attendings, residents, and medical students, attending and presenting at CME conferences, and researching various approaches to teaching and promoting bedside ultrasound. berona@usc.edu

Bhatia, Parul

Dr. Parul Bhatia is an Assistant Professor of Pediatrics at Keck School of Medicine of USC, an Attending Physician and General Pediatrician at Childrens Hospital Los Angeles / AltaMed General Pediatrics and Fellow of the American Academy of Pediatrics. Most recently, Dr. Bhatia has taken on the role of Co-Director of the Year III Pediatric Core Clerkship in Undergraduate Medical Education at Keck School of Medicine. Dr. Bhatia is actively involved in Graduate Medical Education at Childrens' Hospital, providing both didactic and clinical education in the Residency Program. She is the Founder and Director of the Infant Toddler Hearing Screening Program where she conducts clinical research in the area of early identification of hearing loss in young children. She has mentored scores of students during her tenure as an assistant professor and ICM instructor and is the recipient of the Year III Faculty Teaching Award, Keck School of Medicine of the University of Southern California.

Brady, Melanie

Melanie Brady, Ed.D., is a principal investigator on a joint project with Rossier School of Education and faculty from Keck School of Medicine. Dr. Brady has published articles and presented at national conferences on her research about the influence of audience response systems on metacognition. Research interests include educational technology, metacognition, learner

centered education, academic performance outcomes, and conditions that enhance the learning experience. Dr. Brady is an experienced researcher in quantitative and qualitative methods; she developed measurement instruments for use in educational contexts, and has experience as a primary investigator. Dr Brady earned her Doctorate in Education from Rossier School of Education.

Brett-MacLean, Pamela

Pamela Brett-MacLean, PhD, is Assistant Professor and Director of the Arts & Humanities in Health & Medicine Program in the Faculty of Medicine & Dentistry (FoMD) at the University of Alberta. She is committed to enhancing teaching and learning by infusing arts and humanities perspectives in curricular and co-curricular activities within health professions education. She is also committed to collaborative explorations into the scope and possibilities of an expanded medical/ health humanities field, both within the University of Alberta and beyond. A recipient and co-recipient of University of Alberta Teaching and Learning Enhancement Fund grants in support of innovative approaches to medical education, Dr. Brett-MacLean was also recently awarded a 2013 Canadian Association for Medical Education "Certificate of Merit" for her contributions to medical education.

Broadfoot, Kirsten

Kirsten Broadfoot, PhD, is an Associate Professor in the Dept of Family Medicine, University of Colorado Anschutz Medical Campus, as well as the Assistant Director for the Center for Advancing Professional Excellence on that campus. Dr Broadfoot is also the Associate Director for Communication Skills in the Foundations of Doctoring Curriculum, and faculty in Interprofessional Education and Development. Her scholarly work focuses on the organizing and communicative practices of relationship centered healthcare teams in diverse contexts. She is also an active participant in professionalism, remediation and faculty development initiatives on campus where she works with learners across the professional lifespan on communication skills. In her interdisciplinary work, Dr Broadfoot participates in the Master of Public Health program in the Colorado School of Public Health, NSF research in STEM education and minority populations, and mentors graduate students in public health, interprofessional teams and STEM mentoring. kirsten.broadfoot@ucdenver.edu.

Brueggmann, Doerthe

Doerthe Brueggmann (MD/PhD) completed medical school, residency training in the field of OB/GYN as well as her PhD in Germany. After receiving a scholarship issued by the German Research Council, she joined the OB/GYN Department at USC to concentrate on her research career. Her current position as an Assistant Professor of Research combines basic science and clinical research focusing on endometriosis and ovarian cancer with teaching and mentoring. Dr. Brueggmann enjoys to conduct weekly workshops for medical students, which cover common problems in the field of OB/GYN, as well as hands-on simulation training for residents and fellows. In 2012, Dr. Brueggmann graduated from the Teaching and Learning Fellowship at USC.

Bruning, Madeleine

Dr. Bruning is Pediatric Nurse Practitioner and an Assistant Professor of Clinical Pediatrics at the Keck School of Medicine at the University of Southern California in the Department of Pediatrics- Year III Pediatric Clerkship. In addition to clinical teaching and working with underserved families, Dr. Bruning has extensive knowledge in the area of curriculum development and performance evaluation. She has worked closely with the University Park Campus of USC in developing strategies and "best practices" for academic re-integration of veteran students into higher education. Her interest in inter-professional education in clinical practice has led to multiple collaborative efforts with the Center for Innovations and Research on Veterans and Military Families and the School of Social Work to provide training among the medical, nursing and social work students.

Bughi, Stephanie

Stephanie A. Bughi, DHSc, MS is a recent graduate of A.T. Still University where she received her doctorate degree in Global Health. Her academic background also includes two degrees from the Keck School of Medicine, University of Southern California (USC), a master's in Global Medicine and a bachelor's in Health Promotion and Disease Prevention. In 2008, she co-founded the World Med Global Health Initiative at USC, which focuses on disseminating information related to worldwide health issues. Over the last 12 years, Stephanie has conducted studies on the implications of stress on human health and has presented her work at

local, national, and international conferences. She has also given stress-management and personality profile lectures to graduate students. Her academic and research interests include maternal and child health issues as well as improving the well being of health-care providers, the delivery of quality care, and the practice of patient safety. stephanie.bughi@gmail.com

Chang, Jiwoon

Jiwoon Chang is currently a third year student at David Geffen School of Medicine at UCLA. He received undergraduate B.S. degree in Molecular and Cellular Biology at Johns Hopkins and spent one year conducting research at the National Institute on Drug Abuse in Maryland before coming to UCLA. As an applicant of the first UCLA medical school class admitted with the multiple mini-interview process in 2011, Jiwoon found the process fascinating and wanted to evaluate this method compared to the traditional interview style. Under the guidance of Dr. Sebastian Uijtdehaage, Director of Research and Evaluation at David Geffen School of Medicine at UCLA, Jiwoon conducted a study that compared the distribution of personalities between classes admitted with and without the multiple mini-interview. After completing medical school, Jiwoon hopes to continue medical education research and stay involved in academic medicine.

Chilstrom, Mikaela

Dr. Mikaela Chilstrom completed medical school at the University of California at San Francisco and Emergency Medicine residency training at Jacobi and Montefiore Hospitals in New York City. After completing Emergency Ultrasound fellowship training at SUNY Downstate Medical Center, she joined the faculty at Emory University, where she served as the Emergency Ultrasound Fellowship Director. In 2012, she joined the LAC+USC Emergency Medicine faculty, where she is a member of the Emergency Ultrasound Division and has been a leader in resident and medical student ultrasound education. In 2013, she led an ongoing effort to integrate ultrasound into the 2nd year medical student curriculum at USC Keck School of Medicine. Her research interests include musculoskeletal ultrasound and the use of ultrasound in undifferentiated dyspnea.

Christos Theophanous

Christos Theophanous is a 2nd year medical student at the Keck School of Medicine of USC, where he serves as Class President and as a student representative to the Association of American Medical Colleges (AAMC). As part of the AAMC's "Joining Forces" initiative, a program designed to increase awareness of military health issues among medical students, Mr. Theophanous has helped research and implement a supplementary curriculum related to military health at Keck. The series is run in partnership with a variety of Student Interest Groups on campus. Prior to medical school, Mr. Theophanous earned an A.B. in Biology from Harvard University and worked as a healthcare consultant at the Boston-based firm L.E.K. and as a business analyst at DaVita.

Cornman-Thomas, Michelle

Michelle Cornman-Thomas, M.D. is Associate Program Director of the LAC + USC Pediatrics Residency and Assistant Professor of Clinical Pediatrics. Prior to medical school, she taught elementary school with Teach For America, as she strongly believes in equal access to education and healthcare. She is a graduate of the USC SOM and Combined Internal Medicine-Pediatrics residency at County USC. Her strong desire to work with the underserved and passion for teaching kept her at USC. Her clinical duties and teaching are intertwined, working with residents and medical students on the wards, PICU and Med-Peds continuity clinic. Dr. Thomas is currently a student in the Master of Academic Medicine Program at USC. cornman@usc.edu

Crapanzano, Kathleen

Kathleen Crapanzano, MD is a Clinical Assistant Professor with the Department of Psychiatry, LSU Health Sciences Center and also serves as the LSU-OLOL Psychiatry Residency Program Director. After receiving her degree from LSU School of Medicine, she completed her residency at the Medical College of Georgia. Her career has primarily been in the public sector and she served as the Medical Director for the Louisiana Office of Mental Health in the aftermath of Hurricane Katrina, helping to rebuild and expand the mental health system across the state at that time. Her clinical interests include treating people with severe and persistent mental illness, in particular people with schizophrenia. Her current research interests include teaching and evaluating

different aspects of professionalism. She is a Distinguished Fellow of the American Psychiatric Association. Dr. Crapanzano is currently a student in the Masters in Academic Medicine program at USC. kcrap1@lsuhsc.edu

Dancz, Christina

Christina Dancz, M.D. is a native Southern Californian who earned her Bachelor's degree at the University of Maryland. She then moved to Boston to attend Harvard Medical School before returning to California for residency at Los Angeles County + USC Medical Center. She completed a residency in Obstetrics and Gynecology and a fellowship in Female Pelvic Floor Medicine and Reconstructive Surgery under the guidance of Dr. Begüm Özel. Dr. Dancz is an active staff member and Assistant Professor of Clinical Medicine in the Department of Obstetrics and Gynecology at Keck Medical School. She is board certified in Obstetrics and Gynecology, a fellow of the American College of Obstetrics and Gynecology and Director of the Urogynecology Clinic at LAC+USC Medical Center. Her research interests include renal effects of prolapse, anatomic-physiologic correlation and resident education interventions. She is active in medical student and resident education and has received numerous teaching awards.

D'Aquila, Mitzi

Mitzi D'Aquila, PA-C, joined the clinical education team as Clinical Coordinator in November 2010. Ms. D'Aquila has been practicing in Pediatrics for the past 10 years. She has worked for the South Counties Pediatric Critical Care Medical Group as part of their pediatric hospitalist group for the past 7 years. She also worked at Children's Hospital, Los Angeles in pediatric hematology/oncology for 3 years. Ms. D'Aquila graduated from the USC PA Program in 2001, and has been very involved in the program teaching in both the pediatric module and clinical skill workshops for many years. She is a member of the California Academy of Physician Assistants (CAPA) and was a member of the CAPA Board of Directors for five years. She is also a member of the American Academy of Physician Assistants (AAPA) and the Society of Physician Assistants in Pediatrics (SPAP). She is currently a student in the Master of Academic Medicine program at the Keck School of Medicine at USC.

Dasgupta, Jayanti

Jayanti Dasgupta and Patricia Martinez are third-year medical students at Keck School of Medicine at USC. Patricia, a UCLA graduate with experience working in education and cancer disparity research, and Jayanti, a UC Berkeley graduate with experience in public health field research and clinical trials, both came to Keck with an interest in community outreach and primary care. As part of the pilot group of students in Keck's Longitudinal Clinical Community Medicine Experience, leaders of the Family Medicine Interest Group, and, in Patricia's case, an Albert Schweitzer fellow, Patricia and Jayanti were able to explore their individual interests in the practice of community-oriented medicine in locally underserved communities, as well as collaborate to create Health Partners, in which pre-clinical medical students were partnered for an academic year with diabetic patients from local community clinics with the intent of fostering change and empowerment in both the local and the Keck communities.

DeMeo, Stephen

Stephen D. DeMeo D.O. is a 2nd year Fellow in Neonatal-Perinatal Medicine, Department of Pediatrics, Duke University Medical Center, Durham, NC. After completing medical school at the Philadelphia College of Osteopathic Medicine he completed a residency in Pediatrics at Jefferson/Al duPont Hospital for Children in Wilmington, DE, where he served as Pediatric Chief Resident. Dr. DeMeo is currently a student in the Master's in Medical Education Leadership (MMEL) program at the University of New England. His areas of education research include GME and curriculum development. His other areas of research include using novel technologies to improve neonatal intubation training and also the effects of immunizations on pre-term infants. stephen.demeo@duke.edu

DeSousa, Susan

Susan holds a B.Sc. in Biology from the University of Western Ontario and a Diploma of Respiratory Therapy from Fanshawe College. Susan has over 11 years of clinical experience in the areas of critical care, research, burn care, and the operating room and over 12 years of simulation experience. Susan is currently Coordinator of the Sunnybrook Canadian Simulation Centre

(SCSC). Susan's simulation interests include team training, curriculum/instructional design, educator development, e-module design, in-situ simulation, and patient safety. Susan is an active member of the SCSC research team, the Sunnybrook Education Advisory Council, Educator Development Committee; Educator Resource Development Committee, and a member of the University of Toronto, Department of Anesthesia Undergraduate Education Committee. Susan is a member of several simulation organizations including Education and Simulation in Anesthesia, Canadian Anesthesiologists' Society; Society for Simulation in Healthcare and SIMone (Ontario Simulation Network).

Dubina, Emily

Emily Dubina is a fourth year medical student at the David Geffen School of Medicine at UCLA. She has been a student representative on the school's Professionalism Council, a subcommittee of the Medical Student Council, since her first year of medical school. During her time as a representative, she has had the opportunity to be involved in a number of student-driven initiatives as part of the council. She is applying for a General Surgery residency.

Dubov, Alex

Alex Dubov is a PhD Candidate in Healthcare Ethics at Duquesne University with a strong interest in the ethical implications of using behavioral economic approaches, including framing effects, default options, and financial incentives to improve patients' and providers' decisions. He also studies and writes on ethics of end-of-life decision-making and ethics of organ transplantation. His dissertation is an examination of the role of emotions in making moral decisions about risky medical interventions in the ICU. Prior to starting his PhD, Alex graduated with Master of Divinity from Andrews University and worked for Emory University Hospital first as a transplant chaplain and then later as a palliative care counselor. He held a graduate summer fellowship in Bioethics at the Yale Interdisciplinary Center for Bioethics and now teaches there two seminars on ethics of organ transplantation and ethical implications of genetics research.

Encinas Talbot, Jennifer

I am the Residency Administrator for California Hospital, Department of Family Medicine, Keck School of Medicine at USC. I have been with USC since November 2008 where I began as a clinical research coordinator for the Department of Radiology. I am now the CHMC/USC Family Medicine Residency Program Manager at California Hospital. I am responsible for development, implementation, recruitment, compliance, and management (including design and execution) of all aspects of the Residency program. I work very closely with the residency coordinator to ensure the efficiency and process of the day-to-day operations of the program. I currently reside in Pomona with my husband (INFJ) and new baby Charlotte (10 months old), and our Bernese Mountain dog (Ally) who is now 3 years and 88 pounds. Email: jencinas@usc.edu

Fisher, Jennifer

Jennifer Fisher, DNP, WHNP is the Associate Director at the Center for Advancing Professional Excellence at the University of Colorado School of Medicine and is an Associate Professor in the Department of Family Medicine. Her primary academic interests are the use of teaching associates in health professional curricula, optimizing health professional assessment, the appropriate timing and frequency of physical exam training, as well as the use of simulation to improve individual and team communication skills in health professional education. A major goal of Dr. Fisher's work is to advance the use of teaching associates, lay clinical educators trained to teach components of physical exam, to improve the physical exam skill set of physicians and advanced practice health professionals in training. Dr. Fisher obtained her Nursing Doctorate and Master in Science with a specialty in Women's Health from the University of Colorado and her Doctor of Nursing Practice in December 2009.

Flores, Teresa

Teresa Flores, MD, a member of the Alpha Omega Alpha Medical Honor Society, is a recent graduate of the California Hospital Medical Center/University of Southern California Family Medicine (FM) Residency Program. During her time in the residency, she has served as Chief Resident and Didactics Coordinator for the FM Residency Program and has enjoyed mentoring junior residents and teaching medical students. She has given multiple lectures for the residency program, including "Obstetric

Triage," "Autism Screening," and "LGBTQ Youth Health Risk Factors." During her training, she has traveled on medical missions to Nicaragua, Ethiopia, and Haiti. She is interested in obtaining an academic position as a clinical faculty member in a Family Medicine Residency Program. Her interests include: Professionalism, Patient Safety, and Women's Health. florest@usc.edu

Forest, Christopher

Christopher Forest, MSHS, DFAAPA, PA-C is a board-certified physician assistant and Assistant Professor of Clinical Family Medicine at the Keck School of Medicine of USC, Division of Physician Assistant Studies. As full-time faculty, he oversees the Behavioral Sciences curriculum, research methods, and medical technical writing. He is well published in peer-reviewed journals and experienced in conducting randomized-controlled clinical trials. Professor Forest's use of technology in the classroom has spanned from audience response systems to game techniques to incorporating iPads in the classroom. He published in the Journal of Physician Assistant Education in 2012 and he has given presentations at national conferences.

Fowler, John

John C. Fowler, Ph.D., is an Associate Professor in the Department of Medical Education at Texas Tech University Health Sciences Center. Dr. Fowler earned his PhD at the University of New Mexico School of Medicine, pursued post-graduate research at the University of Maryland, Baltimore and Los Alamos National Laboratory in New Mexico before joining the Department of Cell Physiology and Molecular Biophysics at Texas Tech University School of Medicine in 1990. He has taught in medical physiology and neuroscience during his time at Texas Tech and has had responsibility for the first year Major Organ Systems course, the first-year School of Medicine physiology block, for the last 4 years.

Fu, Belinda

Belinda Fu, MD is a Clinical Instructor in the Department of Family Medicine at the University of Washington (UW), and Faculty at the UW Medicine / Valley Family Medicine Residency Program. She received her BA at Stanford University, her MD from the University of California, San Francisco, and completed her residency at the University of Washington. She has studied and performed improvisational theater since 2007, and is a Theatresports ensemble member and improv instructor at Seattle's Unexpected Productions. Dr. Fu's academic specialty is medical education; she regularly leads physician communication and teaching workshops at local, regional, and national conferences. She has led medical improv workshops for groups such as the Society for Teachers in Family Medicine and the Washington Academy of Family Physicians, and she co-organized the first International Medical Improv Train-the-Trainer Workshop in June 2013. www.belindafu.com

Ganster, Anna

Anna C Ganster, M.D., is an Assistant Professor of Clinical Pediatrics, University of Southern California – Keck School of Medicine. After graduating medical school in Germany, she completed pediatric residency in New York City (2008). This was followed by a neonatal-perinatal medicine fellowship at Children's Hospital at Montefiore/Albert-Einstein College of Medicine, where she graduated in 2012. Since then she has joined the faculty of the Division of Neonatology at Children's Hospital Los Angeles. She is a member of the educational arm of the neonatal fellowship's Clinical Competency Committee. She serves in the ethics resource committee and co-chairs the neonatal resuscitation committee at CHLA. Her interest are education in communication skills, simulation and its application to medical education, as well as challenges in clinical teaching within the new accreditation system and changes in academic healthcare. Dr. Ganster is currently a student in Master of Academic Medicine program at USC. aganster@chla.usc.edu

Gonsalves, Wanda

Wanda C. Gonsalves M. D. has taken on a new position as Vice Chair of the Department of Family and Community Medicine at the University of Kentucky College of Medicine in Lexington, Ky since Nov. 2013. Prior to this position she was the Associate Dean for Resident Inclusion and Diversity Education at the Medical University of South Carolina where she taught cultural competency education. Her current position at the University of Kentucky involves overseeing the educational initiatives of the residency program and other administrative duties as Vice Chair. Her academic interest include service learning, interprofessional education and oral health. Dr. Gonsalves received her MD and residency from the University of Kentucky.

Granat, Bonnie

After working as a teacher and literacy specialist in both elementary school and in higher education, Bonnie Granat joined NYCOM, in 2006, as the Learning Specialist. In that role she developed assessment and instructional protocols to support students. / / Bonnie Granat received her Ph. D. from Hofstra University. Her dissertation research focused on the acquisition of medical discourse, an interest developed from working with many medical students. / / In 2009, Dr. Granat took on the role of Director, of the Office of Program Evaluation and Assessment. In that capacity she has been a principle contributor in the development and implementation of the Course/Faculty Assessment program. In addition, she is responsible for all aspects of development, implementation, evaluation, and refinement of student and institutional assessments. Dr. Granat also chairs a national committee working to create a bank of examination questions for all osteopathic medical schools. /

Haber, Jordana

Jordana Haber is an attending physician in emergency medicine at Maimonides Medical Center in Brooklyn, New York. She has been heavily involved in medical education research and curricular innovation during her tenure here. She is matriculating in a Master of Academic Medicine degree program and has given regional presentations on curriculum design. She is also a graduate of the American College of Emergency Physicians Teaching Fellowship. She completed her Emergency Medicine training at Lincoln Hospital in the South Bronx of New York City. She thinks the ER is the most exciting place to practice and teach clinical medicine. Her hobbies are running and rock climbing.

Hales, Kathleen

Kathleen Hales, MD is the Assistant Program Director of the Southern New Mexico Family Medicine Residency Program in Las Cruces, New Mexico. After graduating from the University of New Mexico School of Medicine and completing residency at a Medical College of Wisconsin affiliated program (Southeastern Family Medicine) she had an active rural clinic in New Mexico. Interest in rural and isolated environments led to several years of travel to work in diverse communities across the country. She has spent the past 9 years teaching and supervising residents at SNMFMRP where she also maintains an active personal practice.

Harrison, David

David Harrison is a third year medical student at the David Geffen School of Medicine at UCLA. Last year, he worked as an anatomy tutor for first year students, and has continued his involvement in the research component of the peer-tutoring program unique to UCLA. He has been extensively involved in medical education both in the United States and internationally, primarily in the developing areas of South America. Other research projects primarily involve the integration of multimedia and art therapy with pediatric patients. He will be applying for residency next year, but is undecided on which specialty.

Hartig, Jason

J. R. Hartig, MD is the Program Director for the Internal Medicine and Pediatrics (Med-Peds) Residency at the University of Alabama at Birmingham (UAB). After completing medical school at the University of Missouri and Med-Peds residency at UAB he joined the faculty and works as a clinician-educator with diverse roles and responsibilities. Clinically he sees patients and supervises residents on general inpatient wards and in resident continuity clinic outpatient settings. He works closely with the core residency programs serving as an associate program director. Over the most recent years his role in undergraduate medical education has expanded to include leadership on the Medical Education Committee and reform of the school's curriculum. Dr. Hartig is currently as student in the Master of Academic Medicine program at USC. jhartig@uab.edu

Ho, Cynthia

Cynthia Ho, M.D., Assistant Professor of Clinical Internal Medicine and Pediatrics, is an alumnus of the Keck School of Medicine. She completed her residency in Combined Internal Medicine and Pediatrics in 2008. She joined the faculty at the Keck School of Medicine in 2009. In her current role a Med-Peds Hospitalist, she works closely with residents, medical students, and nurse

practitioners. Dr. Ho is the physician leader for Schwartz Rounds at LAC+USC, a forum for hospital employees to discuss the social and emotional issues in caring for patients. Her interests include improving the transition of care from pediatric to adult providers and teaching residents how to perform invasive bedside procedures. cynho@usc.edu

Hodgson, Carol

Carol Hodgson, PhD, the J Allan Gilbert Chair for Medical Education Research, directs the Teaching Scholars Program, and is an Associate Professor in the Division of Studies in Medical Education at the University of Alberta Faculty of Medicine and Dentistry. She received a Master of Science degree in biochemistry from the University of California, Riverside and a doctorate in Education (educational psychology and research methodology) at UCLA. Before entering the field of medical education in 1992, she was a researcher in preventive medicine at the University of Southern California. Dr. Hodgson actively mentors numerous faculty members in the design and implementation of medical education research. Dr. Hodgson is an expert in curriculum design, evaluation, educational research, and educational assessment, including clinical performance assessment. Dr. Hodgson's research focuses in the area of professionalism and program evaluation, especially in the area of cancer education.

Hyuma Leland

Joseph Carey, MD is an Assistant Professor of Surgery in the Division of Plastic and Reconstructive Surgery within the Keck School of Medicine of USC. His specialty is microvascular surgery, including breast, head and neck reconstruction, extremity salvage, and hand surgery. Dr. Carey is the Chief of Plastic Surgery and an Attending surgeon in the Burn Unit of the Los Angeles County Hospital. He also directs the education of plastic surgery and general surgery residents, as the Associate Program Director in plastic surgery. He collaborates with colleagues from other disciplines as the Assistant Director of the USC Fresh Tissue Dissection Laboratory, where complex models of surgical simulation are used to educate surgeons of the next generation. / / Hyuma Leland, MD is a Postdoctoral Research Fellow in the Division of Plastic and Reconstructive Surgery within the Keck School of Medicine of USC. He is a resident physician in the Department of Surgery at the University of California, San Diego. He is currently researching tissue engineering applications for congenital craniofacial defects and the use of technological solutions for obstacles in surgical training and education.

Johna, Samir

A graduate of Baghdad College of Medicine, Iraq, in 1983. After 6 years of active duty in three wars, he immigrated to the United States of America where he completed general surgery residency program at Kern Medical Center, Bakersfield, California in affiliation with UCSD. He joined the ranks at Loma Linda University School of Medicine where he currently serves as a clinical professor of surgery. He moved his clinical practice to Kaiser Fontana in 2002 where he started a free standing general surgery residency program in partnership with Arrowhead regional Medical center. He signed up for Master of Medical Education program at USC, which he recently completed. Main interests, history, poetry, fishing, travel, and charity.

Kang, Tarina

Tarina L Kang, M.D. is an Assistant Professor of Emergency Medicine and the Chief of the Emergency Ultrasound Division in the Department of Emergency Medicine at USC. After completing her Emergency Medicine Residency at Beth Israel Deaconess Medical Center-Boston and an Emergency Ultrasound Fellowship at The University of Massachusetts Worcester in 2008, she returned to Boston to establish an emergency ultrasound curriculum within the Beth Israel Emergency Medicine Residency. Dr. Kang joined the USC faculty in the Spring of 2013. Dr. Kang's clinical focus involves participating as core faculty for residency, fellowship, and attending education in Emergency Ultrasound, in addition to ensuring consistent use of ultrasound at the bedside with quality imaging by all members of the Department. Her research interests involve the utilization of bedside ultrasound to improve patient care, efficiency in the emergency department, and patient safety.

Kim, Albert

Albert J Kim, MD is a joint Ultrasound and Education Fellow in the Division of Emergency Medicine (EM) at the Washington University in Saint Louis School of Medicine. After completing medical school at the Northwestern University Feinberg School of

Medicine in Chicago, he recently completed his Emergency Medicine Residency at Washington University in Saint Louis, serving as Chief Resident during his PGY-4 year. He is a Clinical Instructor at the Barnes-Jewish Hospital, Barnes-Jewish West County, and Saint Louis Children's Hospital Emergency Departments, which serve the Saint Louis region. His academic responsibilities include development of a four week Education Rotation and supervision of the required Ultrasound Rotation for EM residents. He is also active in the School of Medicine, serving as Faculty Preceptor in the Practice of Medicine Course for first year medical students. Dr. Kim is currently a student in Master of Academic Medicine program at USC.

Konia, Mojca

Mojca Remskar Konia, MD, PhD, MACM is currently an Associate Professor in the Department of Anesthesiology at the University of Minnesota. She is a fellowship trained cardiac anesthesiologist with special interest in adult and pediatric cardiac anesthesia. In 2010 she took over the position of Residency Program Director and Vice Chair of Education of the Department of Anesthesiology. She teaches second, third and fourth year medical students, and anesthesiology residents PGY-1 through PGY-4 and has received several Teacher of the Year awards. She began working with simulation in 2009 and is now a Clinical Director of the Anesthesiology/Critical Care Skills Simulation Laboratory in the SimPORTAL at the University of Minnesota. Dr. Konia is an active member of The Board of Directors and Champions Executive Committee of SimPORTAL at the University of Minnesota. She is involved with curriculum development of the anesthesiology and surgery residency simulation program and is developing multidisciplinary educational curricula, which utilize high- and low-fidelity simulation.

Korin, Tatum

Tatum Korin is an Assistant Professor in the Department of Medicine Education at Keck School of Medicine at USC. She is also the Assistant Dean of Graduate Medical Education at LAC+USC. Her faculty and administrative responsibilities include residents and faculty as teachers training, residency accreditation support and maintenance, and the development of curricular and educational innovations. Her book, *Training Problem-based Learning Faculty Online*, is based on research in faculty development, adult learning and online technology. She also co-authored several book chapters in the area of faculty development and problem-based learning. She has been published in *Academic Medicine*, *Family Medicine*, and *Medical Education*. She earned her BA from UC Santa Barbara in Women Studies, her MA in Educational Psychology from Michigan State University, and her EdD in Educational Leadership from UCLA. For 15+ years she has developed countless educational artifacts and teaching workshops, supporting UME and GME educational programs.

Lentz, Jacob

Jacob Lentz is a third year medical student at David Geffen School of Medicine at UCLA. Jacob worked as a paid anatomy tutor for the first year class during his second year of medical school, which sparked his interest in researching how anatomy is taught to future physicians. Previous, Jacob has been a contributing author on a presentation on anatomy tutoring outcomes at the International Association of Medical Science Educator conference in Scotland last year, and he was a co-author of 'Reciprocal Regulation of Hepatic and Adipose Lipogenesis by Liver X Receptors in Obesity and Insulin Resistance' in the July 2013 issue of *Cell*. Jacob is planning to apply for residency next year, though he does not know in what yet.

Loubeau-Magnet, Helene

Dr. Loubeau-Magnet is the chair of the peer review committee at Inspira Center Woobury. She is also currently in private practice. Upon graduation from her Family Medicine residency, she pursued her interest in Palliative Care Medicine which she also practice today. She served as faculty and assistant director at the formerly known Underwood Family Medicine Residency program. She also served as the director of the third and fourth year clerkship in Family Medicine for the students from Jefferson Medical College and Drexel University. She enjoys teaching and believe the power of positive role modeling. She continues to mentor Family Medicine residents and medical students. She is very interested in the different modalities of teaching and the various modalities of teaching in order to train competent physician clinically and culturally. She is also a proud mom of a three years old boy.

Maldonado, Maria

Maria Maldonado, PA-C, MPAP, MPH, Instructor of Clinical Family Medicine joined the program in 2012. Upon graduating from the USC PA Program in 2006 she served for almost 5 years as a National Health Service Corp Scholar working at Community Health Alliance of Pasadena (CHAP), a primary care clinic delivering quality healthcare to predominantly under- and uninsured patients. Ms. Maldonado worked as an Emergency Medicine Physician Assistant at the Los Angeles County + University of Southern California Medical Center. Currently, she practices Family Medicine in Montebello. Ms. Maldonado completed her undergraduate studies at USC with a BA in Psychology and her graduate education in Public Health at UCLA. Her life mission includes contributing to the delivery of culturally sensitive healthcare to medically underserved populations and empowerment of disadvantaged communities. Ms. Maldonado serves as course director for and instructor in Topics in Medicine I and Advanced Topics in PA Studies: Education.

Maniscalco, Jennifer

Jennifer Maniscalco is a Pediatric Hospitalist at Children's Hospital Los Angeles, and Associate Professor of Clinical Pediatrics at the University of Southern California (USC) Keck School of Medicine. She is the Director of the Pediatric Hospital Medicine Fellowship at CHLA. She received her undergraduate and medical degrees from Georgetown University, as well as a Masters in Public Health from The George Washington University, in Washington, D.C. She completed a general pediatrics residency and pediatric hospital medicine fellowship at Children's National Medical Center in Washington, D.C. Her primary interest is in medical education, primarily for pediatric residents, pediatric hospital medicine fellows, and practicing pediatric hospitalists. She was the co-editor of the Pediatric Hospital Medicine Core Competencies, and currently serves as the chair of the Pediatric Hospital Medicine Education Task Force. Jennifer is currently a student in the Masters of Academic Medicine program at USC. jmaniscalco@chla.usc.edu

Martin, Kate

Kate Martin, MD, MPH, FAAFP is an Assistant Professor in the Department of Family and Community Medicine at the University of Nevada School of Medicine – Las Vegas. She completed a faculty development fellowship in Teaching and Learning at Keck School of Medicine of USC in 2011. Dr. Martin serves as Chairperson of the Years 3 and 4 Curriculum Committee and is Clerkship Director for Family Medicine at her institution. Her clinical duties include caring for patients in both inpatient and outpatient settings, where she also supervises resident physicians. Dr. Martin's educational research interests include clinical reflection and health disparities. She is currently working toward an MBA with a focus in healthcare administration.

Mason, Bonnie Simpson

Bonnie Simpson Mason, MD is a physician educator who is dedicated to solving the challenges of physician pipeline and retention through innovative educational platforms and partnerships. Her experience as a board-certified orthopaedic surgeon and private practice administrator gave her unique insight into the voids in medical and financial education as well as mentorship that affected the careers and practices of aspiring and current physicians. / / In partnership with fellow physicians, Dr. Mason led the development of a comprehensive business of medicine and practice management curriculum in 2007 to fill a void of business and practice management education for physicians. In 2010, she founded OPM Education, Inc. (OPM) www.opmeducation.org,

Mendez, Adrian

Adrian Mendez is a 4th year Otolaryngology-Head and Neck Surgery resident at the University of Alberta in Edmonton, Canada. Originally from Halifax, Nova Scotia Dr. Mendez completed his medical degree at Dalhousie University. His interests lie with head and neck surgery and reconstruction and for this reason he pursued his post-graduate training in Edmonton, where an established head and neck surgery program exists led by Dr. Seikaly. Dr. Mendez is currently taking some time off of clinical duties to pursue a Masters of Science degree in the field of head and neck surgery. His current research interests include facial nerve regeneration, education, head and neck reconstruction, as well as patient-centered outcomes research. Dr. Mendez hopes to pursue an academic practice in the future.

Meraz, Sofia

Sofia E. Meraz, MD is a family physician and faculty at the Family Medicine Residency Program in Orange County, CA. After receiving her medical degree at the Stanford School of Medicine she went on to complete Family Medicine residency at the Kaiser Permanente Residency Program in Orange County. Her areas of interest include office procedures, women's health, community medicine and behavioral medicine. In addition to teaching residents she also supervises medical students and is site director for the Community Medicine Fellowship Program at Kaiser in Orange County. She is active in the local chapter of the California Academy of Family Physicians and is President Elect for 2014. Sofia.E.Meraz@kp.org

Miller, Karen Hughes

Karen Hughes Miller has more than 25 years' experience in adult education with eight years' specifically in medical education. She manages U of L's three annual mandatory non-clinical courses for more than 600 residents along with supporting several other undergraduate and faculty development initiatives on non-clinical topics. Her master's degree and doctorate focused on adult instructional design and development; and in a typical year she designs and delivers at least three institutional and/or regional workshops and one national workshop or session on instructional design and evaluation in health sciences education.

Molas-Torreblanca, Kira

Kira Molas-Torreblanca, DO, FAAP is an Assistant Professor of Clinical Pediatrics at USC and a pediatric hospitalist at Children's Hospital Los Angeles. She graduated medical school from Western University and completed her post-graduate training and chief residency in pediatrics at the University of Nevada. She held a faculty position where she worked as a pediatric hospitalist at University Medical Center in Las Vegas, Nevada. She served as the associate pediatric residency program director there before relocating to California with her family. Currently she is involved in medical student education at CHLA assisting with coordinating the pediatric clerkship on the attending-only service. She also serves as an instructor for the Introduction to Clinical Medicine Course for second year medical students at Keck School of Medicine at USC. Her interests include medical student education, curriculum development and quality improvement with regard to transitions of care. kmrtorreblanca@chla.usc.edu.

Navarro, Christine

I graduated medical school from UCLA School of Medicine in 1995 and completed my residency in Family Medicine at the Kaiser Permanente Family Medicine at the Los Angeles Medical Center. I am currently on the teaching faculty with particular focus on hospital medicine. I am involved in hospital utilization and Focus Care Coordination and am involved in patient safety work in the hospital. Other areas of interest include quality improvement in the residency education and am involved in the pilot projects in Patient Centered Medical Home. Currently, I live in Glendale, California with my husband, 2 teenage sons and 2 dogs.

Nelson-Vasquez, Carrie

Carrie Nelson-Vasquez, MD is a family medicine physician with Kaiser Permanente in Orange County, California. She is Core Administrative Faculty for the Family Medicine Residency program at KP-OC. Areas of expertise include hospice care, end of life care, pain management, geriatric medicine, women's health, as well as procedures and minor surgery. She graduated from San Diego Medical School in 2006 and then the Kaiser Permanente Family Medicine Residency in 2009 and subsequently completed a fellowship in Hospice and Palliative Medicine at the San Diego Hospice and Institute for Palliative Medicine. She returned to Kaiser Permanente and joined the faculty in 2010. Carrie.A.Nelson@kp.org

Newman, Nancy

Nancy Newman, MD is an assistant clinical professor in the department of Family Medicine and Community Health, University of Minnesota. On the faculty of the Hennepin County Medical Center Family Medicine residency program, she practices and teaches full spectrum family medicine, and co-directs the behavioral science curriculum in an urban, multicultural, underserved community. Dr. Newman has additional training in family systems medicine and is also a licensed marriage and family therapist. She is currently participating in the year-long Faculty Development for Family Medicine Faculty fellowship sponsored by the WMMC Family Medicine Residency Program.

Nezami, Elahe

Dr. Elahe Nezami serves as director of the Health Promotion and Disease Prevention Studies and Global Health programs at the undergraduate level, and the Master of Science in Global Medicine program at the graduate level. She is also the Associate Dean for Undergraduate, Masters, and Professional programs of the Keck School of Medicine of USC and co-director of the Wireless Health Technology program. / / Dr. Nezami's research examines determinants of behavioral risk factors for chronic diseases, cancer, and cardiovascular diseases. Other research projects include: medical education pedagogy, examination of personality characteristics in relation to cardiovascular disease, and self-medication theories of smoking. Dr. Nezami received her M.A. in Clinical Psychology from the University of Houston and her Ph.D. in Clinical Psychology from the University of Southern California, where she also completed a post-doctoral fellowship. /

Nguyen, Emily

Emily Nguyen, MD, is a Resident Physician in the Department of Family Medicine at Kaiser Permanente Los Angeles Medical Center. She received her MD degree from Rush University in Chicago, Illinois in 2012. Dr. Nguyen is interested in academic medicine and has initiated a research project meant to provide an ongoing evaluation and means for enhancing resident teaching. She is also serves on the resident council for the California Academy of Family Physicians. Emily.T.Nguyen@kp.org

Nguyen, Tam

After being in the East Coast for both college at Johns Hopkins University and medical school at Pennsylvania State University College of Medicine, I moved back to my home state of California to do Family Medicine residency with O'Connor Hospital. After residency, he joined the San Joaquin General Hospital Family Medicine Residency where I recently stepped up to serve as Program Director. Some of my professional interests and specialty include dermatology (both medical and cosmetic), chronic care model especially with diabetes mellitus, chronic pain, and practice management. My personal interest include running, drawing, and hanging out with my family.

Nickerson, Jillian

Jillian Nickerson is a fourth year medical student at the Icahn School of Medicine at Mount Sinai in New York, NY. She is currently conducting a Master's thesis in Clinical Research on objective measures of hepatic fibrosis regression and quality of life in patients on antiviral therapy for hepatitis C virus. Her previous research has included the use of video technology to educate adolescents about HIV as well as the feasibility of using portable sleep monitors to screen an inner-city pre-diabetic population for obstructive sleep apnea. She has been a teaching assistant for Anatomy, Microbiology and a longitudinal clinical clerkship and has devoted much of her time in medical school to Mount Sinai's student run free clinic.

Nordt, Sean

Sean Nordt, M.D., Pharm.D., is an Assistant Professor of Emergency Medicine and Director of the Section of Toxicology at the University of Southern California, Keck School of Medicine. After obtaining his medical school at University College Dublin, he completed his internship in both emergency medicine and pediatrics at the University of Maryland and then emergency medicine residency at the University of California, San Diego. He then completed a fellowship in Medical Toxicology at UCSD. Prior to medical school he obtained a B.S. and Doctor of Pharmacy degrees from St. John's University and a fellowship in Toxicology. He is former Associate Director of California Poison Control San Diego Division and faculty at UCSD and UCSF. spnordt@hotmail.com

Nyquist, Julie

Julie G. Nyquist, PhD is a Professor in the Department of Medical Education within the Keck School of Medicine of the University of Southern California. She directs the Master of Academic Medicine program and is Chair of the department's annual Innovations in Medical Education Conference for 2014. Dr. Nyquist also serves as program evaluator for the Medical Student curriculum at USC. In the Master of Academic Medicine program she is on the teaching team for multiple courses focusing on leadership, professionalism, instructional design and program evaluation. Dr. Nyquist has given over 550 workshops and

presentation on topics related to teaching, evaluation, use of standardized patients, career development, research, and leadership to a variety of health care professions' faculty members. She has been the author or co-author on 14 federally funded education-related grants. Dr. Nyquist received her doctorate in Educational Psychology from Michigan State University in 1981. nyquist@usc.edu

Ostapchuk, Michael

Michael Ostapchuk, MD, MEd, is board certified in both Family Medicine and Pediatrics and serves as both clinical faculty and as administrator at the University of Louisville School of Medicine. One of his major interests is improving residents' teaching skills and in 2007 he initiated the Residents as Teachers (RATs) program at U of L. That non-clinical curriculum has now expanded to three courses including RATs, Residents and Scholarly Activity, and Residents in Business.

Panopoulou, Katerina

I received my undergraduate degree from the National and Kapodistrian University of Athens School of Medicine. I pursued my postgraduate training in the United Kingdom. I completed my Core Medical training in Bristol and became a member of the Royal College of Physicians. I am currently working as a Specialist Registrar in London deanery training in Rheumatology and General internal medicine (dual accreditation). I have always been fascinated by medical education; In order to enhance my teaching skills and gain an insightful approach to educational science, I undertook a postgraduate medical education certificate at the University College of London, which I was awarded in 2013.

Parsa, Elyas

Midwestern University graduate, Trained at Christ Medical Center in Chicago for Family Medicine residency program. Started as clinical faculty at San Joaquin General Hospital in French Camp, CA in 2012. Interested in procedural teaching and OB/GYN. / Outside of medicine love the outdoors including snowboarding/hiking and any sports involving a ball except golf.

Peabody, Christopher

Dr. Christopher (Toff) Peabody, MD, MPH is currently a Chief Resident at the University of Southern California Department of Emergency Medicine. He attended medical school at the University of California, San Francisco. In 2009, Toff completed an MPH at Harvard University on a Zuckerman Fellowship. In this capacity, he became interested in young physician mentorship. His current research interests lie in quality improvement and patient safety, especially related to underserved populations.

Pendergraph, Bernadette

Bernadette Pendergraph, MD is the Program Director of the Primary Care Sports Medicine Fellowship at Harbor-UCLA Medical Center, Torrance, CA and an Associate Clinical Professor at the David Geffen School of Medicine in the Department of Family Medicine. She joined the faculty in 2002 and has special interests in curriculum development for sports medicine, pain management, and substance use disorders. bpendergraph@labiomed.org

Percival, Vanessa

Dr Percival completed a Bachelor of Medical Science at Auckland University in New Zealand before undertaking a Bachelor of Medicine and Surgery at the University of Sydney. She has recently been awarded fellowship with the Australian and New Zealand College of Anaesthetists. Dr Percival is currently undertaking a simulation fellowship at Sunnybrook Health Sciences Centre in Toronto, Canada where she is involved in teaching and research activities for residents, students and nursing staff within the department, with a focus on simulation and education.

Pressley, Thomas

Thomas A. Pressley, Ph.D., is a Professor in the Department of Medical Education at Texas Tech University Health Sciences Center. After earning his undergraduate degree at the Johns Hopkins University, he entered the graduate program in biochemistry at the Medical University of South Carolina. His postdoctoral training was in the College of Physicians and Surgeons at Columbia University. He was recruited by the University of Texas Medical School in Houston in 1987, and he transferred to Texas Tech in 1995. In addition to his research, he teaches cardiovascular physiology to first-year medical students. Dr. Pressley has served as an interim dean, a visiting professor at multiple institutions, a member of grant review committees, and the chair of the Education Committee of the American Physiological Society. He has also developed numerous courses, and he has reviewed degree programs at several institutions. Thomas.Pressley@ttuhsc.edu

Puvvula, Jyoti

Dr. Puvvula is Associate Clinical Professor at UCLA-Geffen School of Medicine and Harbor-UCLA Department of Family Medicine. Her medical degree is from UC Irvine, College of Medicine. After her internship at White Memorial Medical Center, she completed her residency and faculty development fellowship at Harbor-UCLA Department of Family Medicine. She has a Masters in Public Health from UCLA in Maternal-Child Health with emphasis on Global and Underserved Health. At Harbor-UCLA she coordinates the community medicine and poverty medicine curriculum. She has a CAQ in Adolescent Medicine. She is the medical director of the Gardena High School Based clinic, and coordinates several teen and pipeline projects at three of the local high schools. Her interests and research are in health disparities and vulnerable populations. She is on the Board for "Doctors for Global Health" (www.dghonline.org) and helps coordinate the Chiapas project. Her most passionate and challenging work, however, is parenting her young son.

Rahman, Suraiya S.

Dr. Rahman is a Pediatric hospitalist at LAC+USC, Masters of Academic Medicine student (anticipated completion 2014) at Keck School of Medicine, and mentor in the Professionalism in Practice of Medicine Year 1 & 2 courses at Keck School of Medicine with a special interest in Narrative Medicine, faculty development, mentoring and work-life balance. / / Dr. Rahman graduated from the Aga Khan University Medical College in Karachi, Pakistan in 1997, completed her Pediatric residency training at Jacobi Medical Center in the Bronx, New York in 2002 and worked for Children's Mercy Hospital in Kansas City as a Pediatric Hospitalist from 2004-2010. Prior to joining the group in Kansas City, she did locums at various Pediatric practices, both rural and suburban, in the state of Missouri. She has been at Keck as a Pediatric hospitalist since 2012. /

Ramachandran, Sujatha

Sujatha Ramachandran, M.D. is the Program Director in Anesthesiology at the Albert Einstein College of Medicine/ Montefiore Medical Center, NY and an Assistant Clinical Professor at Albert Einstein College of Medicine (AECOM). She has been a cardiac Anesthesiologist at Montefiore for 10 years. She predominantly supervises residents and fellows providing anesthetic care to cardio thoracic surgical patients. Her administrative duties include monthly Graduate Medical Education Committee, Patient safety committee and Resident Clinical Competency meetings. She also serves as a mentor for AECOM undergraduate students. Dr. Ramachandran is currently a student in Master of Academic Medicine program at sramacha@montefiore.org

Rao, Sheela

Sheela Rao is an Assistant Professor of Pediatrics at Children's Hospital of Los Angeles. She has taught pediatric residents and medical students in both inpatient and outpatient clinical settings since joining the faculty at USC in 2006. In 2007 she started facilitating interviewing workshops with standardized patients for first and second year medical students in the Introduction to Clinical Medicine I course at the Keck School of Medicine. In September 2011 she was invited to join the faculty as pediatrics discipline supervisor for the USC UCEDD Leadership Education and Neurodevelopmental Disabilities program, an interdisciplinary course to facilitate education and advocacy for populations with disabilities and limited access to health care. In tandem with this position she took over the Child and Family Health track director role in the USC Masters in Public Health program. She is currently traversing through the Keck School of Medicine's Masters in Academic Medicine degree program.

Resnik, Cheryl

Resnik is an associate professor of clinical physical therapy and associate chair of the Division of Biokinesiology and Physical Therapy at the Herman Ostrow School of Dentistry, University of Southern California (USC) in Los Angeles. Resnik received her DPT from USC, a Master of Science in Health Care Management from California State University, Los Angeles, and her BS in physical therapy from the University of Maryland. In addition to her academic responsibilities at USC, Resnik is Director of Community Outreach, oversees a pro bono clinic dedicated to wellness and prevention for the local community, and represents her division on the University Interprofessional Education Committee. Resnik, who served as the president of the California Physical Therapy Association from 2006-2010, is also an activist working to bring access to healthy food to the East Los Angeles neighborhood adjacent to the Health Science Campus.

Richards, Anita

Anita J. Richards, MACM(c), is an Instructor of Clinical Medical Education at USC. She has over 20 years experience working in the standardized patient (SP) field, first at the National Board of Medical Examiners, then at the University of California, San Diego. She has been working in the Clinical Skills Education and Evaluation Center at Keck School of Medicine for the past two years, implementing and evaluating teaching and assessment activities involving SPs. She also serves as Co-Leader of the Trainers' Subcommittee for the California Consortium for the Assessment of Clinical Competence (a consortium of all eight allopathic medical schools in California). Anita is an active member of the Association of Standardized Patient Educators. She also is currently a student in the Master of Academic Medicine Program at USC.

Rommereim-Madden, Daphne

Dr. Rommereim-Madden, MD, is faculty at North Colorado Family Medicine in Greeley, Colorado. She joined NCFM in 2008 where she currently practices operative obstetrics, emphasizing teaching in Community and Ambulatory Medicine and the Patient-Centered Medical Home. She is a Fellow of the American Academy of Family Physicians and a Senior Clinical Instructor in the Department of Family Medicine at the University of Colorado Health Sciences Center. Prior to her professional chapter at NCFM, Dr Rommereim-Madden served as co-medical director at Sunrise Community Health Center then worked in private practice in Johnstown, Colorado. She has been board-certified in Family Medicine since 1998. She acquired a Masters in Public Health from the Johns Hopkins Bloomberg School of Public Health in 2009 where she also earned the Certificate in Maternal and Child Health, studying the development and successes of Fetal and Infant Mortality Review Boards nationwide.

Rosenthal, Jane

Jane Rosenthal, Ed.D., is a faculty member and Learning Resources Specialist at the Keck School of Medicine. In this capacity, Dr Rosenthal provides academic support for students in workshops and in one-on-one settings. This work includes research and directly helping students manage stress, improve test-taking strategies, and assist in the transition from undergraduate program to medical school academics, to the clinical setting, and on to residency. Prior to joining the Keck team in February 2010, Dr Rosenthal was the Director of Academic Advising and Student Retention at New York University College of Dentistry & Nursing. Her research focus is on the interaction among motivation, learning strategies, and academic performance.

Rossetti, Gina

Gina Rossetti is an Assistant Professor in the Department of Medicine at the Keck School of Medicine of USC. She serves as an Associate Director in the USC Internal Medicine Residency Program where her research focuses on Quality Improvement, Innovative Teaching Techniques within Graduate Medical Education, and Healthcare Disparities. She earned her BS from Arizona State University and her MD from the Keck School of Medicine of USC. She completed her residency training in Internal Medicine at USC.

Saenz, Jennifer

Jennifer Saenz, MD, MEd, is the Program Director for the LAC+USC Pediatric Residency Program. She is an Assistant Professor in Pediatrics and the Assistant Director of Pediatric Primary Care at LAC+USC Medical Center. She has been a staff physician for 16 years, joining the LAC+USC family directly out of residency which she completed at Children's Hospital Los Angeles in 1997. She spent the first five years after training at the El Monte Comprehensive Health Center offering primary care

in the community where she was born and raised. In 2001, she completed her Masters in Medical Education at the University of Southern California. She has been involved in graduate medical education for the past 12 years. Her duties include directing the residency program, teaching residents and medical students on the inpatient wards and in clinic. She also offers direct patient care in faculty clinic and in the urgent care setting. jds@usc.edu

Saloum, David

David Saloum, M.D. is the Emergency Medicine Residency Program Director at Maimonides Medical Center in Brooklyn, New York. He clinical career began with the U.S. Army where he served as an Emergency Physician in multiple countries. Now on staff at Maimonides for six years, he splits his time doing clinical work, administrative duties, faculty development, and education research. Dr. Saloum is currently a student in the Master of Academic Medicine program at USC. dsaloum@maimonidesmed.org

Sarmah, Anita

Anita originally qualified from the University of Manchester, UK. She went on to train in Anaesthesia in Edinburgh and Nottingham. After a Fellowship in Critical Care Medicine with University of Toronto, she moved to Harborview Seattle at University of Washington. Currently she is working as an Attending Anesthesiologist at Sunnybrook Health Sciences Centre with special interest in innovations in Undergraduate Medical Education. She co-developed the first University of Toronto Undergraduate Anaesthesia e-learning module prior to "Entry Simulation Day" recently presented at the World Congress of Anesthesiologists. Additionally she co- introduced a 2nd simulation experience. She pioneered the first Clerkship didactic bedside Ultrasound teaching, presented at AMEE 2013. She is a co-founding member of the Undergraduate Ultrasound Committee. She is the proud recipient of the Dr John Desmond Award /

Schamber, Elizabeth

Elizabeth Chamber received a B.A in Psychology from Wesleyan University and an M.A. in Medical Sciences from Loyola University Chicago. After completing her Bachelor's degree she spent 2 years in the AmeriCorps program volunteering at Haight Ashbury Free Medical Clinic in San Francisco, and then worked for 3 years as the Clinical Research Coordinator for the Department of Orthopaedic Surgery at UCSF. She is currently a second year medical student at USC Keck School of Medicine and is interested in preventive medicine and integrative health, particularly as they pertain to obesity, substance abuse and nutrition.

Schultz, Ann

Ann Schultz, MPAS, PA-C, is full-time faculty at the Keck School of Medicine of USC Primary Care Physician Assistant Program as an Instructor of Clinical Family Medicine. She has 35 years experience in clinical medicine, has been actively involved as a clinical preceptor for more than 30 years, and is a graduate of the USC physician assistant program where she joined as a faculty member in 2007. Areas of both teaching and clinical focus include women's health, pediatrics and pulmonary medicine. In addition to teaching and clinical practice Ms. Schultz is a Medical Officer in the United States Army Reserve. She has been a volunteer member of the Medical Reserve Corp of Los Angeles County since its inception in 2003 and was recently appointed as a member of the Advisory Board with the Los Angeles County Department of Public Health.

Schulz, Catherine

Catherine Rodziewicz Schulz, MD is an Assistant Professor, Department of Anesthesiology, at the Keck School of Medicine at the University of Southern California. She trained at the University of Michigan Medical School and did her anesthesia residency at Emory University. She started and currently is the Director of the Resident Simulation Education Program in Anesthesiology at USC. She has been featured as a curriculum and scenario developer for CAE Healthcare's top of the line hi-fidelity HPS Human Patient Simulator. Her clinical interest is ambulatory anesthesia and she has presented simulation workshops at SAMBA (the Society for Ambulatory Anesthesia) teaching crisis resource management skills. Dr. Schulz is currently a student in the Master of Academic Medicine program at USC. catherine.schulz@med.usc.edu

Schulz, Christopher

Dr. Christopher Schulz, BM, BSc currently carries a clinical role as Resident Medical Officer (Post-graduate Year 3) at Nuffield Health Brighton, and an educational role within the Anatomy Department at Brighton and Sussex Medical School in the United Kingdom. He completed his medical degree at the University of Southampton, followed by two 'foundation years' (similar to a rotating internship) in Portsmouth, UK during which Dr. Schulz gained clinical experience in a wide range of medical and surgical specialties. His current interests lie within Ophthalmology, Medical Education and Anatomy, and is involved in a number of ongoing academic projects related to these. As a US citizen raised and educated in the UK, Dr. Schulz still has a number of close family ties in California. chrisschulz@doctors.org.uk

Seltzer, Justin

Justin Seltzer is currently a first year medical student at the Keck School of Medicine. He is a graduate of the University of Southern California, where he completed a bachelor of arts with a major in International Relations and a minor in the Health Care Studies. Justin has broad research interests and has thus far been involved with clinical studies in neurosurgery. He is a medical student teacher in the undergraduate anatomy course "MEDS 320: Clinical Perspectives in Human Anatomy" at USC.

Shoemaker, Erica

Dr. Shoemaker is the program director for the Child and Adolescent Psychiatry Fellowship at University of Southern California/LAC + USC Medical Center. She has held this position for the last 5 1/2 years. She completed the Fellowship in Medical Education at UCLA in June 2007 and joined the faculty at USC in March 2008. She has an interest both in the use of new technology to further medical education as well as an interest in the age-old problem of how to foster collegial and ethical behaviors in "trainees" ranging from medical students to faculty.

Shoenberger, Jan

Jan Shoenberger, MD is the Residency Program Director for the Department of Emergency Medicine at LAC+USC Medical Center. She is an Associate Professor of Clinical Emergency Medicine at KSOM. Dr. Shoenberger is a Southern California native who received her BS in Biochemistry/Cell Biology from UCSD in 1993. After two years working in a basic science research lab at The Scripps Research Institute, she attended the USC School of Medicine where she received her MD in 1999. She did her PGY1 year at Santa Barbara Cottage Hospital in Internal Medicine and then completed 3 years of Emergency Medicine residency training at LAC+USC. She is also board certified in Hospice and Palliative Medicine. Her research interests include resident education in emergency medicine and end of life care in the emergency department.

Simonson, Jean

Jean Simonson, MD, is currently Associate Professor, Department of Anesthesiology, at the University of Nebraska Medical Center (UNMC) in Omaha. Following a brief career in nursing, Dr. Simonson completed medical school and residency training at UNMC. As a practicing academic anesthesiologist for the past sixteen years with special clinical interests in liver transplant and obstetrical anesthesiology, Dr. Simonson serves as the Director of Obstetrical Anesthesia at The Nebraska Medical Center, a merged healthcare system of a private hospital and academic institution. As Residency Program Director since 2009, she designed, developed, and implemented the department's clinical base year residency program and a resident research oversight committee. Her academic interests include anything related to resident education and GME including curriculum and clinical rotation design, interdepartmental collaboration, and assessment of program and personnel performance. She is also a past president of the Nebraska Society of Anesthesiologists.

Singh, Rasnik

Rasnik Singh is a second year medical student at UCLA David Geffen School of Medicine. She graduated from UCLA in 2012 with a major in Microbiology, Immunology, and Molecular Genetics. Her current areas of research include medical education, endocrine surgery and otolaryngology.

Souder, Denise

Dr. Souder is Assistant Professor and Associate Director of the Clinical Skills Education and Evaluation Center at the Keck School of Medicine of the University of Southern California. She has been involved in standardized patient education since 2002, and is responsible for educating actors to portray patients in scripted cases with medical students, residents, physicians' assistants, and nursing students. She serves as exam and remediation faculty for Year 3 and Year 4 medical students, and teaches in faculty development workshops. / / Her current research interests include learning theories in medical education, feedback, and self-assessment. Dr. Souder earned her nursing degree from the LAC+USC School of Nursing, a bachelor's of arts degree from Mount St. Mary's College, a master's of science in education from the University of Southern California, and her Ed.D. with a major in educational psychology from the University of Southern California. / / / /

Souter, Karen

Karen J Souter MB BS FRCA, is the Vice-chair for Education and Residency Program Director in the Department of Anesthesiology and Pain Medicine at the University of Washington in Seattle, Washington. She received her medical degree and postgraduate training in anesthesiology in the UK and fellowship training in neuroanesthesiology in Canada. She practiced as a consultant neuroanesthesiologist at the University of Southampton until 2001. / Dr Souter moved to the University of Washington in 2002 and became residency program director in 2005. She is responsible for 107 residents. In 2011 she received the ACGME "Parker J Palmer Courage to Teach" award in recognition of her work related to resident education. / Dr. Souter is an active member of many professional societies related to anesthesia and education. She is secretary of Society for Education for Anesthesia, and currently serving as president-elect of the Association of Anesthesiology Core Program Directors. /

Strohm, Maureen

Maureen Strohm, MD, Clinical Associate Professor of Family Medicine, is Director for the Eisenhower Medical Center Family Medicine Residency program in Rancho Mirage, which welcomed its first residents in July 2013. / / A native Californian, Dr. Strohm graduated cum laude from Santa Clara University in 1974, and earned her MD from Georgetown University in 1978. Following her family medicine residency at UCLA in 1981, Dr. Strohm served the inner city communities of central and East Los Angeles through the National Health Service Corps until 1986, and later through USC Family Medicine until 2009. / / She began her teaching career when she joined USC Family Medicine in 1983 as a preceptor with the affiliated family medicine residencies and completed the fellowship in Medical Education in 1984. She was Director, Year I ICM from 1990-1995. From 1995 to 2009, she was Director for the USC/California Hospital FM Residency. During these years, she completed 17 marathons, and was Medical Director for the LA Marathon from 2008 -2010. / / She is board certified in Family Medicine and most recently, in Addiction Medicine as well. /

Stromberg, Erica

Erica began her career at Henry Ford Health System in 2003 in Patient Financial Services. After obtaining her Bachelors of Arts in Public Relations in 2010, she transitioned to the Marketing and Web Services department where she contributed to redesign of the health systems' 6,000 page consumer website, HenryFord.com, which won the 2012 eHealthcare leadership gold medal award for best overall internet site as well as a the gold medal in best site design. / / As Manager of Web Services, Erica provides web support for a number of product lines across the health system including Undergraduate, Graduate, Continuing and Allied Health medical education training programs. / / Contact information: / Estromb1@hfhs.org / 313-874-6246 /

Tanaka, Pedro

I began my career as an anesthesiologist in my native country of Brazil. In 1994 I was appointed as an instructor in anesthesiology at the Federal University of Paraná in Brazil. In 1996 I received a promotion to Assistant Professor of Anesthesiology and was promoted again to Associate Professor of Anesthesiology in 2000. I came to Stanford University for a sabbatical year in 2007. It was a great fit on both sides, and I decided to pursue a long-term career at Stanford. I am currently a Clinical Associate Professor in the Department of Anesthesia.

Thompson, Michelle

Michelle Thompson, MD is an Assistant Professor in Clinical Pediatrics and Associate Director of the pediatric residency training program at Children's Hospital Los Angeles (CHLA). In addition to her administrative and teaching responsibilities, she manages a busy clinical practice as a member of the Division of General Pediatrics at CHLA. Dr. Thompson is a graduate of the University of Virginia School of Medicine in Charlottesville, VA. She moved to the West Coast in 1995, and completed her pediatric residency training at CHLA in 1998. Dr. Thompson is currently a student in the Master of Academic Medicine Program at the University of Southern California. mthompson@chla.usc.edu

Trost, Margaret

Margaret Trost, MD, is an Assistant Professor in the Division of Hospital Medicine, USC/Keck School of Medicine. She has been an instructor for the Introduction to Clinical Medicine course, teaching the art of the physical exam and history taking to junior medical students, since 2011. She also supervises senior medical students, residents, and fellows as they care for pediatric inpatients at Children's Hospital Los Angeles. There she is a member of the infectious disease and antimicrobial stewardship committees. Her research interests skew towards infectious disease topics, likely related to her year of infectious disease fellowship at the University of Texas Southwestern, where she studied respiratory viruses and their relation to asthma. Currently she acts as a research mentor to two medical students through the USC Salerni mentorship program, and heads the Evidence-Based Medicine research interest group within the Division of Hospital Medicine. mtrost@chla.usc.edu

Trueger, Nathan

Dr. Donald is a Health Policy Fellow in the George Washington University (GW) Department of Emergency Medicine in Washington, DC. After medical school at the University of Chicago Pritzker School of Medicine, Dr. Donald completed her residency at Los Angeles County/Harbor-UCLA Medical Center in 2012. During her fellowship, Dr. Donald's main interests have been health policy in medical education, and coordinated health care delivery systems. Currently, Dr. Donald is a Masters of Public Health candidate at GW (spring 2014), and a physician-fellow at the Center for Medicare and Medicaid Innovation. sdonald@mfa.gwu.edu

Tschanz, Mark

Mark P. Tschanz DO, FACP, (Lieutenant Commander, US Navy) is the Senior Medical Officer on the USS Essex, a large amphibious assault ship home-ported in San Diego, California. Dr. Tschanz oversees the operations of the large medical department on the ship, which is complete with six operating rooms, a 14 bed ICU, and a large medical-surgical ward. He completed residency in Internal medicine at the Naval Medical Center San Diego (NMCS) in 2008, followed by a year as the Chief of Residents. Following residency, he remained at the medical center, eventually becoming the Associate Program Director and the clerkship site director for the 3rd year Medicine clerkship. Dr. Tschanz is also active in the American College of Physicians, serving on the Council of Early Career Physicians (CECP). Dr. Tschanz is currently a student in Master of Academic Medicine at USC.

Vasa, Rukmani

Dr. Vasan serves as Associate Director for GME at LAC+USC Medical Center, Director for Pediatric Primary Care and Co Pediatric Clerkship Director. Working collaboratively with the GME director, she provides oversight of 59 programs to comply with ACGME requirements including CLER. Since joining the USC faculty in 1997 Roni has taken a leadership role in medical education, developing and implementing innovative educational curricula with competency-based goals and objectives and evaluation tools. As a medical educator, Roni's personal challenge has been to prepare her graduates for providing high quality health care that is responsive to the needs of the population. In addition to supervising residents in continuity clinics and attending on the pediatric wards, Roni provides primary care to vulnerable inner city children at LAC+USC Medical Center.

Vath, Richard

Richard J. Vath, MAEd is an Academic Research Director for Education at Our Lady of the Lake Regional Medical Center in Baton Rouge, LA, and a Doctoral Candidate in Education and Psychology at the University of Michigan. At the University of Michigan, he served as a graduate research assistant on two large-scale, NSF-funded studies in STEM education. In his current role as faculty member in the Baton-Rouge-based LSU Psychiatry Residency Program, he provides lectures on learning, teaching, and quality improvement, as well as contributes to the program's faculty development activities. His research interests include the impact of faculty development opportunities on physician educators' scholarly thinking and practice as well as assessment of resident learning across the training continuum. Richard.vath2@ololrnc.com

Vilasagar, Neetha

Neetha Vilasagar MD is a senior fellow in the Pediatric Critical Care Medicine program at Harbor-UCLA Medical Center and CHOC Children's Hospital. She completed medical school at Marshall University in Huntington, WV and residency in Pediatrics at Harbor-UCLA Medical Center in Torrance, CA. Her research has thus far investigated simulation as a clinical education tool, and she looks forward to utilizing simulation in her future career.

Wald, David

I have been involved with undergraduate and graduate medical education for 17 years. I currently serve as the Medical Director of the William Maul Measey Institute for Clinical Simulation and Patient Safety, Temple University School of Medicine. I am also a long standing Clerkship Director of a mandatory 4th year emergency medicine clerkship.

Wegler, Jennifer

Jennifer Wegler, MMS, MA, PA-C, the Director of Didactic Education, joined the USC Trojan family in July of 2005 when she became a part of the faculty at the PA Program. A Chicago native, Ms. Wegler attended University of Illinois at Champaign-Urbana where she earned a Bachelor's degree in Kinesiology with an emphasis in Athletic Training. She began her teaching career as a high school science teacher at a high school in the Chicago suburbs, where she also served as athletic trainer. During that time, Ms. Wegler also received a Master's in Secondary Science Education and after 7 years of teaching anatomy, physiology and biology, Ms. Wegler returned to school to earn a Master's in Physician Assistant Practice from Midwestern University in 2002. She is now the course director for Clinical Skills I and Topics in Medicine II, and practices in Orthopedics.

White, Casey

Casey B. White, Ph.D. is the Associate Dean and Associate Professor for Medical Education, Research and Instruction at the University of Virginia. She is responsible for conducting research related to the medical student curriculum, offering structured faculty development opportunities and providing leadership to support the curriculum, evaluation efforts and clinical assessment of students' knowledge, skills and attitudes. / Dr. White's research interests are broad. She was co-investigator on one of the first Stemmler grants to be awarded; with colleagues, she studied medical student self-assessment. She was also co-investigator on two NIH grants – integrative medicine and informed consent. She has received external funding to study multi-culturalism, inter-professional service learning, and technology/simulation-based and virtual human learning tools in medical education. / Dr. White has taught courses in educational psychology, assessment and measurement, instructional methods, and medical/professional education. She has conducted numerous workshops on active learning methods, small group teaching and learning, and self-regulated learning. /

Wong, Ivan

Dr. Ivan Wong completed his medical school training in 2003 at Dalhousie University, Halifax, Nova Scotia Canada. He has completed his Orthopaedic Residency at McMaster University and Fellowship in Sports Medicine and Trauma at the Southern California Orthopaedic Institute. Dr. Wong has recently completed a Masters of Academic Medicine at the University of Southern California. / He currently serves as an Assistant Professor at Dalhousie University and specializes in arthroscopic reconstruction of the shoulder and hip. / / Dr. Wong's research interest is on development and teaching of advanced arthroscopic reconstructions. Current arthroscopic projects include reconstruction of irreparable cuff tears, and instability with bone loss. /

Xi, Cindy

Cindy Xi, M.D. is a fourth year resident at Los Angeles County + USC Medical Center in the combined Internal Medicine + Pediatrics program. During her undergraduate studies in Brain and Cognitive Sciences at the Massachusetts Institute of Technology, her interest in clinical outcomes changed her course from basic scientist to physician. Exposure to patient care and its social and financial barriers early in her training at the Keck School of Medicine stimulated an interest in advocacy, and as a result, she co-founded the California Student Physicians for Health Care Reform. Residency has reinforced that advocacy remains an inherent part of the daily work of a physician. Upon graduation, Cindy plans to work in primary care.

Yang, Elaine

Elaine Yang, MS2, received a B.A. in Medical Anthropology & Global Health from University of Pennsylvania, where she conducted ethnographic research on local perceptions of health changes within an indigenous population of northern Argentina. After completing her bachelor's degree, she worked in clinical research for Penn's Center for Sleep and Respiratory Neurobiology. She assisted in coordinating a seven-year longitudinal NIH-funded project on peri-menopausal obstructive sleep apnea and performed in-home sleep studies for various studies related to sleep medicine. She is currently a medical student at USC Keck School of Medicine with an interest in community-based primary care and acute exacerbations of chronic conditions. In the future, she hopes to incorporate integrative health modalities and international work in her practice. /

Zia, Stephanie

A three-time alumnus of USC, Dr. Zia received her B.A. in education in 1999, M.D. in 2003, and completed residency in Combined Internal Medicine and Pediatrics (Med/Peds) in 2007. She completed a Pediatrics Chief Resident year before joining the faculty in 2008. In addition to her duties as a Med/Peds hospitalist, Dr. Zia has a passion for mentorship and teaching. She is the Co-Course Director for Keck's Professionalism and the Practice of Medicine course, the Med/Peds Faculty Advisor, and Assistant Program Director for the Med/Peds residency program. She is an AOA member and received the Leonard Tow Humanism in Medicine award. She was selected the Class of 2007's Resident Teacher of the Year and achieved Master Teacher distinction in 2013. Currently, she is pursuing her Masters in Academic Medicine at Keck. Dr. Zia is deeply devoted to USC and its students, and loves inspiring her students to be lifelong learners.