

2009 WGEA WGSA WMAS WAAHP CONFERENCE

MERC * CRIME * LIME * CurrMIT

AAMC Western Regional Conference Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine
April 18-21, 2009

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PROGRAM

Saturday, April 18, 2009

ROOM

La Fonda Hotel

8:00 - 5:00 pm
9:00 - 12:00 pm

Pre-Conference Meetings

MERC – Formulating Research Questions and
Designing Studies
Carol Hodgson, PhD

CRIME
LIME
CurrMIT

Stiha (LF)

Exchange (LF)
Boardroom (LF)
La Terraza (LF)

12:30 - 2:30 pm
1:00 - 4:00 pm

WAAHP Executive Meeting

MERC – Searching and Evaluating the Medical Education
Literature

Carol Hodgson, PhD and Lauren Maggio, MS(LIS), MA, AHIP

Coronado (LF)
Stiha (LF)

2:30 - 4:30 pm
4:00 - 7:00 pm
4:30 - 6:00 pm
6:00 - 7:00 pm

WAAHP New Advisors' Orientation

Early Registration
Poster Session #1
Welcome Reception

Dinner on your own

Coronado (LF)
Lobby (LF)
Ballroom (LF)
La Terraza (LF)

8:00 – 9:30 pm

WAAHP Retirement Celebration – Coffee and Dessert

La Terraza (LF)

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Efficacy of a Capstone Course in Preparing Medical Students for the Transition to Residency

Alan R. Teo, John Maa, Elizabeth Harleman, Patricia S. O'Sullivan

Introduction: The transition from medical school to residency is challenging with various competencies essential for the new resident. Many schools have instituted programs to prepare medical students with these skills. However, limited literature exists on the effectiveness of these offerings.

Objectives: To assess the efficacy of a capstone course in preparing senior medical students for the transition to graduate medical education (i.e., residency).

Methods: A required three-week capstone course was developed for the end of medical school. Course content focused on: 1) management of common clinical topics, 2) communication, 3) procedural skills, and 4) life skills. Student participants completed a confidential pre- and post-course questionnaire containing fourteen items about preparedness for residency on a five-point Likert scale from strongly disagree (1) to strongly agree (5). They also completed a six-item course evaluation using a similar Likert scale. **Results:** Students (n=76) rated overall course quality as 4.5 (sd=0.72). Additionally, 61 students completed matched pre- and post-course surveys on preparation for residency. Students were significantly more likely to rate themselves as prepared for residency on the three items with the lowest pre-course score: 1) communicating outside their chosen specialty; 2) maintaining their own well-being; and 3) recognizing what resources are available to manage a mistake made in internship.

Discussion: A short capstone course is a feasible and effective method of improving perceived preparedness for residency, particularly in skill domains in which students feel the most ill-prepared. Further studies including objective evaluation, longitudinal follow-up, and a control group are planned to assess quality and durability of course impact.

**Reflections on Professionalism: Student Reactions to an
“Impaired Colleague” OSCE Station**

Pat Kenney-Moore

Introduction: Professionalism is a key component in the development of qualified, safe and effective health care providers. As outlined in the Competencies for the Physician Assistant Profession¹, the competency of professionalism requires that PAs practice “without impairment from substance abuse, cognitive deficiency or mental illness.” Although programs provide instruction in detection and treatment of substance abuse as well as professional responsibility, inquiry into physician assistant students’ ability to manage lapses in professionalism has not been well delineated.

Objectives: To ascertain if an OSCE station on professionalism is an effective platform for students to practice their skills in dealing with an impaired colleague.

Methods: 36 physician assistant students were exposed to an OSCE station in which they were presented with a scenario involving a clinical encounter with a fellow student who admitted to drinking alcohol. During the station, students were asked to role-play how they would respond to this impaired colleague. At the conclusion of the OSCE, students completed a three-question survey and a post-encounter reflection.

Results: Students overwhelmingly confirmed the benefit of participating in the impaired colleague station. Additionally, the reflective comments richly describe the value of the experience as an opportunity to practice skills in dealing with this ethical dilemma as opposed to just discussing it in a classroom setting.

Discussion: Based on this single experience, an OSCE station appears to provide a safe opportunity for a formative student experience in dealing with issues in professionalism.

Reference: *Competencies for the Physician Assistant Profession*, accessed June 18, 2008 3:00 pm at www.nccpa.net

Development of a Survey of Self-Reported Confidence in Non-technical Resuscitation Skills

Jennifer Plant, Sandrijn Van Schaik, Christy Boscardin, Patricia O'Sullivan

Introduction: Life long, self-directed learning should be steered by self-assessment. Self-assessment can facilitate the acquisition of non-technical resuscitation skills, including leadership and communication skills. Physicians demonstrate poor self-assessment, but this may be due to the lack of adequate tools.

Objectives: To develop a valid self-assessment tool for non-technical resuscitation skills.

Methods: Based on previous work defining the construct of non-technical skills, we designed a 24-item survey of self-reported confidence using a 5-point Likert scale. Three experts reviewed the survey for content validity. Pediatric residents, critical care fellows and attendings completed the survey. We performed exploratory factor analysis testing four and two factor models based on literature review, examined internal consistency reliability with Cronbach's alphas and provided validity evidence through known group comparison using multivariate ANOVA.

Results: 97 subjects completed the survey: 79 pediatric residents and 18 pediatric critical care fellows and attendings. The two factor model fit the data best with all but 3 survey items loaded as theorized onto 1 of 2 components with correlations of > 0.5 . One component had 12 items ($\alpha = 0.92$) and corresponded to cognitive non-technical skills such as situation awareness and decision making. The second component with 9 items ($\alpha = 0.90$) corresponded to interpersonal skills. Residents scored lower than fellows/attendings ($p < .001$): $3.47 \pm .46$ vs $4.46 \pm .39$ for cognitive skills and $3.24 \pm .55$ vs $4.23 \pm .41$ for interpersonal skills.

Discussion: This survey provides a valid self-assessment tool for non-technical resuscitation skills. Further investigation into its predictive validity related to observer-rated competency in these skills is pending.

Psychometric Evaluation of a Course Evaluation Tool: Testing a Postulated Model*Babbi J. Winegarden, Dale Glaser*

The overall objective of this project was to undertake an in-depth psychometric investigation of the Course Evaluation tool used at UCSD School of Medicine. As this tool is used for both formative (learning) and summative (advancement and review) purposes, providing evidence of validity is critical for fair and meaningful interpretation¹. Our Course Evaluation tool has five postulated subscales: Communication, Organization, Integration, Content, and Examinations/Grading. Cronbach's alpha was computed for the five subscales to determine internal consistency for the full sample (N=809) and across sex (females N=408; males N=401). A confirmatory factor analysis (CFA) for the full sample and a multi-sample CFA by sex also were conducted. The reliability estimates were relatively high for all the full-sample subscales, ranging from .841 to .900 with good item intercorrelations (all > .586) and for all the subscales by sex, ranging from .808 to .887 for Females and .852 to .904 for Males. CFA using the MLR estimator^{2,3} resulted in an overall fit that was significant: $\chi^2(312) = 766.72, p < .05$ indicating lack of fit. The NNFI (.924), CFI (.931), RMSEA (.06) and SRMR (.056) indicate marginally acceptable fit. There is also some preliminary evidence that model fit slightly favors males (e.g., lower chi-square, higher item R²). While this study provides some preliminary evidence of validity for our Course Evaluation tool, the results of these analyses underscore the importance of ongoing investigation into the validity of home-grown evaluation tools. Future research will involve examination of local fit statistics (e.g., residuals) and possible differences in item interpretation between males and females to gain insight into ways to improve our tool.

References

¹Downing, S. M. (2003). Validity: On the meaningful interpretation of assessment data. *Medical Education, 37*, 830-837.

²Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods, 3*, 4-69

³Yuan, K., & Bentler, P. M. (2000). Three likelihood-based methods for mean and covariance structure analysis with nonnormal missing data. *Sociological Methodology, 30*, 165-200

Can We Predict Residents' Behavior Using the Thomas-Kilmann Conflict Mode Instrument?

Meir Jonathon Solnik, Dotun A. Ogunyemi

Objective: To assess the utility of the Thomas-Kilmann conflict mode in predicting resident performance.

Methods: The Thomas-Kilmann instrument assesses behavior in conflict situations along two dimensions (1) assertiveness, tendency to satisfy ones' own concerns and (2) cooperativeness, tendency to satisfy the other person's concerns. Nineteen residents volunteered and conflict mode percentiles were calculated. Residents were classified as contributors if they provided major administrative service to the program or concerning if they had significant issues or had been placed on remediation. CREOG scores and faculty evaluations of residents on the 6 competencies were concomitantly analyzed.

Results: Scores of those considered to be contributors compared to others: competing [58% vs. 17% (p=0.01)], avoiding [32% vs. 84 % (p=0.01)], accommodating [50% vs. 81% (p=0.01)]. Contributors compared to others had significantly high competing, moderate/high collaborating, low avoiding and low accommodating. Scores of those considered to be concerning compared to others: collaborating [10% vs. 31% (p=0.01)], avoiding [90% vs. 57 % (p=0.006)], accommodating [86% vs. 65% (p=0.03)]. Spearman correlations with contributing compared to concerning residents were: collaborating $r = 0.73$ (p=0.007), avoiding $r = -0.58$ (p = 0.048) and accommodating $r = -0.69$, (p = 0.013). Conflict modes also seem to be able to predict residents' evaluation by faculty on the ACGME competencies.

Conclusions: Residents who are successful at executing administrative duties are more likely to have a profile that is relatively high in collaborating and competing but low in avoiding and accommodating. An opposing profile is more common among residents who have difficulties adjusting to residency.

A Communication Needs Assessment

Rita S Lee, Traci E. Yamashita, Eva M Aagaard

Introduction: Healthcare providers must assess patients' behavioral risks to perform appropriate counseling and healthcare screening.

Objective: To perform a needs assessment, determining medical students' perceptions of and self-confidence in their ability to perform comprehensive behavioral histories.

Methods: Cross-sectional survey of all medical students enrolled at the University of Colorado Denver School of Medicine in 2007-08. Frequency and descriptive data were recorded; differences by academic year were analyzed by logistic regression.

Results: Among the 584 students enrolled, 367 (63%) completed the survey. Overall, students felt it was important to perform comprehensive alcohol (93%), tobacco (97%), and sexual (87%) histories. Students were less confident in their ability to perform alcohol (80%), tobacco (86%), or sexual (70%) histories. The perceived importance of taking a sexual history significantly varied according to academic year; 38% of first year medical students strongly agreed versus 23%, 20% and 27% among second, third, and fourth years, respectively ($p=0.003$; OR and 95% CIs relative to first years, 1.80 (1.09-2.97); 2.16 (1.16,-4.04); and 2.30 (1.24-4.27)). The importance of taking alcohol and tobacco histories did not vary according to academic year.

Discussion: Medical students agree that taking comprehensive alcohol and tobacco histories is important, less so with sexual history taking. However, comprehensive histories are not commonly performed. Attitudes about the importance of taking a sexual history decreased after the first year of medical school. Educators should focus on developing effective interventions to address these gaps and issues in the hidden curriculum that may affect attitudes towards provider-patient communication

Development of an Enteral Nutrition Protocol for Surgical Intensive Care Patients

Allen Nathaniel Gustin

Background: Clinical evidence supports the early initiation of feeding in critically ill patients, as studies have shown that malnutrition can increase morbidity and mortality. Nutrition can be especially important in surgical patients in order to aid in wound healing, prevent bacterial translocation of the gut, and promote gastric-immunologic mechanisms. Additionally, surgical intensive care unit patients (SICU) can be complex in terms of nutrition planning due to the potential for altered anatomy or the presence of peri-operative surgical complications. Inconsistent practices with enteral feeding often prevent healthcare teams from achieving feeding goals and optimizing the benefits of nutritional support. There are a number of protocols that have been developed for the medical intensive care patient population; however, we are not aware of any reports with specific protocols for the surgical population.

Objectives: To develop a standardized, evidence-based enteral nutrition protocol for the surgical intensive care unit that provides up-to-date guidelines for educating healthcare teams to initiate, manage, and evaluate the effectiveness of enteral feeding.

Methods: An extensive search for evidence-based literature was conducted. The final protocol was compiled from ASPEN guidelines and enteral feed protocols published for intensive care patients in the previous ten years. The protocol was developed by a multidisciplinary team including nutritionists, pharmacists, nursing services, and an anesthesiologist trained in critical care medicine. The finalized protocol was subsequently submitted for review and approval by our facility's Pharmacy and Therapeutics, Nutrition, and Clinical Nursing Committees. The final protocol is meant to be an educational tool for rotating anesthesiology residents, general surgery residents, and pharmacy residents rotating through the SICU.

Results: The developed protocol consists of six separate yet interrelated algorithms which outline an educational approach to each of the relevant aspects involved in providing appropriate enteral nutrition for the SICU patient population. These aspects include optimal time to initiation of feedings, suggestions for tube selection, placement and placement verification, management of gastric aspirate volumes and assessment of feeding intolerance, guidelines for peri-procedural holding/stopping of feeding, utilization of adjunctive pharmacotherapy, and evaluation and management of diarrhea. The multidisciplinary SICU healthcare team will reflect on each previous ICU day to identify barriers and facilitators which allow for adherence to the enteral feed protocol. In the surgical patient population, there will often be patients who have contraindications to enteral feedings or, due to the specifics of their surgery, are not appropriate candidates for enteral feeding. These potential patients are described and excluded from this protocol.

Conclusions

The intent of the protocol is to balance nutritional goals with prevention of complications by creating a unified educational approach and eliminating inconsistencies in care. The protocol and its algorithms are meant to be utilized in conjunction with a multidisciplinary healthcare team. We hope to further evaluate the efficacy of the protocol once implemented by assessing our institution's time to initiation and goal rate of feeding, management of gastric residuals, and the daily reflective process as evidenced by overall adherence to the protocol. At this time, we feel that the protocol's algorithms could be adapted to any surgical intensive care unit setting. As the safety and benefits of the protocol become evident, we plan modify it for utilization in the medical intensive care unit, and possibly, to the general medicine and surgical wards.

Applying the Service Learning Model to Medical Education Through a Health Education and Action Conference

Andrew Brookens, Christopher Kudron

Context: The coming generation of health care practitioners will face novel healthcare delivery challenges outside the clinic. Anecdotally, medical students are largely under-informed about broader community issues surrounding public health and population-based interventions. Service learning is a form of experiential education that combines academic curriculum with meaningful service and is particularly suited to address many of today's challenges in medical education.

Objectives: Student leaders recognized opportunities for increased learning through actionable public health outreach events. Leaders at the University of Colorado Denver (UCD), recognizing an opportunity to increase learning about public health through action, developed the "Health Action Conference" (HAC) to raise the profile of health access and advocacy among students, perform meaningful, student-led service directly to the surrounding community, investigate a timely healthcare challenge and foster cross-professional collaboration by including students from multiple UCD health professions schools.

Key Message: Students, through alternative education and action, have a unique ability to address the health care challenges of our generation in an intimate yet less passionate manner than current practitioners. As future physicians, we must assume the role of advocate now, in addition to the other functions of the profession.

Conclusion: At the two-day conference, over 100 students and faculty learned and served 600 visitors including 360 patients at the health fair. Elected officials and community partners demonstrated strong support at this student conference and interest in future collaborations. The HAC offers a successful example of service learning at academic medical centers relevant to the health care challenges of our generation.

**Health Promotion and Disease Prevention HP499:
Current Issues in Medical Education and Healthcare**

Philippe Champagne, Walavan Sivakumar

The importance of professionalism and ethics in medicine is widely recognized and as such accorded openings in medical school curriculum whether as lectures or organized courses. The benefits to physicians, patients, and society in having professional, ethical, and cultural competent doctors are immeasurable and although may appear a matter of character, they can definitely be honed, strengthened, and reinforced. An innovative approach to such goals is to reinforce the learning medical students acquire by having them teach these same concepts to undergraduate pre-medical students, introducing these concepts earlier in the pipeline.

Objectives:

1. Medical students reinforce and deepen their knowledge of topics related to professionalism, ethics, cultural competency, health policy and other such related topics in medicine by researching these topics before preparing a lecture
2. Medical students learn and practice academic skills such as preparation of lectures and lecture materials as well as the skill of actually teaching
3. Medical students are mentored by faculty, allowing for feedback and improvement, especially of academic skills
4. Makes medical students available as role models to pre-medical students and promotes connections, strengthening this axis
5. Exposes pre-medical students to these topics, creating an introduction of important material earlier in the pipeline of medical training

Key Message: By having medical students teach a course on professionalism and related topics in the practice of medicine strengthens these students understanding of these topics, provides them with an opportunity to begin viewing themselves as teachers, and introduces these topics in pre-medical school training. This approach strengthens knowledge and creates and hones new skills in teaching (of importance as medical students become residents).

Conclusion: This format is an innovative addition to existing “art of medicine” curriculum, providing an alternative to lectures that achieves similar results in terms of knowledge acquisition, but also provides secondary benefits (teaching practice and increased awareness of these issues in future incoming classes of medical students). Of particular interest is the positive feedback loop implied in such a format: as incoming medical students become better versed in these topics as premedicine students, hopefully the more this format would benefit. Although a bit unfocused in this first attempt, focusing more on the mentoring from faculty concerning academic skill development could create another such positive loop, one which great implications (given the importance of teaching skills in resident staff for most of medical education).

Correlation of Neurology Clerkship Curriculum Changes and Improved Shelf Board Examination Performance*Mary Johnson*

In all clerkships for Phase II students at the University of New Mexico School of Medicine, the grade obtained on the end of the clerkship shelf board examination comprises 25% of each student's final grade. In the clerkship years 2000-2001 and 2001-2002 (classes of 2002 and 2003) 26.0% and 32.9% of the students received neurology board scores that were failing (unsatisfactory or "F"). In the year 2002-2003 changes were made in the didactic curriculum provided for the students during their 4 week neurology clerkship. The percent of students receiving unsatisfactory grades decreased to 10.1%, 14.7%, and 7.3%, for the classes of 2005, 2006 and 2007.

Well-Being Series Linked to the Curriculum: Lunchtime Workshops for First Year Medical Students

Rebecca Wendell Watters

Context: Medical students are at high-risk of developing mental health problems. In 2006, University of California (UC) Student Mental Health Report found a need for more campus mental health services.

Objectives: In response, we linked elective well-being lunchtime events with the academic curriculum. We transformed the standard free lunch talk (e.g. talk by an eating disorders specialist) to skills-based workshops curriculum-linked with classroom lectures, e.g. mindfulness meditation linked with that morning's cardiovascular lecture "Response of the Heart to Injury". Prior lunchtime events occurred 2-4 times a year and reported an average attendance of 7 students (range 4-14); curriculum-linked lunches occur 6-8 times a year and attract an average of 24 (range 22-35). During the workshops, first-year medical students meet the psychiatrist and psychologist who are available to them for free, confidential, on-campus services. Students are taught stress management skills such as cognitive behavioral therapy to use with their patients but also for themselves. These workshops target vulnerable subgroups (e.g. first generation students) and reinforce the vital social support network within their class.

Key Message: Linking well-being lunches to the academic curriculum is a successful method to increase student attendance to non-clinical well-being events and to subsequent clinical counseling services.

Conclusion: We believe that the curriculum-linked well-being workshops provide three benefits: They enhance the curriculum; develop students' stress management skills; and expose students to their mental health providers thereby lowering their threshold for seeking individual counseling. Data is being collected to determine the impact of these workshops on service utilization.

Are Student Behaviors Predictive of USMLE© Step 1 Success?

Barbara Wilson, Shin Kamaya

Introduction: Starting early in their medical education, students at the University of Colorado Denver School of Medicine are introduced to a variety of study techniques geared toward improving their USMLE© Step 1 experience/score. These techniques are numerous; some examples include creating schedules, building in personal wellness time, completing a question bank and purchasing key exam review books. However, many of these suggestions are made to students without evidence to support which of these behaviors may be most effective. Given the limited amount of time students have to dedicate to the USMLE© Step 1, we were interested in knowing which behaviors were most correlated with higher USMLE© Step 1 exam scores.

Objective: This study examines the impact of various students' USMLE© Step 1 study behaviors on Step 1 score outcomes.

Methods: Upon completion of the USMLE© Step 1 exam, 127 2nd year medical students at the University of Colorado Denver School of Medicine were given a 30 question survey assessing a multitude of variables associated with individual study behaviors for the USMLE© Step 1 exam. Some of the variables included (1) amount of hours per week students' studied during basic science courses, (2) the amount of hours per day students studied during the designated study time, (3) class attendance in the first two years of the curriculum, (4) amount of practice questions completed, (5) whether or not a schedule was created and (6) the number of/type of review books used. This survey was assessed along with other individual student data including first year curriculum course grades and MCAT© section scores. Data was analyzed using regression models for key variables.

Results: Initial regression models showed that three variables are significant predictors of USMLE© Step 1 scores. These variables are (1) MCAT© Physical Sciences scores, (2) number of test questions studied, and (3) total hours spent studying. Both number of test questions completed and number of hours spent studying are variables controlled by medical students and are examples of effective studying behaviors. However, when number of hours spent studying and total number of practice questions completed were grouped together in a regression analysis, total number of hours studied became insignificant.

Conclusion: Individual student behavior does impact USMLE© Step 1 exam scores. Specifically, completing more questions yields higher Step 1 scores. This does have implications for the message medical schools give to their students in preparation for this important exam.

**Teaching Resuscitation Skills to Pediatric Residents:
The Impact of a Structured Mock Code Curriculum**

Sandrijn Van Schaik, Jennifer Plant, Patricia O'Sullivan

Introduction: Pediatric residents report limited exposure to real and mock resuscitations (“codes”) and low levels of confidence in resuscitation skills. We developed a formal mock code program to overcome this gap in training.

Objectives: To determine the new program’s impact on residents’ confidence in resuscitation skills.

Methods: We implemented a program of weekly mock codes with assigned roles, structured debriefing and feedback. PGY-1 and PGY-3 residents completed an electronic survey prior to (2006) and 2 years after (2008) implementation of the program. Residents reported mock and real code experience and rated their confidence in 20 technical and leadership resuscitation skills on a 5-point Likert scale. We created confidence scores (mean±standard deviation) for technical, leadership and combined resuscitation skills. We compared pre and post survey results using t-test for unpaired samples.

Results: Resident that participated in two years of the new program (PGY3s in 2008) had increased confidence in their resuscitation skills as compared to 2006 controls. Incoming residents in 2008 (PGY1s) were comparable to historic controls.

Conclusions: Implementation of a structured mock code program positively impacted pediatric residents’ confidence in resuscitation skills. Whether this translates to an increase in residents’ competence in resuscitation skills is a topic of ongoing study.

**Trends in Prediction of Primary Care Choice—
Are Demographic and Attitudinal Predictors Changing?**

Sharon Wayne, Craig Timm, Lisa Serna, Summers Kalishman

Introduction: The number of medical students entering primary care residency has decreased in the past fifteen years. We sought to learn whether characteristics of our medical students that predict primary care residency have also changed over time.

Objective: To compare predictors of primary care residency between two cohorts of students, defined by year of entry to medical school: 1993-99 and 2000-04.

Methods: We selected students entering University of New Mexico School of Medicine between 1993 and 2004 for whom we had data on selected baseline variables as well as information on residency match. 469 students were in the early cohort and 309 were in the more recent cohort.

Results: The two groups were similar with respect to most variables except that students from the more recent cohort were significantly less likely, at baseline, to have an interest in primary care and were also less likely to match in primary care residency. For the earlier cohort five variables were independent, significant predictors of primary care residency: being female, younger age, early interest in primary care, lower score on USMLE Step 1, and higher Professional Responsibility score (from Medical Student Attitudes Toward the Underserved scale). For the more recent cohort, only early interest in primary care and USMLE Step 1 score were significantly associated with primary care residency.

Discussion: In the past, multiple factors influenced the decision to enter primary care. Now, fewer factors influence this decision. Early interest in primary care is an important factor since it can be determined on entry to medical school.

50-word summary:

We compared predictors of primary care residency between medical students from two time periods: 1993-99 and 2000-04. Fewer variables were independently associated with primary care match for the more recent time period compared to the earlier time period. Early interest in primary care was an important factor for both groups.

The Effect of Unprofessional Conduct on Medicine Residents' Development of Cynicism, Burn-out and Professional Standards

*Martha E Billings, Kelly Fryer-Edwards, Marjorie Wenrich,
Ruth A Engelberg, Jared Randall Curtis*

Introduction:

Residents are at increased risk of burnout due to intense work demands and perceived mistreatment in the context of a cynical hospital culture where unprofessional conduct may be tolerated. These factors may have deleterious effects on professionalism and subsequently patient care.

Objectives:

The study identifies specific experiences in residency training that increase the risk of burn-out, cynicism and declining professionalism standards, and investigates if cynicism and burn-out are associated with the observation of unprofessional behavior by peers and faculty.

Methods:

We surveyed internal medicine residents at the University of Washington via an on-line questionnaire. We used the Maslach Burn-Out Inventory (MBI) and piloted questions to measure cynicism. We assessed exposure to unprofessional conduct and ratings of residents' behaviors on a professionalism scale. We used non-parametric tests to evaluate associations of the exposures to burn-out and cynicism.

Results:

Of 140 residents recruited, 69 participated (50%). Forty respondents (60%) met criteria for burn-out. The MBI score correlated with the extent of the respondents' own unprofessional behavior. Cynicism and residents' own unprofessional behavior correlated with the amount of attending and peer resident unprofessional conduct observed. Burned-out residents were more cynical but did not differ in professional behavior ratings from non-burned-out.

Discussion:

The conduct of residents and attendings, an aspect of the hidden curriculum, may foster the development of cynicism among residents and lead to deterioration in their own professional behaviors. Cynicism likely augments burn-out. It is imperative to reform hospital culture in order to improve professionalism and reduce burn-out in residents.

Extending the Medical Educator's Reach Via Online Tools*Josephine P.G. Tan***CONTEXT**

Literature searching and information management skills are critical components of producing quality research. At our institution, a librarian assists in literature research and instructs medical educators and students on how to best search databases such as PubMed, as well as other resources related to medical education.

OBJECTIVES

With increasing requests to lead research consultations and literature searching workshops, there is an evident need to find ways to extend a medical educator's reach beyond just in-person assistance. There are three objectives: (1) create additional online venues for reaching a greater audience of researchers and learners; (2) streamline publication of material to the web by using freely available tools; and (3) track the usage of these sites to evaluate their effectiveness.

KEY MESSAGE

Creating these online instructional materials was very easy and efficient by using free Google tools available on the web. The librarian developed online resources using tools such as blogs, wikis, and websites. Tracking the usage of the tools developed helps to calculate return on investment of the time taken to develop the content.

CONCLUSION

An instructor's use of time can be streamlined by creating online materials to provide learning at the point of need. Online materials should enhance but not replace in-person instruction. The critical component to evaluating these materials is to track their usage. This allows for continual evaluation and improvements that can be easily made to the online materials.

Using a Mock Code Format to Teach Neonatal Cardiopulmonary Physiology to Preclinical Medical Students

Angela Feraco, Colin Partridge, Andrea Marmor

Context: Simulated or “mock” code situations are used extensively to prepare pediatric residents for code situations and are cornerstones of the Neonatal Resuscitation Program. Advances in preclinical undergraduate medical education at UCSF have transformed the format of the first two years of medical school from lecture- and discipline-based learning to multi-modal, active learning, with resultant improvements in clinical readiness. Experience at UCSF suggests that simulation can be used successfully in preclinical undergraduate medical education to reinforce material learned in more traditional lecture and small group settings. Prior to beginning clinical clerkships, all UCSF students participate in Life Cycle, an integrated 10-week block course that covers key material in reproduction, fertility, obstetrics, gynecology, pediatrics, mid-life, and geriatrics. Core pediatric material is covered in a series of six small group discussion sessions.

Objectives: To improve preclinical (second year) UCSF medical students’ content mastery and satisfaction with the existing “Neonatal Emergencies” small group discussion session by implementing a mock code scenario as an experiential method for teaching neonatal cardiopulmonary physiology.

Key Message: Simulated clinical situations provide innovative formats for teaching and reinforcing key preclinical material.

Conclusion: Simulated clinical scenarios present opportunities to teach key preclinical material, such as neonatal cardiopulmonary circulatory changes, in an experiential, clinically-oriented manner. Our poster will present our experiences with the mock code exercise in the 2009 pilot year.

Examining the Educational Value of First Year Medical Students' Patient Encounter Data

Bridget O'Brien, Bonnie Hellevig, Amin Azzam

Introduction: Many medical schools have started using patient encounter logs to document students' clinical experiences. This information can be used for multiple purposes by multiple users, but the design of the log system is often suited to serve some purposes better than others. This study examines the value and use of a web-based log system (EncounterIt) among students.

Objectives:

We evaluated the ways in which first year students used EncounterIt. We hoped to identify factors which enabled and inhibited students' use of patient encounter logs to enhance their learning.

Methods:

We used a mixed methods approach that included: 1) an initial student focus group to identify general impressions, 2) a subsequent review of student entries in the patient log system to inform the design of a semi-structured, open-ended survey, and 3) distribution of the survey to targeted student user groups (high, low, and non-users). We analyzed the survey responses through qualitative content analysis.

Results:

Twenty-one students out of 50 completed the survey (42%). Only four students felt EncounterIt, as designed, facilitated their learning. Students identified many inhibiting factors suggesting the system was not designed as learning resource. However, the majority of students (62%) identified ways in which tracking patient encounters could benefit their learning if appropriately designed. They described features essential for such a system. Similar themes appeared across high, low, and non-user groups.

Discussion:

Students perceived EncounterIt as a system that was not designed to enhance their learning. However, most students did see value in the concept of tracking patient encounters and described key features to optimize educational utility.

Learning outcomes of a Web-Module for Teaching Interpreter Interaction Skills to Pre-Clerkship Students

Desiree Lie

Background

Effective use of interpreters is associated with improved healthcare outcomes yet is inadequately taught¹. Generalizability of a web-module² for interpreter interaction skills beyond knowledge and for a single institution has not been documented. We examined the impact of a web-module³ at 3 US schools where the predominant languages of limited English proficiency patients were Spanish, Vietnamese, Chinese and Russian.

Methods

The schools had similar curricula. We implemented the one-hour web-module⁴ for pre-clerkship students. It has 6 interactive video vignettes with immediate feedback³. A 10-question standardized multiple-choice format knowledge test, using similar pre/post items, was embedded. Schools 2 and 3 also conducted a clinical station testing skills using validated behavior checklists⁴.

Results

The web-module with pre/post test was completed by 169 (school 1), 65 (2) and 70 (3) students (100%, 68% and 81% respectively). Pre-test mean scores were 5.9 - 7.0 (out of 10 maximum). Post-test mean scores were higher at 8.3 - 9.2. Post-test difference in aggregate mean score (6.5 to 8.5) was 2.0 points ($P < 0.001$) or +20% (95% CI, 17.75%, 22.31%). A self-selected group of 30 students (32%, school 2) did not participate in the web-module but took the same test items and showed no improvement. At schools 2 and 3 skill scores by patient and interpreter did not correlate with knowledge gain.

Conclusion

Requisite knowledge can be improved by a web-module but the instruction even when added to practice in a standardized setting is inadequate for improving skills. A more comprehensive and intensive curricular approach is recommended.

The Internet as a Tool for the Sexual Victimization of Children: Review of the Literature from a Public Health Perspective

Linda Hodes Villamar

OBJECTIVE: To draw attention to the problem of online child sexual victimization as a public health concern and not solely a criminal problem, through a review of its epidemiology, analysis of the phenomenon from both the victims' and offenders' points of view, and examination of the risk and protective factors involved.

METHODS: Using information from law enforcement agencies and peer-reviewed articles on the topic of Internet-related child sexual abuse and general child sexual abuse, data were analyzed for content, depth, bias, and future direction.

RESULTS: Law enforcement agencies and the news media have drawn more attention to this issue, but the focus emphasizes the criminal nature of this phenomenon and catching offenders in the act, often missing the fact that for many children the damage has already been done. The National Juvenile Online Victimization (N-JOV) Study represents the most extensive research on this subject and shows that the majority of online relationships between a child and an adult lead to face-to-face encounters, that 93% of these encounters involve a sexual offense, and 76% of these online relationships are initiated through chat rooms. However, much remains to be studied and more research is needed in order to develop effective and appropriate prevention strategies.

CONCLUSION: This research has implications for public health actions involving education, clinical practices, and policy changes around this important issue, possibly expanding the current legal way of dealing with online sexual victimization of children from one of "catching" the offenders in the act to one of prevention.

Keck's Screen Now And Prevent Program

Erica Van den Haak

Context: California has one of the highest rates of medically uninsured in the country, and Assembly District 46, where the Keck SOM is located, has the highest rate of medically uninsured in the state. The surrounding community is predominantly working class Hispanics, most of whom do not receive health insurance through their employer. This issue is especially relevant currently, with the struggling economy.

Diabetes and heart disease are two of the leading causes of disability and death in the US. They are also responsible for billions of dollars in healthcare costs (in 2008, the cost of heart disease and stroke in the US was projected to be \$448 billion, according to the CDC). Tragically, type 2 diabetes and heart disease are largely preventable. While there are many well-known therapies proven to prevent and/or treat these diseases, applying such interventions on a community-wide, cost-effective scale has been difficult.

SNAPP, however, will continue to successfully implement prevention and interventions because of its large supply of enthusiastic volunteers, as well as its partnership with established clinics, schools, and corporations.

Objectives: We have organized our monthly free clinic to give the population around Keck School of Medicine easy access to free health screenings and healthy living counseling. It is our aim to help our community improve their quality of life and reduce their future medical costs by alerting them to preventable health conditions, identifying problems that may be developing before they become severe and expensive, and providing a reliable resource for anyone, regardless of their insurance or citizenship status. We screen our patients for the major risk factors for type II diabetes and heart disease, administer free flu vaccines in the winter, and provide free eye exams to our patients. We also refer our patients to free and low-cost clinics close to their homes, where they can obtain accessible and affordable medical care.

Since opening our clinic in January 2008, we have partnered with other USC schools to expand what we can do for our patients. We have partnered with the USC School of Business to come up with a marketing plan to increase awareness about our clinic. The USC School of Pharmacy has been involved with administering free flu vaccines to our patients, and the USC School of Law helped us to obtain non-profit, 501(c)(3) status. Students from the undergraduate campus have helped translate for our Spanish-speaking patients, and we are trying to work with the USC School of Dentistry to increase our services. We hope to continue these efforts in the future to provide more for our patients.

Key Message: As medical students, we are not yet able to practice medicine on our own, but as a group under the supervision of a physician, we can help the people in our communities while practicing the skills we have learned in school. This is especially important in medical schools in areas of the country with high rates of medically uninsured. We have the ability, and maybe even the responsibility, to change the health of their communities. We endeavor to make medical care as affordable and accessible as possible by screening them at our free clinic and also referring to clinics in our community.

Conclusion:

The Screen Now And Prevent Program is a growing support system for the community around the Keck SOM at USC, a community in unquestionable need of such a resource. While we have only been open for a year, we have done our best to work with community organizations, clinics, and other schools to increase the services we can provide for our community.

Sí se Puede: Incorporating Medical Spanish into Medical School Curricula

Linda Hodes Villamar, Mariana Mejia Botero

Context: Medical Schools often have very rigid schedules and requirements, making adding Spanish curriculum very difficult. Student initiative and support may help provide creative ways to include medical Spanish into existing medical school requirements.

Objective: Describe recent student-initiated proposals to include Medical Spanish teaching in the current University of New Mexico School of Medicine curriculum, including the SPIE Project, or Spanish Practical Immersion Experience Project.

Key Message: Medical Spanish is becoming an indispensable tool for all health professionals and medical schools need the help of students to initiate creative ways to incorporate Spanish learning opportunities into their curricula.

Conclusion: Students have great ability to impact their school's curricula and should not hesitate to initiate ways to include Spanish into their school's already busy schedules and requirements, as increasing numbers of students and patients demand culturally and linguistically competent health education.

Program in Medical Education for the Urban Underserved

Elisabeth Wilson, Karen Sokal-Gutierrez, Amin Azzam, Alma Martinez

PURPOSE

To describe the *Program in Medical Education for the Urban Underserved* (PRIME-US) and to discuss the early results from our comprehensive evaluation plan.

BACKGROUND

The *Program in Medical Education for the Urban Underserved* (PRIME-US) is a new track at the University of California, San Francisco (UCSF) and the Joint Medical Program (JMP) at the University of California Berkeley. PRIME-US is part of a statewide initiative to increase the number of physicians working with underserved populations by increasing the class size of all UC medical schools through the creation of focused tracks. PRIME-US is designed to: 1) attract medical students from diverse backgrounds interested in caring for the urban underserved; 2) provide participants with a medical education experience that equips and supports them to become leaders in the care of urban underserved communities; 3) and increase awareness and knowledge of underserved care in the broader UCSF and JMP community.

METHODS

The PRIME curriculum spans five years and includes a summer introduction, experiential seminars, clinical immersion in underserved settings, community engagement, longitudinal mentorship and support, and an additional year to complete a masters degree. To evaluate PRIME-US, we have developed a prospective study design including both formative and summative measures, as well as quantitative and qualitative methods. Data is being collected using class-wide surveys and focus groups, activity attendance and evaluations, as well as school admissions and academic performance data.

RESULTS

Early findings from admissions data, student focus groups, and evaluations of PRIME-US activities reveal: 1) more than 65% of PRIME-US students are from racial/ethnic minority groups that are underrepresented in medicine (UIM) or disadvantaged backgrounds; 2) overall diversity of UCSF student body has increased by 10%; 3) PRIME-US students start their training with more positive attitudes towards the underserved and stronger commitment to work with vulnerable communities than their peers; 4) program strengths include community-based activities, exposure to underserved populations and providers, reinforcement of personal and professional values, and small group support; 5) areas for improvement include increased support for community partners, inclusion of student peers not enrolled in PRIME-US, and academic support; and 6) PRIME-US is seen as valuable program despite challenges of increased class size, especially at smaller JMP program.

CONCLUSION

PRIME-US is an innovative program designed to produce physician leaders who will increase medical workforce diversity and reduce health disparities in underserved communities. At this time, the initial launch of the program has been extremely successful and we look forward to a bright future.

An Approach to Cultural Awareness: What We Can Learn From Student Reflections

Jill Omori, Damon Lee

Context: While all medical schools may have a cultural competency curriculum in place, we all differ in how we choose to approach it. While some may focus on educating students about particular ethnic and social groups, others take a broader approach to the topic of culture. We will share our approach to cultural competency and the benefit we feel it has for our students.

Objectives:

- Define culture and cultural awareness in relation to health care
- Describe the components of the cultural competency curriculum in our Family Medicine clerkship
- Discuss our students' reflections on cultural awareness at the end of their clerkship experience

Key Message: Our Family Medicine clerkship cultural competency curriculum includes an orientation seminar, clinical encounters, and two movies followed by a group discussion. The students are also required to write an essay describing how cultural factors influenced the health care experience, judgments, attitudes, or management decisions in one of their patient encounters. They must choose a non-ethnic based example for their essay to help them broaden their idea of what culture is. Themes and realizations from the student essays will be shared.

Conclusion: Changing our students' approach to cultural awareness and reinforcing it through a variety of means has helped them to self-reflect on the importance and impact of cultural factors in the health care setting. They are also able to identify strategies related to cultural awareness that have or would have helped to improve health outcomes or the health care experience for their patients.

**The Effect of Experiential Education on Students' Attitudes About
Complementary & Alternative Medicine Practices**

Maieibeth Velasquez, Eva Kaul, Arti Prasad

OBJECTIVES: To evaluate the effectiveness of an experiential Complementary and Alternative Medicine (CAM) education session in changing medical students' beliefs, attitudes, and comfort level with CAM.

DESIGN: Students attended a 3 hour class on Mindfulness Based Stress Reduction with a trained provider, and completed a Likert scale survey of their agreement with various statements about CAM both pre- and post-session.

ASSESSMENT: Changes in agreement with 7 of the 10 items reached statistical significance, including increase in students' subjective level of knowledge about CAM, decrease in the belief that CAM is too controversial to discuss with patients, increase in perceived ability to find information about CAM, and increase in support for the inclusion of CAM in the medical school curriculum.

CONCLUSION: A CAM experiential session was effective in changing students' beliefs and attitudes, and improved their comfort levels with CAM. Similar sessions could be a valuable addition to the medical school curriculum.

Medical Education Is Our Tradition –

Felicia Espina Miller

Context- Outreach: American Indian High School Health Careers Outreach Events

Objectives- Share outreach "best practices" in attracting and preparing American Indian students for careers in the health professions. Illustrate the highlights of past and continuing programs.

Key Message- Interest and motivation in health profession careers must be promoted and supported early in a student's education. Medical schools can partner with high school programs by sharing their unique resources. Creating culturally sensitive outreach programs promotes connection, respect, and motivation.

Conclusion: Innovative and culturally sensitive outreach programs are critical to assuring that we meet the goal of increasing the number of students from medically underrepresented communities who wish to become doctors.

CC-PriME – The Center for Cultural Proficiency in Medical Education: Changing the Culture of Medical Education

David A. Acosta, Amen Tsegai

Context: The University of Washington School of Medicine (UWSOM) was chosen as one of 18 medical school sites in the U.S. to be awarded a Cultural Competence and Health Disparities Award in August 2005 by the NIH/NHLBI to develop and integrate a cultural competency curriculum across the training spectrum - from undergraduate medical education to graduate medical education to faculty development. The Center for Cultural Proficiency in Medical Education (CC-PriME) is a new center that was developed at the UWSOM, and is housed in the Office of Multicultural Affairs. CC-PriME adds a new dimension to the UWSOM, and reinforces the mission of the School and its commitment to enhancing the diversity in medical training as a unique educational opportunity. The demographics of our region is rapidly changing, and the School recognizes that now is the time to begin preparing for what the future brings - an increasing diverse population that will need a health professional workforce that is prepared to provide the best cultural-responsive care.

The mission of CC-PriME is to

- Create a teaching environment that is sensitive to and integrates into the undergraduate medical education curricula and graduate medical education training the knowledge of the many factors that are cultural barriers that contribute to health;
- Provide the learner with the skills necessary to provide quality care in a culturally sensitive and linguistically appropriate manner;
- Enhance the ability of all physicians in training and faculty to address racial/ethnic disparities in among the diverse population groups in the Pacific Northwest region;
- Become a culturally proficient institution that can develop culturally competent approaches, or "best practices", to eliminate these disparities and serve as a regional educational resource on cultural competency to all community physicians in the region.

The specific aims of CC-PriME are as follows:

- Develop and integrate an evidence-based curriculum in cultural competency, and integrate this curriculum into the current medical school curriculum;
- Design diversity training for all graduate medical education programs that will help the residents-in-training: assess and reflect on their personal stereotypes, biases, and prejudices that impact the quality of patient care they deliver; assess and reflect on the hidden discrimination and biases in the "culture" of medicine; and develop cross-cultural communication skills that will enhance their ability to approach cultural differences and confrontation in a culturally responsive manner.
- Design and implement faculty development in cultural competency for all basic science and clinical faculty involved in teaching the required courses, clinical clerkships and elective preceptorships;
- Achieve cultural awareness with all faculty and staff involved in teaching who will in turn be better prepared to train both medical students and residents in this area of study;
- Develop a robust Center that will serve as a regional educational resource on cultural competency for the UWSOM and its affiliates in the region.

Objectives

- Provide the medical educator with a number of curriculum examples (case vignettes, cultural competency exercises, lectures) that have been used for medical student and resident training and faculty development
- Provide a number of useful tools for the medical educator on the explanatory models for cross-cultural communication, cultural competence core concepts, reflections, and steps for conflict resolution/negotiation
- Provide information on the challenges in developing this Center, and describe the lessons learned.

Key Message

- Developing a centralized resource center to develop and disseminate curriculum on cultural competence has been an innovative strategy that medical schools can adopt to accomplish a number of common goals that all academic institutions share:
- Reinforces the mission of the medical school and its commitment to enhancing the diversity in medical training as a unique educational opportunity
- Satisfies the accreditation standards from the LCME and ACGME
- Moves towards institutional climate change that creates a teaching environment that celebrates diversity, is more inclusive and culturally responsive.

Conclusion

CC-PriME and the curriculum tools that it has developed is an innovative strategy that can help change how our future health professionals are trained. The Center hopes to share and disseminate some of the curriculum tools that it has developed to assist other medical schools and residency programs in their quest to deliver cultural competence training at their own institutions.

The Hispanic Health Pathway: Preparing Future Health Care Providers to Provide Culturally Responsive Care for the Hispanic/Latino Community

David A. Acosta, Pam Racansky

Context

In 2004 there were 41.3 million Hispanic/Latinos living in the U.S. making up 13% of the total U.S. population and representing the largest and fastest growing population in the nation. Similarly, Hispanic/Latinos make up the largest ethnic minority population in the Pacific Northwest region. The Hispanic Health Pathway (HHP) has been under development for the last two years at the University of Washington School of Medicine (UWSOM), and is the product of a collaborative working group made up of faculty, medical students, and community health providers that serve the Hispanic communities in our local vicinity and region. The HHP provides medical students at the UWSOM with the necessary training and experiences to make them better practitioners in urban and rural Hispanic communities.

The goals of the program are to:

- Prepare both Hispanic and non-Hispanic medical students how to provide cultural-responsive care to Hispanic communities;
- Enhance the present medical school curriculum on Hispanic health care issues and disparities; and
- Encourage research on Hispanic health issues and disparities.

The HHP provides a unique educational experience for the medical student through the use of specialized lecture series, small group discussions, problem-base learning, clinical immersion experiences in medical practices that serve the Hispanic communities, research opportunities, and language proficiency skills. This program is unique in that it utilizes a number of Hispanic faculty affiliated with the UWSOM to teach the curricular components who collectively have had a vast amount of experience in working directly with Hispanic populations. Upon completion of the curriculum requirements of the HHP, the student is awarded a Certificate of Completion by the UWSOM and is recognized of this honor at graduation by the Dean of the School of Medicine.

Objectives:

- Describe an innovative approach to teaching health care providers the knowledge, skills and attitude that are necessary for providing culturally responsive care to Hispanic/Latino communities.
- Share online learning modules on Hispanic health care disparities that have been developed.

Key Message:

Given the changing demographics of the U.S. and the anticipated large increase in the Hispanic population, the present and future physician workforce must be prepared and ready to provide the best quality and culturally responsive patient care. This pathway is an innovative approach that can be integrated seamlessly into a content-laden medical school curriculum.

Conclusion:

The Hispanic Health Pathway (HHP) is an innovative approach that can help change how our future health professionals are trained. The presenters hope to share and disseminate the HHP curriculum and the online electronic modules that they have developed to assist other medical schools in their quest to deliver cultural competence training at their own institutions.

Educational Innovations in Addressing Health Care Disparities

Cynthia Arndell, Deana M. Richter, Matias Vega, Tina Carlson, Mary Ellen Gonzalez, Julie Sierra, Andrea King, Katherine Flynn-O'Brien

Context: Poverty and social inequity are among the most important determinants of health worldwide. New Mexico, a rural and culturally diverse state, consistently ranks among the poorest.^{1,2,3,4} We as clinicians and educators have a social responsibility to address the effects of disparities on health. Few academic programs exist nationwide that educate future physicians to meet these challenges and reverse the trend for medical students to *lose* their altruism throughout medical school.^{5,6}

Objective: To design and implement an integrated four-year curriculum based on sound educational principles to prepare future clinicians to address healthcare disparities, thereby improving individual and population health.

Key Message: Through a parallel process of development and implementation, comprehensive four-year objectives have been created and several teaching/learning activities integrated; others are in the planning stage. The literature and experience have led us to adopt and recommend key curricular principles/guidelines and educational methods for teaching this content, for example:

Principle/Goal	Method
Form transdisciplinary design team	Include educator, physicians, social worker, nurse, students
Partner and share with others	Internal: Ethics/Professionalism, Diversity, Public Health External: national advisory committee, other institutions
Use Fink’s (2003) guidelines	Objectives that go beyond content; integrated design
Create significant learning experiences	Authentic projects, service learning, interprofessional education, reflection and narrative, mentors/role models

Conclusion: It is our social responsibility to educate for health equity. UNM SOM is utilizing sound educational principles to develop and implement an innovative curriculum that addresses disparities and can serve as a resource for others pursuing this goal.

References:

¹Phipps S (2003). *The Impact of Poverty on Health: A Scan of Research Literature*. Ottawa, Canada: Canadian Institute for Health Information.
²McCally M, Haines A, et al. (1998). *Poverty and Ill Health: Physicians Can and Should Make a Difference*. *Annals of Internal Medicine* 129: 726-733.
³U.S. Census Bureau. *Income, Poverty, and Health Insurance Coverage in the United States*. <http://www.census.gov>
⁴US Census Bureau New Mexico, American Fact Finder.
⁵ Croasdale M (2008). Students Lose Empathy for Patients During Medical School. *Amednews.com*, March 24/31 and Newton BW, Barber L, Clardy J, Cleveland E, and O’Sullivan P. (2008). Is There a Hardening of the Heart During Medical School? *Academic Medicine* 83(3): 244-249.
⁶Doran KM, Kirley K, Barnosky AR, Williams JC & Chenge JE (2008). Developing a Novel Poverty in Healthcare Curriculum for Medical Students at the University of Michigan Medical School. *Academic Medicine* 83(1): 5-13.

UCLA PRIME Developing Healthcare Leaders for Disadvantaged Communities

Lawrence 'Hy' Doyle

Introduction: The UC System works to increase the numbers of physicians practicing in disadvantaged communities through its PRIME programs. UCI's focuses on the Latino Community, UC San Francisco's on Urban populations, UC Davis' on Rural populations, UC San Diego on Health Equity. UCLA's will develop leaders in healthcare for the underserved/disadvantaged.

Objectives: UCLA PRIME is a 5-year dual-degree program designed to develop leadership skills for medical students who will work in disadvantaged/underserved communities.

Method: Through a three-week orientation curriculum, students were introduced to a traditional leadership model, a relationship-centered leadership model, and presentations from a number of faculty involved with healthcare delivery in underserved communities. The students were then given an application opportunity, to develop a project to assist a particular disadvantaged community.

Results: The student project, improving a community center, produced a flat administrative structure that reflected neither of the models presented, however, students felt that they grew as a cohort and had learned to new ways of working together.

UCLA PRIME students have continued their leadership development through the year by serving as:

- Student member of Medical Education Committee;
- Class Treasurer;
- Member of search committee for Founding Dean;
- Co-Chair UCLA SNMA;
- Founding Chair UCR LMSA;
- Chair, LGBT student organization;
- Co-Chair, Partners for Progress (Educational program working with school children in underserved community)
- Class organizer for State-wide Healthcare Lobby Day on Universal Healthcare;
- Leader of action to improve student voting access;
- Conference Organizers for Regional Medical Student Conference.

Discussion: Inaugural efforts lead in a positive direction.

A Culturally Based Undergraduate Research Program for Latino Prehealth Students*Priscilla Bell*

The Latino population is underrepresented in the health professions, and Whittier College, with its strong prehealth program and large Latino enrollment, is uniquely situated to make an impact on this situation. The objective of this project was to increase the number of successful Latino health science students by providing research opportunities that built on their cultural backgrounds. The initial research projects involved surveys of allopathic physicians, alternative healers and their Latino patients. Recently we have been analyzing herbs recommended for headache and cough from ethnic pharmacies. Through these projects, students have learned research methods of sampling, statistics and data analysis, as well as gaining confidence in the presentation of research results through presenting talks and posters.

A modest increase in the Latinos entering health schools has been noted thus far. In the six years before the project, only 15% of the successful applicants from Whittier College were Latino. This number has risen to 19% since the program. It should be noted also that 5 additional Latino students are in the final stages of application to professional schools. While these numbers are small, the trend is positive.

Research projects built upon the cultural knowledge and language skills of students provide a means of reinforcing their unique strengths. These projects have evolved in such a way as to develop the students both as social and natural scientists and have served as a bridge between the medical approaches in their native culture and the science of their future careers.

Breaking Barriers: How Underrepresented and Minority Students Prepare for the MCAT Verbal Reasoning Section

Ashkan Sefaradi, Maria Hayes-Bautista

The Center for the Study of Latino Health and Culture (CESLAC) is seeking to gain a greater understanding regarding the comprehension of reading material by Underrepresented Minority Students (URM). As of 2004, URM composed 26% of the California population (CA Census 2004), and according to research by CESLAC, are projected to compose more than 50% of the California population in the near future. However, only three out of every 30 U.S. medical students come from URM backgrounds (MSAR 2008).

The Medical College Admission Test (MCAT) is a standardized test that is required by all United States medical schools. It is used as a leading factor by medical schools upon considering their candidates. This test (MCAT) contains a Verbal Reasoning section, which tests a student's ability to comprehend and apply literal and figurative understandings of long text. Paragraph recall and idiom understanding are also crucial to achieving success on the verbal reasoning section of the exam. Furthermore, we hypothesize that the skills required to succeed on this section may also be contributing and in fact, critical components for success on the other parts of the MCAT.

In December of 2008, a group of five students attending Northridge State University met to work with a medical school applicant employed by CESLAC to prepare for the verbal reasoning section of the MCAT. The students agreed to the terms of the verbal reasoning workshop, which were to meet 3 to 4 Sundays a month for a period of six or more months. The workshops would be four hours in length.

Each student received a copy of MCAT Verbal Reasoning Mastery by Ivy Hall Review and the plan was to work through the ideas in the book, which included: MCAT overview, details in scrutinizing passages and questions, development of reading comprehension, memory, and active reading skills, error analysis, a Neuro-Visual training program, and advice from successful test-takers. After the first month of the workshop it was clear their understanding of the MCAT test and of the mechanics involved with critical reading needed to be systematically analyzed in formalized into a study of their progress. The students were asked to keep a journal of their work and an IRB application to UCLA's office of research was submitted. The goal of workshop was to learn how to best instruct URM students for the MCAT VR exam. The goal of the proposed investigation pending approval by the school of medicine IRB is to effective ways for ESL and URM students to increase their MCAT scores.

Arts in Medicine at the University of Nevada School of Medic

Marin Gillis

Context:

Review of 2 year curricular and co-curricular programming at UNSOM which shows how an office with no internal funding has created a vibrant arts in medicine program that supports medical students, faculty, caregivers and patients, and partnerships between the SOM and the community.

Objectives:

Audience will 1) discover national organizations that support home arts in medicine programs with information and funding. 2) understand the importance of community and inter-university partnerships for educational excellence and SOM administrative support of arts in medicine programs 3) take home one program that will cost nothing, foster student wellness, and be a great public relations tool for alumni.

Key Message:

Curricular and Co-curricular arts in medicine opportunities are valuable to student life, medical education, and community development and need not add to the SOM budget.

Conclusion:

Vibrant arts in medicine programming can exist at every medical school.

A New Special Interest Group for the Arts in Medical Education

Marin Gillis

Context: Founded in 1991, The Society for Arts in Healthcare is a national non-profit organization dedicated to the promotion of arts in healthcare. In 2008, a group of medical educators, including Sandra Bertman, PhD, Distinguished Professor of Thanatology and Arts, National Center for Death Education and Richard Pretorious, MD, Professor of Family Medicine, University of Buffalo, long-standing members of The SAH, created the Special Interest Group on Arts in Medical Education. It would be a place where medical educators, working within the specificities of the administration, education, and accreditation processes of medical schools, could exchange ideas and collaborate on curricular and research projects integrating the arts into the medical curriculum. The educational goals of such interventions range from improving diagnostic skills to developing humanist and ethical awareness of self and patient.

Objectives:

- 1) Describe resources available to educators in medical schools wanting to incorporate arts in medicine;
- 2) Determine if this is an appropriate organization to support host institutions curricular and co-curricular goals for arts in medicine at one's host institution;
- 3) Identify many successful educational interventions of arts in the medical school curriculum.

Key Message: The Medical Education in the Arts SIG is a new and valuable resource for any medical educator wanting to start an arts in medicine curricular intervention at the UGME level and is a valuable place for those already modeling such interventions to find a community of medical educators dedicated to the promotion of the value and importance of arts in healthcare.

Conclusion: Medical educators may consider becoming involved with this new group.

The Use of Contemporary Art to Enhance Core Clinical Skills

Pamela B Schaff, Robert M Tager, Suzanne Isken, Jo Marie Reilly, Theresa Woehrle

Introduction: Several medical schools have incorporated experiences with art observation in the service of improving students' powers of observation, visual diagnostic skills, and pattern recognition skills. The Keck School of Medicine (KSOM) recently partnered with Los Angeles's Museum of Contemporary Art (MOCA) to enhance students' core clinical skills through guided instruction in observation, description, and interpretation of visual art. To our knowledge, this is the only experience reported in the literature to focus solely on contemporary, often non-representational art.

Objectives:

- identify visual and narrative elements in a series of artworks
- apply observational and interpretive skills in a non-clinical setting
- integrate prior knowledge in the service of interpreting what is portrayed
- gain comfort with ambiguity
- understand that there can be more than one answer to many questions

Methods: Twelve Year II students meet at the museum with two clinician educators experienced in the visual arts and literary studies, and MOCA's Education Director. The group moves through a series of guided observations and discussions in MOCA's galleries. The constructivist approach enables students to integrate their observations with their prior knowledge, self-knowledge and context relating to the art of medical diagnosis.

Results: Approximately 35 students have participated thus far in the Art and Medicine Experience. Evaluations have been overwhelmingly positive, with 100% of students stating that the experience very adequately or adequately met the objectives, and that they would recommend the experience to others.

Discussion: Several more groups will go to MOCA this spring. In order to analyze measurable outcomes of the Art and Medicine experience, we need more than a single museum visit, and therefore hope to develop an eight-week elective for Year I-II students.

Art Aloud: Spoken Art, A Voluntary Activity to Complement the Medical Humanities Curriculum

Nancy Coleman, Daniel Shapiro, Ronald Grant

INTRODUCTION

Art Aloud is a monthly spoken art café event for medical students, educators, staff, and patients. The lunchtime event provides an open forum for sharing poetry, essay, memoir and stories. It allows participants the freedom to experiment with writing and reading aloud, and to share and reflect on the work of others.

OBJECTIVES

Art Aloud's overall goal is to provide students a complementary experience to the existing medical humanities curriculum. Participants will increase their appreciation of nuance and subtlety and will grasp the value of literature to their personal and professional life.

METHODS

Attendance is tracked over a 16-month period. A participant survey asks why people attend, how their perception increases of nuance and subtlety in the lives of others, and how the activity applies to their education or work.

RESULTS

Preliminary survey results will identify how the activity is perceived, how meaningful it is, and attendance trends.

DISCUSSION

Art Aloud is a relaxed, collegial activity. It provides a safe and supportive environment for experimentation and increases awareness of the power of good communication. It accommodates active and passive modes of responding to literature, and complements the existing medical humanities curriculum of assigned texts, discussion groups, narrative medicine courses, and other activities for those who participate. Art Aloud contributes to the education, as opposed to the training, of a doctor.

Narrative Medicine and Emerging Clinical Practice

Julie Reichert, Summers Kalishman, Brian Solan

Context

Medical literature demonstrates the usefulness of reflective writing in life-long learning and the development of professionalism. After their first year, medical students at the University of New Mexico School of Medicine disperse throughout our state for eight weeks in a Practical Immersion Experience (PIE), working in a community clinical setting under the guidance of a preceptor. In the summer of 2005, we launched a pilot project, PIE Narrative Strand. Nine self-selected students were paired with physician-mentors on campus. Once per week students wrote reflectively, via e-mail, about their PIE experiences, and their mentors responded in kind.

Objectives

Students were asked to write about their encounters with patients, colleagues, mentors and the community; their observations and questions about clinical practice; their feelings about being in this particular community. They were asked to reflect, and connect their experiences with their learning.

Key Message

Writing is a means for expression and communication, and also a tool for learning and discovery. Evaluations from students and mentors confirm that reflective writing is a valuable aid for students during their early clinical experiences.

Conclusion

Reflective writing is useful for gaining self-awareness, improving communication skills, reducing practitioner stress, and developing empathy and trust between patient and practitioner. This pilot project demonstrated the benefit of a reflective writing program early in a medical student's career. Mentors, too, found the correspondence rewarding and felt refreshed about their own practice. This program has been expanding yearly, and now (2009) includes the entire class.

Literature, Fine Arts & Medicine: Personal Narrative in the Undergraduate Pre-Medical Curriculum

Greg Martin

Introduction: The Bachelor of Arts/Medical Degree (BA/MD) program at the University of New Mexico includes a five seminar sequence designed specifically for participants in the program. The Health, Medicine and Human Values (HMHV) seminars are interdisciplinary courses that involve collaborative teaching with faculty from the School of Medicine and the College of Arts and Sciences. HMHV 201: Literature, Fine Arts, and Medicine explores connections among health, illness and personal narrative.

Objectives: To provide students with opportunities for experiential learning and self-reflection through the reading and writing of personal narrative.

Methods: Students read published books and personal essays written by patients and doctors, as well as by family members of loved ones with illnesses and diseases. One goal of the course is to learn the craft of storytelling, to learn how narratives actually work. Students come to understand the "anatomy" of stories in much the same way a medical student must increasingly comprehend the complex organizational system of the human body. Just as importantly, *students* contribute to this literature with a personal essay of their own. The seminar is also a writing workshop focused on emulation. With all of the course readings, students look to find models for the kinds of stories they have to tell. With each reading, students ask the question: what lessons can I learn from this to help my own writing? The course is designed to push students in their growth as a reflective and creative thinkers and writers and help them gain insight into themselves, their goals, their future patients, and their profession.

Over the course of sixteen weeks, students invest and re-invest in a single 12-15 page personal essay, related in some way to health, illness and medicine. To produce this essay, students write generative 1-2 page craft-based exercises, keep a writing and reflection journal, share and critique their ongoing work-in-progress with their peers in small-group workshops, and turn in an "early" and "middle" draft for instructor feedback. At the end of the semester, along with their final drafts, students submit a 3-5 page preface, exploring the techniques used and influences in the revised essay, as well as an exploration of their development as a writer over the semester.

A confidential university-wide, student evaluation; as well as a BA/MD specific confidential questionnaire, are administered after the seminar. Students evaluate their change in knowledge and skills as result of the seminar including the reflective writing component.

Results: In their end of semester evaluations, students consistently reported that the course improved their ability to write, interpret and self-reflect. On a scale of 1-6, the median student rating for the "Course in General" was a 5.6. On a scale of 1-5, the median student rating for the "Value of the Course Content in Relation to Your General Education" was a 4.4.

Discussion: Immersing the students in the literature of medicine allows them to see for themselves the uncertainty and the art in the practice of medicine. Immersing the students in the writing of their own health-related stories, and in the uncertainties, difficulties and rewards of good storytelling, makes this connection even stronger.

Student Peer Review of Effective Board Study Practices

Maureen J Garrity

Introduction: Early in their medical education, students at the University of Colorado Denver School of Medicine (UCD, SOM) are introduced to a variety of study techniques geared toward improving their USMLE© Step 1 experience/score. These techniques include creating schedules, building in personal wellness time, completing a question bank and purchasing key exam review books. However, many of these suggestions are made without evidence to support their effectiveness. Given students' limited time to prepare for the USMLE© Step 1, we were interested in knowing which behaviors were most correlated with higher USMLE© Step 1 exam scores.

Objective: This study examines the impact of various students' USMLE© Step 1 study behaviors on Step 1 score outcomes.

Methods: Upon completion of the USMLE© Step 1 exam, 127 rising third-year medical students at the UCD, SOM completed a 30-question survey assessing their study behaviors for the USMLE© Step 1 exam. Variables included (1) amount of time studying during basic science courses and during the designated study time after completing their second year of courses, (3) class attendance in the first two years of the curriculum, (4) amount of practice questions completed, (5) whether or not a schedule was created and (6) a high self-identified and/or school-identified risk for poor performance. With student permission on the study form, performance data including their individual MCAT scores, Honor points earned in the first two years, and Step 1 scores were included in the data file. A total of 120 students had complete data.

After examining zero-order correlations with Step 1 performance scores, a sequential regression analysis was conducted. MCAT physical science scores were entered first followed by total class attendance for years one and two, the third step included the total number of honors' points earned in the first two years. In the final step, Step 1 study behaviors (total hours studying and number of questions studied) were entered.

Results: R-square change was significant for each step of the model. The final model had an adjusted R-square of .532. Coefficients are shown in Table 1 below. Of these, only Class Attendance was not significant.

Table 1: Coefficients and Significance in Final Regression Model

Variables	Unstandardized coefficients		Standardized coefficients	t	significance
	B	Standard Error	Beta		
(Constant)	164.19	10.65		15.41	0.00
MCAT Physical Science	3.66	0.88	0.28	4.14	0.00
Class Attendance	0.28	0.85	0.02	0.33	0.74
Total Honors Points	0.52	0.07	0.51	7.35	0.00
Number of Questions	0.00	0.00	0.13	1.97	0.05
Total Hours Study	0.02	0.01	0.13	1.95	0.05

Conclusion: Student performance in the first two years of medical school combined with specific study behaviors (i.e., number of hours spent studying and number of questions reviewed) when preparing for the Step 1 exam appear to influence performance

To Be or Not to Be: A Comparative Study of Factors that Influence Commitment to Career Choice Among Pre-Health Students

Steven Bair, Cindy Fitch

Choosing and pursuing a career path is a complex process that involves many factors. This career development process has been investigated in general populations of students but has not been thoroughly examined in terms of specific career interests. Therefore, the current study is an attempt to translate these findings from general student populations to students interested specifically in the healthcare professions. One hundred twenty-one participants completed a series of questionnaires that assessed a variety of factors including career choice, strength of career choice, career-related confidence, extent of previous career exploration, desired career characteristics, academic performance, and other factors. Questionnaires were completed at the beginning, middle, and end of an introductory course for pre-professional health science students. Of special interest was comparing students who changed their career orientations during the course of the study and those that persisted in their original career choice. Students who persist in their career orientation have a wider breadth of previous career-related experience and are more confident of their future success than students who change their career path. This confidence is also highly correlated with the strength of their career choice. The results of this study suggest future investigations that will look at career choice over a longer period rather than just one college term. We also describe a series of courses that have been successful aimed at preparing students for admission to graduate and professional health care programs through additional health care career-related experiences.

Two Courses Which Enhance the Resumes of Pre-Health Professions Students: NSCI 308, Community and Careers in the Health Professions, and the Phlebotomy Technician Certificate Program

Carol Itatan

In order to enhance the background experiences and resumes of the health-professions students, we offer at California State University, Long Beach a service-learning course entitled “Community and Careers in the Health Professions” and a phlebotomy technician training course. The service-learning course includes two hours per week of lecture/discussion concerning the health care delivery system of the US and three hours/week of volunteer work in a health-related community site. This course provides opportunities for volunteer service and a working knowledge of how the health care system “works” or “doesn’t work”. Students are placed in agencies where they are able to observe, and interact with staff and community members and reflect upon their readings in the text and how the health care system impacts every day people. The phlebotomy course places students in hospitals and clinics where they are able to interact directly with patients, earn a salary, work part-time, continue their education and are exposed to many different health professions. These experiences will greatly enhance the resume of the student seeking a career in a health profession and provide knowledge about possible alternative careers.

Implementing a Successful Internship Program for Health Professions Students

David A. Kaiser, Rishann Nielson

Context: Students applying to health professions schools need to have experience shadowing and learning more about the particular profession to which they aspire. As health professions advisors, we may be able to coordinate internships to provide students with these opportunities.

Objectives: Share information regarding health professions internships including:

- Setting up internship sites
- Maintaining communications
- Evaluations (students and supervisors)
- Internship ‘seminars’
- Adding depth and breadth to the experience
- Unique experiences

Key Message: To share with health professions advisors an internship program that is successful in providing quality experiences for students.

Conclusion: Though coordinating health professions internships can be quite challenging, the benefits provided to students are worth the effort.

Forty-five Years of Health Professions Advising at California State University Fullerton

Christina A. Goode, Julianne Stern, Khuyen Vu.

In October 1962 the Premedical Committee of then Orange State College wrote their first letter of support for a student applying to medical school. Forty-five years later the Health Professions Committee of California State University Fullerton continues to write letters of support for students applying to all the health professions. In the intervening time much has changed including the growth of the university from a small college to a university serving over 33,000 students and the establishment of an office and faculty position dedicated to advising and mentoring pre-health professions students. This paper will review some of our history and look at new strategies we are implementing to ensure that we continue the success of the last 4 decades.

2009 WGEA WGSA WMAS WAAHP CONFERENCE

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AAMC Western Regional Conference Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine
April 18-21, 2009

PROGRAM

Sunday, April 19, 2009

ROOM

La Fonda Hotel

7:00 am	Registration	Lobby (LF)
7:30 am	Continental Breakfast	Ballroom (LF)
7:30 - 9:00 am	Poster Session #2	Ballroom (LF)
8:00 - 9:30 am	WAAHP Ask an Admissions Dean Panel	Coronado (LF)
9:00 - 10:30 am	Poster Session #3	Ballroom (LF)
9:30 - 10:30 am	WAAHP Dental School Admissions: Art or Science or Both? <i>James C. Betbez, Sandra J. Bolivar, Mary Lynch, Robert Trombly</i>	Coronado (LF)
10:30 am	Walk to the Santa Fe Convention Center	
11:00 am	Welcome <i>Ellen Cosgrove, MD, FACP</i> Senior Associate Dean of Education UNM School of Medicine	Sweeney AB (CC)
11:15 - 12:15 pm	Plenary Session <i>Keynote: Abraham Verghese, MD</i> Professor for the Theory and Practice of Medicine, Senior Associate Chair, Department of Medicine Stanford University	Sweeney AB (CC)
12:15 - 12:30 pm	Book Signing to follow Dr. Varghese's talk	Sweeney AB (CC)
12:30 - 1:45 pm	Medicine in Music: A Café Concert Featuring <i>Courtney Johnson, MD & Michaela Johnson</i> Lunch Provided	Sweeney CD (CC)
1:45 - 4:00 pm	Medicine in the Arts Workshops <i>(Literature, Poetry, Photography, Music, Drawing)</i> 1. Doctoring in a Time of Crisis: Writing for Meaning, Writing for Reform <i>Dora Wang</i>	O'Keefe (CC)

Sunday, April 19, 2009

	2. From Colleague to Colleague: Using Drawing/Painting (even doodling) to Relax and Rejuvenate <i>Nancy Koff</i>	Kearney (CC)
	3. Writing and Healing <i>Julie Reichert</i>	Milagro (CC)
	4. Healing the Self through Self Portraits <i>Amy Stein</i>	Coronado (CC)
	5. Seeing the Light (room) <i>Robert Katz, John Trotter</i>	Pojoaque (CC)
	6. Turning Your Experiences into Narratives: Memoirs <i>Greg Martin</i>	Peralta (CC)
	7. Listening for Story: Publishing Narrative Medicine <i>Tom Janisse</i>	Lamy (CC)
	8. The Zen of Photography & The Dance of Directing <i>Valerie Santagto</i>	DeVargas (CC)
	9. The Worst Mistake I Ever Made – Narrative Writing <i>Frank Huyler</i>	Nambe (CC)
	10. Family Stories <i>Helene Silverblatt</i>	Ohkay Owingeh (CC)
	11. Poetry Workshop: Craft and Creativity <i>Anastasia Andersen</i>	Tesuque (CC)
	12. "Happy, Sad, Scary, Yearning – What A Difference A Note Makes" <i>Courtney Johnson</i>	Sweeney CD (CC)
	13. Composing: Music, Medicine, and the Moment <i>Patrice Repar</i>	Sweeney AB (CC)
1:30 - 2:30 pm	WAAHP Predicting Problem Behaviors <i>Maureen Garrity, Cindy Fitch</i>	(LF)
2:45 - 3:45 pm	WAAHP Holistic Review: Making it Real	(LF)
4:00 - 5:30 pm	WAAHP Professions Update Session #1 Moderator: <i>Doug McBride</i> Dental: <i>James C. Betbeze</i> Pharmacy: <i>Megan Thompson</i> Physician Assistant: <i>Colleen Schierholtz</i> Physical Therapy: <i>Susan A. Queen</i> WICHE – <i>Margo Schultz</i> Veterinary – <i>TBA</i>	(LF)

Sunday, April 19, 2009

**Dinner on your own*

7:30 - 9:30 pm

**Admissions Deans' and Directors' Fair hosted by
Western Dental Schools: The Arizona School of Dentistry
and Oral Health, Loma Linda University, Midwestern
University, Oregon Health & Science University, University
Of Nevada Las Vegas, University of the Pacific, University
Of Southern California, University of Washington, Western
University of Health Sciences**

Ballroom (LF)

**All conference participants are welcome.*

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Pre-Clinical and Clinical Performances Among Diverse Groups of Medical Students

Ming Lee, Cha Chi Fung

Introduction

Asian-American and Caucasian students have usually been found to perform better than other ethnic minority students on the pre- and early medical school assessments. Whether these performances sustain and predict clinical year achievements have not been clearly understood.

Objectives

To compare MCAT and a variety of medical school performance measures among diverse ethnic groups and to identify predictors of NBME subject exam.

Methods

Data were collected for students from the classes of 2006 and 2007 on the following measures: (1) MCAT; (2) USMLE Step 1; (3) NBME Medicine exam; (4) Inpatient Medicine clerkship evaluation; and (5) Clinical Performance Examination (CPX).

To understand group differences, we conducted analyses of variance (ANOVA). Multivariate analysis of covariance (MANCOVA) was calculated to examine the overall group performance after controlling for MCAT. Multiple regression analyses were used to study the predictive values of all other measures on NBME.

Results

Three-hundred-and-twenty-three students participated in the study. The ethnic groups significantly differed in all measures except CPX. This difference disappeared when examining medical school performances as a whole after controlling for the initial differences in MCAT. NBME was largely accounted for by USMLE Step 1 and the mean clerkship rating. This prediction varied among individual groups.

Discussion

Medical education improved the lower initial performances of African- and Latino-Americans. MCAT did not play a major role in the prediction of NBME, which was better predicted by USMLE Step 1 and the clerkship ratings. The predictive values for different ethnic groups need further investigation using larger student populations.

Deliberate Practice Improves OB/Gyn Residents' Hysteroscopy Skills

Meir Jonathon Solnik, Beth W Rackow, Frank Tu

Objective: To assess for the degree of improvement in hysteroscopic skills after focused, deliberate practice with junior-level residents.

Methods: Prospective, non-randomized trial involving 38 residents from 3 academic institutions. Fifteen participants were postgraduate year 1/2, and 14 subjects were PGY 3/4. Junior-level residents underwent 4 one-on-one training sessions (10 minutes each), 2 sessions dedicated to hysteroscope assembly, 2 towards operative hysteroscopy. All subjects then underwent an objective structured assessment of technical skills and performed the same assembly and operative tasks. Subjects were evaluated by unbiased gynecology staff. Scoring utilized a checklist that identified the critical components of each task and a global assessment of technical skill.

Results: Assembly times (172 ± 57 s vs. 239 ± 5 s), assembly scores (10.9 ± 2.5 vs. 4.5 ± 2.8 , maximum score 13), resection scores (4.1 ± 8 vs. 3.2 ± 1.2 , maximum score 5) and overall global skills assessment scores (27.7 ± 4.1 vs. 20.5 ± 3.4 , maximum score 35) were superior in the trained, junior-level residents compared to the untrained, senior residents ($p < 0.05$). Scores on assembly times, assembly assessment, resection, and overall global skills assessment did not differ across institutions.

Conclusions: Brief, hands-on training sessions which are task-specific and repetitive facilitated short-term gains in learning of operative hysteroscopy. This curriculum, which was effectively implemented at 3 institutions using a standardized educational format, generated comparable results, suggesting the potential for application as a standard model in surgical training.

Assessing Residents' Medical Ethics: Do They Show What They Know?

Ann Morrison, Darra Kingsley, Jenny Jernigan, Teresita McCarty, Bronwyn Wilson, Sharon Wayne, Heather Webb, Steve McLaughlin, Cynthia Geppert

Introduction: Residents perform complex medical ethics interventions as an integral aspect of providing clinical care. Little is known about residents' preparation or proficiency in conducting these ethics tasks.

Objectives: Assess residents' knowledge and skill in performing common ethical tasks using standardized patients and faculty-generated checklists.

Explore correlations of residents' ethics knowledge, performance and level of training.

Methods: Forty residents from Emergency Medicine, Internal Medicine and Surgery participated in an Objective Structured Clinical Exam at the end of their first year of training. After completing a survey about the extent of ethics education received in medical school, the residents participated in a standardized patient assessment. Two stations focused on ethics skills: obtaining informed consent for a procedure and informed refusal by a surrogate decision-maker. Residents were assessed on their communication skills using a global rating scale and on their ability to perform the specific tasks using faculty-generated checklists. Knowledge of medical ethics principles and practice was assessed by a written test.

Results: Residents with >10 hours of ethics education during medical school had significantly higher communication scores. Written test ethics knowledge scores were better than performance scores. Most residents performed below faculty-established standards on the performance checklists.

Discussion: In a multimodal assessment including the use of standardized patient interactions to evaluate residents' knowledge and competence to perform common ethical duties, residents demonstrated adequate knowledge of medical ethics principles but had difficulty implementing this knowledge in a performance setting. Increased attention to developing an ethics skill set may be warranted.

Impact of Model Madres

Adriana Padilla, Susan Hughes

INTRODUCTION: Traditional medical school clerkships have been noted to have gaps in curriculum, inefficient administrative systems and academic isolation for clerkship directors.^{1[1]} Informal student feedback, when trained in traditional clerkships, highlights the need for longitudinal and integrated care of the patient in order to meet optimal learning goals. Two models of clinical integration exist at UCSF, the longitudinal integrated clerkship model (LIC) versus hybrid models (integration and longitudinal patient care within traditional clerkships). Model Madres is a hybrid model taking advantage of an innovative perspective of caring for women, children and families across traditional clerkships.

OBJECTIVES: Evaluate the effectiveness of meeting clerkship goals and longitudinal integrated patient care goals in this model via a core competency plan, pre/post survey and attitudinal assessments from focus groups. Evaluate the impact on programmatic resources.

METHODS: 7 students participated in this 6 month model. Longitudinal training, integrated learning, community /practice based education and structured mentoring were key components of this hybrid design.

RESULTS: Student participants experienced continuity patient care goals and met core learning goals. Interdisciplinary learning opportunities, utilization of community based education in assisting with patient care and mentor feedback utilization is in process of analysis. Impact on programmatic resources will be summarized.

DISCUSSION: Preliminary findings indicate that Model Madres participants met core learning goals and met continuity patient care expectations. Optimum integration of the participating clerkships was not met. Challenges with logistics, space needs, programmatic resources and educator preparation and buy in were noted. Hybrid models, like Model Madres, face multiple challenges.

1[1] Pipas CF, Peltier DA, Fall LH, et al. Collaborating to integrate curriculum in primary care medical education: successes and challenges from three US medical schools. *Fam Med* 2004;36 Suppl:S126-32.

Development of a Tool to Support Resident/Fellow Self Assessment/Reflection Skills to Enhance Learning of the ACGME Core Competency:Practice Based Learning

Susan Baillie, Neil H. Parker

Context: Medical education literature has placed increased emphasis on the need for physicians to adopt self assessment as a common practice. After reviewing considerable literature, few tools were found that enabled residency program directors to enhance this skill development.

Objectives: This paper reports on development of a learning tool which supports resident/fellow self-assessment/reflection in their attainment of goals and objectives of their residency training program. It was also designed to address the ACMGE Competency, Practice Based Learning.

Methods: Initially the tool was developed for one residency program and piloted there. After usefulness was shown, many other programs adopted the tool. It was presented and discussed at one of the semi-annual Program Directors' Conference. From the beginning, it was used as a required tool prior to each resident's semi annual meeting with the program director.

Key Message: Program directors report that the new tool has had several positive and significant impacts: The assessment tool engages the resident in reflecting on and assessing their knowledge and skill acquisition in all Core Competency areas just prior to the semi-annual meeting. The tool provides the Program Director with a self-reported assessment that they can use in addition to other assessment instruments used such as attending evaluations, in-service exams, and multiple source evaluations. The tool has also enhanced resident Practice Based Learning Competency. Future research is planned to assess the effectiveness of the tool.

The Role of Reflection in the Senior Mentor Program

Carla Herman, Denise Minton, Lloryn Swan

Introduction: A number of medical schools have adopted Senior Mentor Programs (SMP) to increase students' understanding of the care of older adults.

Objective: At UNM, the voluntary SMP provides an opportunity to improve communication skills and meet a number of student competencies in geriatrics.

Methods: First year medical students are paired with active community-dwelling elders. Each student completes 3 meetings with specific learning objectives and provides written reflection on the experience. Medical students are surveyed with a validated instrument at the beginning of medical school, at the end of their second year and at graduation on knowledge and attitudes towards aging.

Results: Students that complete the SMP have an increase in their knowledge of geriatrics and in attitudes toward aging compared to students who do not participate in the SMP. The reflective narrative portion provides a qualitative evaluation of the experience.

Discussion: The SMP has shown positive effects on the medical students' knowledge and attitudes toward aging. In addition, the students and mentors report a number of benefits from participation in the program.

Evolution of an Evaluation Tool for Student Oral Presentations Utilizing an Interdisciplinary Reflective Process

*Jamie T. Anderson, Robbyn L. Tolles, Gwen Shonkwiler, Amy McFarland,
Daniel Spogen, Rick Falkenberg*

Context:

In 1995, first year medical students in our Clinical Problem Solving I (CPS I) course began making oral presentations related to case learning issues before the entire class. Students could volunteer or be randomly selected and were given limited feedback with no grade. In 2008, oral case summary presentations are a required assessment activity. All students present to their small groups where they are graded by their facilitators via an oral presentation rubric and a case summary checklist.

Objectives:

1. To present a reflective process that successfully led to quality improvement in the assessment of communication skills for first year CPS I students and
2. To present two successful grading systems which provide transparent and consistent evaluation for grading student oral presentations

Key Message:

The sixteen small group facilitators for CPS I come from a variety of medical and educational backgrounds. Through monthly meetings and annual retreats, course faculty steadily revised and improved the student assessment process used in this case-based course. We have now established a presentation format and grading process that has significantly reduced student presentation grade challenges.

As an added benefit, the process of ongoing interdisciplinary quality improvement generated alignment with both the CPS I course goals and our Institutional Objectives.

Conclusion:

We attribute our success with the task of creating a transparent oral presentation grading system that was acceptable to students and facilitators alike to the group's diversity in background, motivation toward course improvement, and regular opportunities for faculty discussion and reflection.

Narrative Writing as a Tool in Medical Education

Brian Solan, Lilie Velarde, Amy Clithero

Introduction

The Bachelor of Arts/Medical Degree (BA/MD) program at the University of New Mexico includes a summer practicum during the second year. For the practicum, BA/MD students spend a month in one of five rural NM communities to enhance their knowledge and understanding of public and clinical health issues and medical practices in rural and underserved communities. Weekly narrative writing on their experience is required.

Methodologies

Students are required to send one piece of in-depth reflective writing once per week to their mentors. Students use these writings to examine and reflect on the ways they made meaning of their new experiences. Writing could be any genre including poetry, drama, fiction or personal narrative. Mentors respond to the students' writings. A confidential questionnaire is administered before and after the practicum. Students evaluate their change in knowledge and skills as result of the program including the narrative writing component.

Results

Students rated improved ability to communicate (Pre = 3.6 Post = 3.9) and engage in discussions (Pre = 3.6 Post = 3.8) by the end of the practicum. Students also believe the narrative writing component is valuable for their professional development.

Discussion

Narrative writing gives students an opportunity to regularly reflect on their experiences and shape their reflections through writing. Self reported improvements in communication skills were seen. Most students do not plan to continue narrative writing primarily due to time constraints rather than perceiving no value in the exercise.

Impact of a Telephone Follow-Up Curriculum on Medical Student Physician-Patient Interaction Skills

H. Carrie Chen, Karen Hauer, Calvin Chou, Rene Salazar, George Saba, Ann Poncelet, Arianne Teherani, Jason Satterfield

Introduction

Students learn patient education techniques in their preclerkship communication skills curriculum but have infrequent opportunities to actively practice them until their clerkships. Even then, few students receive real-world feedback on the effectiveness of their communications. We developed a Telephone Follow-up Curriculum (TFC) to reinforce the physician-patient interaction (PPI) skills of “ask-teach-ask”, “closing the loop”, and “looking ahead”. This format enables students to check patient comprehension, retention of information, and medical adherence since the last visit or discharge.

Objectives

To evaluate the impact of TFC on PPI skills of third-year medical students.

Methods

In 2008, we piloted TFC with a subset of third-year medical students enrolled in a 6-month longitudinal clerkship. After basic PPI didactics, students selected four patients from their clinical encounters to call, completed a written exercise for each call, and participated in discussion sessions with faculty facilitators. Students and faculty facilitators evaluated the usefulness and quality of the curriculum using a 5-point Likert scale. All students in the third-year class participated in a three-station clinical performance exercise (mini-CPX) after six months of clerkships.

Results

Eighteen students participated in TFC over six months, completing four calls each. All third-year medical students completed the mini-CPX. We will present the curricular evaluation scores and compare the performance on patient education items in the mini-CPX between students who underwent TFC with those in other longitudinal and traditional clerkships who did not.

Discussion

Telephone follow-up exercises are feasible for clerkship students, allow students to objectively assess their PPI skills, and provide motivation and feedback for improvement.

Resident Leadership in One Academic Center's Patient Safety Initiative

Benjamin A Levy, David P Sklar, Summers Kalishman, Roger Jerabek

Introduction:

Since the publication of *To Err is Human*, patient safety has been elevated to a national priority. Creating staff "buy-in" has been a featured component of many quality improvement initiatives. Yet, little has been done to generate "buy-in" among the nation's medical residents. In this article we present a process proactively involving residents in the quality improvement process.

Objectives:

This project attempted to create a measurable and reproducible approach to quality improvement through resident led identification of key safety needs, prioritization of these needs, workshop designed action plans, and continuous follow up and feedback.

Methods:

A survey was used to identify the residents' patient safety concerns. A full day retreat was organized based on the survey results. At the retreat, small group seminars moderated by residents formulated specific plans for each of the top concerns. Each plan was adopted by one of the hospital's quality improvement committees. Follow up of the retreat was held every six months with ongoing evaluation of the improvement process.

Results:

The survey identified several new institutional priorities. The retreat was well attended by residents, medical staff, and administrators. Progress over the following year was mixed with some issues resolved and some issues remaining unchanged.

Discussion:

Differences between this survey and national safety guidelines are striking. Emphasized in this project were staffing levels, communication, and work place efficiency. Components usually attributed to patient safety measures including duty hours and medication errors were de-emphasized. Further research is needed to understand whether this process will have lasting and measurable benefit.

Relationship of Reflection-on-Action and Feedback with Clinical Performance

Win May, Denise Marie Souder, Donna Elliott, Pamela Schaff

The concept of reflection-on-action (retrospective reflection on a situation) and reflection-in-action (reflection while practicing) is the seminal work of Schon (1983). Mamede et al. (2008) reported that in internal medicine residents, reflective practice had a positive effect on the diagnosis of complex unusual cases. As medical educators, we assist medical students in becoming competent practitioners who are not only skillful, but who also practice self-reflection (Westberg & Jason, 2001). At the Keck School of Medicine, fourth year medical students take a clinical competency examination, which is a graduation requirement. All students are encouraged to review their videos, while it is mandatory for those students whose grades fall one standard deviation below the mean to review at least two of their encounters with a medical educator. In these sessions, students review their standardized patient encounters, using a self-reflection form developed by one of the authors. The student and the educator then discuss this reflection-on-action, followed by verbal feedback from the faculty.

Objectives

Students who review their videos will be:

1. Able to self-reflect on their clinical skills including communication and cultural competency skills.
2. Better prepared for the USMLE Clinical Skills (CS) examination.

Key Message

In the past three years since this program was initiated, those students who voluntarily reviewed their videos with self-reflection ($n=30$) have all passed the CS. Of those students who were required to watch their video encounters with self-reflection ($n=60$), all but two passed the CS.

Conclusion

Self-reflection-on-action can assist students in improving their clinical reasoning.

References

1. Schon DA. *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books 1983; 21-69.
2. Mamede S, Schmidt HS, Penaforte JC. Effects of reflective practice on the accuracy of medical diagnoses. *Medical Education* 2008; 42: 468-475.
3. Westberg J and Jason H. *Fostering Reflection and Providing Feedback: Helping Others Learn from Experience*. New York, NY: Springer Publishing Company 2001; 1-57.

Evaluating the Effects and Influences of Early Medical Student Preceptorship Experiences on Career Processes and Decisions

Amy McFarland, Jamie Anderson

Introduction:

The 2008 AAMC Medical School Graduation Questionnaire reported that about half of medical students surveyed said they were strongly influenced by mentors and/or role models when determining their specialty choice. At UNSOM, our medical students experience two primary care preceptorships during the Introduction to Patient Care course. Utilizing our high level of early clinical exposure, the study hopes to determine if and when the preceptorship experiences influence students' decision making about specialties.

Objectives:

To assess the effect of medical students' interaction with their preceptors and clinical course experiences on students' specialty preference.

Methods:

Student volunteers are being surveyed at five points throughout their four years of medical school concluding with their choice of residency. Surveys are conducted via a university supported electronic system.

Preliminary Results:

The final results of this longitudinal study are pending. To date, response rates from two different cohorts range from 33% to 64%. Early data show that 28% to 50% of specialty choices by entering students were in primary care. The percentage of responders reporting that they have changed their outlook based on experience in their preceptor's specialty is 42% to 54%; of those, 60% to 85% reported positive factors and 10% to 40% reported negative factors in their consideration of specialty.

Discussion:

This ongoing survey will help us to strengthen and assess the value of early clinical exposure to students and the factors that affect their ultimate medical specialty choice. Preliminary results suggest an increased interest in primary care after two preceptorships.

Status of Medical Spanish Language Training at a Sample of U.S. Medical Schools

Sonia J Crandall, Carol A Hildebrandt, Sylvia Bereknyei, Lynn Bickley, Jorge Girotti, Elizabeth Lee-Rey, Clarence Braddock

Introduction: Globalization and recent immigration trends have changed the complexion of the US. As providers care for more diverse patients the communication gap will widen, impacting quality of care. It is essential that medical Spanish be offered as a fundamental component of a healthcare curriculum.

Objectives: Evaluate the present status of medical Spanish instruction at member schools of the *National Consortium for Multicultural Education for Health Professionals*.

Methods: Four member schools developed a 14-item questionnaire on curricular formats for medical Spanish which was distributed by e-mail to the 18 schools of the Consortium.

Results: Thirteen member schools responded. Half of the schools reported county or state Hispanic populations > 25%. All but two offer medical Spanish (85%). Six of the 13 schools have placement criteria based on level of Spanish language proficiency. In about half of the responding schools, medical Spanish is offered as an elective, with number of participants varying from 15 students to 50% of the class. The most common barrier to offering medical Spanish is lack of time in the curriculum.

Discussion: It is a commonly held belief that language requirements have not been emphasized as part of medical student education. Among thirteen schools of the *National Consortium for Multicultural Education for Health Professionals* this does not appear to be the case. Preparing learners to be true patient advocates in a global culture and positioning medical institutions to provide comprehensive care in today's market necessitates the inclusion of medical Spanish in medical training.

The Impact of Including Cultural Competency in a PBL Curriculum

S. Michelle Nikels, Carol S. Hodgson

Introduction

Problem-based learning (PBL) is commonly used to teach basic science and clinical problem solving. However, a review of the literature shows no incidences of PBL to teach cultural competency.

At our school, PBL cases are taught longitudinally within all but two of the pre-clerkship courses. An article is provided for one cultural competency learning issue within each case.

Objective

Our objective was to determine whether a change to include cultural competency learning issues and a required reading in every PBL case would result in students reporting that the cases helped them understand the impact of cultural factors on the practice of medicine.

Methods

All first- and second-year students participated in the PBL curriculum and completed a required evaluation at the end of the course using a five-point scale.

Results

	Year-One	Year-Two
	Mean	Mean
How well did the PBL cases help you understand the impact of ...		
Socioeconomic factors on the practice of medicine.	3.7	3.3
Psycho-social and behavioral factors on the practice of medicine.	3.6	3.4
Gender on the practice of medicine.	3.2	3.0
Cultural factors on the practice of medicine.	3.5	3.4
Apply basic science principles.	4.2	3.6
Overall quality of PBL curriculum.	4.00	3.50
Overall quality of the pre-clerkship courses.	3.96	3.75

Discussion

The inclusion of specific cultural competency learning issues and a required article on a cultural topic for each PBL case requires tutors and students to address the issues of cultural competency. These experiences can have an impact on students' learning.

Inclusion of a Required Cultural Competency Article in a PBL Case Discussion

Carol S. Hodgson, S. Michelle Nikels

Context

Many medical schools struggle with the best way to teach cultural competency, especially during the pre-clerkship curriculum. Student resistance to the topic is a major barrier to a successful program. How can schools include cultural competency without “turning off” students from the topic and making it seem relevant to patient care?

We introduced a new methodology to PBL by including an article emphasizing some cultural aspect of the case. For example in a case of an African-American lesbian patient who presents in the ER with right lower quadrant pain, the accompanying article is one that compares level of physician trust in different ethnic groups. The learning issues for this case include typical basic and clinical science ones, but also include those on health disparities and patients’ issues of trust.

Objective

The objective of adding a cultural competency article linked to specific PBL learning issues was to increase the amount of discussion of cultural, psychosocial, and socioeconomic issues within the context of a PBL case.

Key Message and Conclusion

Including specific PBL learning issues related to cultural competency does not ensure that these issues will be identified by the students, be discussed in detail, or affect students’ learning. However, by including a required article these topics are assured a place in the discussion even when tutors or students are uncomfortable bringing up the topic. The article helps provide a framework for including these important issues and allows students to see the relevancy of these concepts in patient care.

Pruning the Thorns of Harmful Stereotypes: Using Reflection to Promote Excellence in Psychiatric Medical Education

Janet L. Trial, Cheryl St. George, Darin Signorelli, Donna Elliott

Introduction:

Cultural competence curricula (CCC) are widely established in first and second year medical coursework. Curriculum for application and evaluation of these skills at the bedside (clerkships) are limited and necessary for clinical integration.

Medical student perceptions of the mentally ill may be fraught with fear and include a lack of education/understanding of mental illness. Students may unknowingly carry these thoughts and perceptions into the clinical setting. If they remain unidentified, barriers to appropriate care and treatment will be apparent in patient outcomes.

Objectives:

- Provide psychiatric health care to a diverse, multicultural patient population and recognize the impact of social, cultural and spiritual beliefs and practices upon physician/patient relationships.
- Create student personal awareness and review the impacts stereotypes play in the clinical setting.
- Understand the benefits and limitations of stereotyping in clinical care. Identify techniques to reduce the inappropriate stereotypes, stigma and bias of these patients.

Methods:

Students (n=168) were asked to write a weekly reflective narrative from multi-media prompts designed to elicit particular aspects of stereotyping in psychiatric care during the 6-week Psychiatry clerkship. Small group discussions with faculty utilized the reflections as culminating experiences. Student reflections were qualitatively analyzed to determine effectiveness.

Results:

Preliminary results identified common themes including transition from fearfulness to empathetic humanistic conceptualization of patients. Increased confidence and competence in psychiatric skills were demonstrated.

Discussion:

Student maturation is facilitated by narrative reflection & provides a mechanism for identification and processing of student stereotypes & bias.

Role Models: Responding to the Challenges of Teaching Cultural Competency

Paritosh Kaul, Gretchen Guiton

The need to include cultural competency education throughout medical school is widely accepted. [1]-[2]
The challenges that this poses also are becoming known. [3]

This study evaluates the effectiveness of a 2 ½-hour introductory session on culture to 1st year medical students. It examines the effectiveness of this session on students' attitudes and compares it with other efforts to ascertain ways to overcome student resistance.

In the interactive session, upper-level students and a clinician introduced the 156 first-year students (in groups of 50) to the notion of culture. Students explored their own and a peer's culture in dyads, viewed a video of a medical situation involving culture, viewed a role-play of a medical interview using the Kleinman questions which students then practiced.

Students were administered the 15-item Health Beliefs Attitude Survey [4] before and after participating in the session. A paired t-test was conducted for each attitudinal factor: whether doctors should *elicit* a patient's perspective and whether knowing the patient's perspective affects the quality of *care* doctors' provide.

Students' attitudes increased significantly ($p = 0001$) on both resulting in a large ($d = .66$) and moderate ($d = .44$) effect size for *care* and *elicit*, respectively. These results are remarkable when compared to prior studies with medical students where attitudes declined² or increased only on *care*. [5]

Role models as instructors along with opportunities to relate to culture personally and in a medical situation, and to practice skills to address culture appear to reduce resistance and improve students' attitudes toward addressing cross-cultural communication in medicine.

[1] LCME Accreditation Standards. Available at: (<http://www.lcme.org/standard.htm>).

[2] AAMC. Cultural Competence Education for Medical Students: Tools for Assessing Cultural Competence Training. Available at (<http://www.aamc.org/meded/tacct/culturalcomped.pdf>).

[3] Boutin-Foster, C., Foster, JC, Konopasek, L. Physician, know thyself: The professional culture of medicine as a framework for teaching cultural competence. *Acad. Med.* 83 (1), 106-111.

[4] Alison Dobbie, A., Medrano, M., Olney, C., and Tysinger, J. Health Beliefs Attitude Survey. 2003, University of Texas Health Science Center at San Antonio.

[5] Sauaia, A

Transition Block, a Bridge from Basic Sciences to Clinical Clerkships

Glynnis B. Ingall, Teresa T Anderson

Five years ago, a new course designed to help students transition from basic sciences to their clinical training years, was placed in the curriculum immediately prior to the start of the phase II clinical clerkships. Since its inception, this course has been revised extensively based upon student evaluations and input from clerkship directors regarding what skills need to be better developed in students prior to entering clinical clerkships.

After a presentation of the evolutionary changes in the course, the current curriculum will be outlined and innovative course elements described in detail.

Students have consistently shown a preference for hands-on or practical experiences rather than lectures at this stage of their training. Consequently, lectures have been replaced with communications training, hands-on clinical skills practice, and small group problem solving sessions as much as feasible. Evidence based medicine training was added so that all students now enter their third year with knowledge of EBM principles. Innovations such as "real time" tutorial mini-cases, the on-line patient note writing/peer evaluation program and the use of MS III-IV students as course facilitators/developers have been very well received by students.

The responses to feedback from students and clerkship directors have resulted in changes/innovations.

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**Reflections in the Field: Teaching Emotional Intelligence & Humanism
During Global Health Programs**

Alexis D Armenakis

Introduction: Research supports that global health electives catalyze changes in attitudes about professionalism and nurture humanistic qualities. After international experiences, students demonstrate an increased desire to understand patients' cultural contexts and advocate for communities' wellbeing. Therefore, immersion programs may provide an antidote to the well-documented decline of humanistic values during training. **Methods** In spring of 2008, CFHI piloted an educational intervention to teach humanism, cultural humility, and emotional intelligence to a population of American medical and premedical students participating in global health immersion programs in La Paz, Bolivia and Oaxaca, Mexico. The 4-week curriculum consisted of a 30-minute online module, 8 hours of on-site small group discussions, and weekly journaling exercises. Process-oriented discussions about program experiences and culture shock were used as the catalyst to examine attitudes and explore self-care strategies. Classroom techniques involved group contracting, self-reflection exercises, role-plays, self-assessment and action plans, critical incident reports, meditation/ relaxation exercises, and short didactics about emotional intelligence theory. We evaluated our educational intervention using mixed methods in a time-series study design to assess the impact of the curriculum on student attitudes. We also interviewed facilitators to evaluate the effect of this experience on their identity as educators.

Results: This presentation will share our initial data analyses and lessons learned in the first two implementation cycles of our curriculum. **Discussion** This study is one of the first to pilot an intervention focused on teaching humanism and cultural humility in the global health context. If successful, the program may serve as a model curriculum for nurturing humanistic values and professionalism.

**The Basic Science Learning Station—
Touching Students' Kinesthetic Learning Style Preferences**

Amin N Azzam, Jennifer Breckler

Introduction

Students have variable and sometimes multimodal learning preferences that include kinesthetic (hands-on or tactile) learning. Yet the pre-clerkship medical school curriculum does not emphasize kinesthetic learning. A new instructional strategy to enhance this “curricular hole” is the Basic Science Learning Station (BSLS).

Objectives

We designed the BSLS to provide medical students with kinesthetic and integrated experiences in modern basic science content.

Methods

At the BSLS, students experience weekly self-guided activities which include the physical manipulation of games, puzzles and conceptual models. These stations provide students opportunities to integrate basic science domains, reinforce concepts presented in other formats (i.e. case-based or lecture), motivate and inspire basic science learning, and integrate clinical with basic science domains. To evaluate the BSLS, students were required to fill out an electronic questionnaire each week. In order to determine the types of learners using the BSLS, we distributed a freely-available on-line learning style inventory known as the “VARK” to participants.

Results

Even though the station was an optional, ungraded activity, 57 – 77% of our students interacted with the station between 2003 and 2008. VARK results suggest that 87 – 100% of our students have a kinesthetic learning preference among their learning style preferences. Our poster will present more detailed results.

Discussion

The BSLS directly addresses medical students' desires for kinesthetic learning opportunities through an innovative approach to teaching basic science. It also presents new opportunities for presenting cross-disciplinary basic science content with clinical context. This approach may inspire and motivate students to acquire and retain basic science knowledge longer than they might otherwise.

Starting a Medical-Legal Alliance Elective

Emilie A. Sebesta, Andrew Hsi, J. Michael Norwood, Carol Suzuki, April Land

Context

Since 1996, UNM Department of Pediatrics programs have collaborated with the UNM School of Law. In 2007, a steering committee composed of faculty of both schools formalized this collaboration as the Medical-Legal Alliance for Children (MLAC), expanded its availability to all families of pediatric patients seen at Children's Hospital, and began sending third year law students to hospital clinics to begin intakes for potential client families needing legal representation.

Objectives

Under the leadership of the MLAC Steering Committee, the School of Medicine initiated a parallel process for fourth year medical students to increase understanding of social determinants of health affecting children and their families. Students elect to participate in a four week block with objectives spanning medical and legal topics. Students attend outpatient pediatric clinics, participate in legal intake meetings, go to court with law students and faculty, attend law seminars, learn about community legal and social resources, and prepare presentations highlighting ethical issues in medicine.

Key Message

Three medical students completed the rotation in 2008. Each learned a great deal, enjoyed the experience, and concluded that all medical students would benefit by having a better understanding of the non-biological, often legal, issues that affect the health of children and families. One student resolved to remain involved with MLAC should she remain at UNM for her family practice residency.

Conclusion

The Medical-Legal Alliance for Children provides an effective approach to resolving legal issues in the clinical arena while also providing a rich educational experience for medical and law students. Additional challenges exist.

**Mindful Practice for Medical Students and Residents:
A Curricular Experience in Reflection**

Tana Annette Grady-Weliky, Scott McDonald, Fred Marshall, Ronald M. Epstein

Context: Mindful practice refers to our ability to be aware, in the moment, on purpose, with the goal of providing better care to patients and to take better care of ourselves. Being mindful is at the core of clinical competence.

Objectives: With this in mind the University of Rochester School of Medicine developed a program designed to give medical students, residents and practicing physicians tools to help them become more mindful during daily clinical practice. The explicit aim of the program is to help participants develop self-awareness and self-care skills so that they can be attentive and present in clinical settings.

Key Message: Self-awareness is an essential element of communication, professionalism, teamwork, technical skills, and life-long learning. All of these attributes are included in the curriculum and are among the ACGME core competencies. The curriculum is focused on cultivating mindfulness in clinical work settings and has two specific goals: to improve the quality of care and to improve physician well-being. Research has found that these two goals are linked. Twelve modules have been developed for medical students and resident training. Topics of these modules include the following: Professionalism; Physician Self-Care and Burnout; Witnessing Suffering; How Doctors Think; Time; Balance and Conflict Management. Several educational methods are used throughout the curriculum including: 1). *Brief awareness exercises and reflective questions*; 2) *“Appreciative inquiry” interviews* and 3) *written narratives*.

Conclusion: The poster will describe details of the curriculum and include preliminary survey data from the initial year of implementation.

**Organizing a Lunch-Time Lecture Series:
Supplementing and Enriching Medical Education**

Linda Hodes Villamar

Context: Description of student-organized lunch-time lecture series at the University of New Mexico School of Medicine aimed at supplementing current medical school curricula on topics such as Global Health and Health Policy.

Objective: To provide an overview of how student organizations and individual students have organized lectures, workshops, and media viewings about Global Health and Health Policy issues in an effort to provide the student body with a broader view of medicine and enrich current medical school curriculum.

Key Message: Students and student groups have great power and responsibility to supplement and enrich their school's curriculum with often underrepresented topics important to our training, and using lunchtime lecture series, workshops, and other extracurricular student activities can provide a creative and sustainable venue for such educational initiatives.

Conclusion: Student-organized lectures, workshops and other extracurricular activities are sustainable and effective tools for student organizations to add valuable content to their school's curriculum.

The Effect of Experiential Education on Students' Attitudes About Complementary & Alternative Medicine Practices

Mariebeth Velasquez

OBJECTIVES: To evaluate the effectiveness of an experiential Complementary and Alternative Medicine (CAM) education session in changing medical students' beliefs, attitudes, and comfort level with CAM.

DESIGN: Students attended a 3 hour class on Mindfulness Based Stress Reduction with a trained provider, and completed a Likert scale survey of their agreement with various statements about CAM both pre- and post-session.

ASSESSMENT: Changes in agreement with 7 of the 10 items reached statistical significance, including increase in students' subjective level of knowledge about CAM, decrease in the belief that CAM is too controversial to discuss with patients, increase in perceived ability to find information about CAM, and increase in support for the inclusion of CAM in the medical school curriculum.

CONCLUSION: A CAM experiential session was effective in changing students' beliefs and attitudes, and improved their comfort levels with CAM. Similar sessions could be a valuable addition to the medical school curriculum.

The Culture of Healthcare: What Medical Students and Their Professional Peers Really Think about Interprofessional Learning

*Lynne Tomasa, Nancy Koff, Andreas Theodorou, John Murphy,
Cathy Michaels, Nancy Coleman*

Introduction:

Beginning in 2006, several large-group interprofessional (IP) activities for students from medicine, nursing, pharmacy, public health, law, and social work were implemented. Topics included: healthcare culture and communication, disabilities, pandemic flu, and cardiopulmonary resuscitation; half-day sessions included various learning formats. Participants ranged from 200 – 400 students.

Objectives:

The IP curriculum goal is to change the current training environment, professional silos. Learning objectives for each IP activity included items addressing interprofessional teamwork: encouraging awareness of the importance of teamwork; practicing respectful communication with colleagues; describing the training, roles, and contributions of other professionals; and reflecting on the students' roles in promoting teamwork.

Methods:

Paper or online-evaluation surveys for each activity included both Likert-scale and open-ended questions, which asked students what they liked and disliked and how they would improve the activity. Qualitative analysis (Atlas.ti software) was used to identify major themes. A focus group of 12 students representing three professional groups was employed to provide another source for triangulation of survey results.

Results:

The survey response rate averaged 80%. Students offered insights into their sense of stereotypes, personal attitudes, preferences regarding IP learning, as well as what occurs during the small group discussions.

Conclusions:

IP activities play important roles in understanding the healthcare culture and learning environment. In planning IP activities, close attention must be paid to group process, underlying stereotypes, and student attitudes.

The Clinical Skills Lab: Deliberate Practice to Remediate Medical Student Communication Skills

Ann Morrison, Nancy Sinclair

Context

Performance assessment of communication skills is expected in undergraduate medical education, though little precedent exists for remediating poorly performing students.

Objectives

- Develop a communication skills remediation model, based on deliberate practice.
- Pilot model with 3rd year medical students with deficient communication skills scores.
- Observe the intervention effect on future communication skills scores.

Key message

Five students performing below standard in communication on a 3rd year performance assessment participated in a Clinical Skills Lab (CSL) session. Prior to the CSL experience, students viewed their performance recordings and developed specific learning objectives. Students were paired with a faculty coach and a standardized patient (SP). The SP was trained in improvisation and giving feedback. During the 30 minute session, students received targeted feedback from faculty and SPs and practiced specific skills over several iterations of the same scenario. Three weeks later participants showed statistically significant improvements in their scores. Students uniformly evaluated the CSL as a positive experience. They suggested that the CSL be offered earlier in the curriculum and on a more regular basis.

Conclusions

The Clinical Skills Lab is a promising intervention to improve communication skills which includes direct observation, multisource feedback, and iterative practice.

Future work will consider whether benefits seen in this study can be generalized to a larger group of students; and whether this model can be used to sustain communication skills development in the long term.

Student Learning Approaches: The Effect of Limited Curricular Time in a Six-Week Summer Enrichment Program

Michelle Vermillion, Lawrence Hy Doyle, Sebastian Uijtdehaage

Introduction

Validated with first year medical students in the UK (Mattick, 2004) and US (Guiton, 2006), the Approaches to Learning and Studying Inventory (ALSI) has been found to correlate with academic performance. A shift from a “surface approach” (rote memorization) to a “deep approach” (learning for understanding) was observed in students participating in the Summer Medical and Dental Education Program (SMDEP), a six week academic enrichment program for disadvantaged undergraduate pre-medical and dental students (Doyle, 2007; Doyle, 2008).

Objectives

To compare the effect of a condensed Learning Skills course to that of the traditional course on student’s learning approaches.

Methods

In 2007, UCLA SMDEP students (N=67) participated in a Learning Skills course consisting of 15 hours of lectures. In 2008, this course was shortened to 8 lecture hours to accommodate other, nonrelated activities in the curriculum. 66 students participated. In both years, the ALSI was administered during the first and sixth week of the program.

Results

A mixed model MANOVA indicated a significant and equal increase in Deep Learning in both cohorts ($p < .005$) and a significant decrease in Surface Learning ($p < .001$). This decrease was slightly less in the 2008 cohort compared to historic controls ($p < .01$).

Discussion

Our finding suggests that an abridged Learning Skills course is as effective as the full course offered in previous years. After the course, disadvantaged students relied less on rote memorization in favor of deep learning. The effect on surface learning, however, was not as strong as in previous years. Future studies must compare the long-term effects of the two curricula.

Training of Clinical Empathy: Medical Students' Perspectives

Behnoosh Afghani, Shabnam Besimanto, Alpesh Amin, Johanna Shapiro

Background: The objective of this study was to evaluate attitudes of 3rd and 4th year medical students regarding their training in clinical empathy at a public teaching hospital.

Methods: A questionnaire containing items on students' satisfaction and opinions as well as barriers to empathy training was distributed during the last quarter the year.

Results: Of 188 eligible participants, 157 (84%) responded. The response rate for 3rd and 4th year medical students were 78% and 88% respectively. Half of the respondents said empathy could be taught. Students were satisfied more with the training of empathy during the first 2 years of their training compared to their clinical years (91% vs. 73%). Eighty one percent of respondents felt that their empathy had increased or stayed the same during their training. When asked about barriers for learning empathy, majority of respondents chose time pressure and lack of good role models. Respondents rated breaking bad news to patients, talking to patients about medical mistakes and taking care of dying or demanding patients as the main areas in need of more empathy-related training. Methods that ranked highest for training of clinical empathy were "following or assisting one patient to his/her clinic visits" and "students admitted to the hospital as a patient with fake diagnosis."

Conclusions: Majority of students were satisfied with their training of clinical empathy. But our study highlights the need for innovative methods to address the concerns of medical students regarding the barriers to practicing empathy, such as time pressure and lack of effective role models.

Perspectives on the Medical School Objectives Project (MSOP) Learning Objectives for Medical Informatics: A Survey of Medical Students at the University of Utah

Denise E Beaudoin, Stephanie J Richardson, Joyce A Mitchell

Introduction: Given the role that biomedical information plays in the delivery of health care, medical students must become proficient in informatics. Previous surveys have assessed students' informatics competencies. However, no study has queried students about the importance of informatics learning objectives to their careers, or the emphasis that should be placed on informatics content in the curriculum.

Objectives: To examine medical student perspectives about the importance of MSOP informatics learning objectives to role development, by curriculum year.

Methods: A Web-based survey was created based on the MSOP objectives. Respondents rated the importance of the objectives using a five-point scale. The survey was e-mailed to all medical students at the University of Utah (N = 405). Qualitative analysis was conducted on free-text responses to: "Are there other medical informatics learning objectives that you think should be integrated into the curriculum?" and "Additional comments."

Results: Thirty-six students provided comments (44.4%, 19.4%, 22.2% and 13.9% for first, second, third and fourth-year students respectively). First-year students expressed concerns about information overload, and desired PDA training. All years acknowledged the importance of training on information retrieval, use of tools, and clinical applications/EMR systems. Sixteen students provided additional comments (56.3%, 25.0%, and 18.8% from first, third, and second-year students, respectively). Some were skeptical about the applicability of informatics to their careers; others felt the objectives were important but would be difficult to integrate into the curriculum. Third- and fourth-year students might benefit most from informatics instruction due to their clinical experience.

Discussion: Results will be considered as informatics content is integrated into the curriculum.

Information Survival Skills: Librarians in Medical Education

Sarah Knox Morley, Ingrid Claire Hendrix

Context: The crisis in scholarly communication and the increased emphasis on evidence-based practice highlight the need for information literate health care professionals. Health sciences librarians play a critical role in raising student awareness of issues related to the evaluation, use, and communication of medical information by healthcare providers. To address this challenge, library faculty members created a medical school elective in 2006 covering these important issues. To date, this course has been taught three semesters.

Objectives: Overall course objectives were to:

1. Understand the changing nature of scholarly communication and online publishing;
2. Identify resources and strategies for searching current best evidence;
3. Apply methods for presenting and managing information.

Key Message: By using a “soup to nuts” approach, 2nd and 3rd year medical students were given the opportunity to become familiar with and understand all facets of the information cycle. The syllabus included sessions on the publication process, the rising cost of medical information leading to alternative publishing models, literature searching, resource management, and presentation. The authors were interested in introducing concepts and strengthening skills that students will use in their future careers as researchers and evidence based practitioners.

Conclusion: This course elective provided practical application of evidence-based concepts and skills for students working on research projects or for students in the clerkship phase. Feedback from student participants reiterates the value of providing this type of information and has given us greater insight into optimal placement of topics in the broader school of medicine curriculum.

The Road Not Traveled: Evidence-Based Practice and Information Literacy

Lauren A. Maggio, Keith A Posley, Kristin Fabbro

Context:

Evidence-Based Practice (EBP) is the integration of best research evidence, clinical expertise and patient values to guide medical decision making. Information Literacy (IL)—a person’s capacity to recognize when information is needed and their ability to locate, evaluate, and effectively use that information—is critical to effective EBP. Previously at Stanford, medical librarians have been responsible for teaching information acquisition skills to medical students. There has been little formal integration of EBP and IL, or teaching engagement of clinical faculty in this domain. In 2008, we created a faculty development program designed to merge the concepts of EBP and IL. The program included a baseline needs assessment of faculty IL knowledge, skills, and attitudes. In addition we provided hands-on information skills and feedback training, and ongoing support from the librarian and physician EBP expert.

Objectives:

The faculty development program is designed to improve faculty IL and EBP skills, synchronize faculty and medical student skills, further integrate IL and EBP into the SOM curriculum, and create information literate faculty role models. Our poster will present the details of the curriculum, implementation plans, preliminary data as to effectiveness, lessons learned and potential future directions.

Key Message:

The road to EBP passes through the domain of IL. Improving IL skills is an important step toward developing clinician educators’ ability to practice and teach EBP.

Conclusion:

Information Literacy is an important yet underdeveloped framework for clinician educators. Focused faculty development can help them pave the road between clinical questions and evidence-based answers.

**Web 2.0 Tools to Enable Peer Support and Collaboration
Across all 4 Years of Medical School**

Akpen Gbegnon, Amin Azzam, Chandler Mayfield

Context: Web 2.0 tools (such as blogs and wikis) are useful tools for educators, facilitating information sharing and collaboration. However, these tools have yet to be instituted by many medical schools as they require heavy user involvement and resist top-down implementation.

Objectives: We developed a wiki for UCSF medical students for peer support and collaboration. Each class maintains and develops their wiki to meet their own needs. Classes have used their wikis to share learning materials, external references, study guides, and other learning resources, while also having access to other class wikis. Other uses include a virtual space for a medical education literature search specialist, USMLE Step 1 mentorship by 4th year medical students, student generated survival guides, electronic flash cards, and personal pages. A governing group made up of student representatives from each class support sustainability and consistency. Students receive daily digest emails summarizing key updates and changes to the wikis.

Key Message: When developing a Web 2.0 product, it is important to seek advice from the product end users. The process of engaging our end users focused our development in areas that were important to the students, resulting in successful adoption of the wiki in each medical school class. Future directions include providing individualized e-learning by subcategorizing various resources based on their usefulness to different personality types and VARK learning styles.

Conclusion: The medical student wiki is an effective tool to promote collaboration and teaching between students and also allows for easy transfer of information from one class to another.

Virtual Environments as an Educational Modality for Facilitating the Emergence of First-Year Medical Students' Knowledge and Comprehension of the Nephron

Deborah LaPointe, Holly Phillips

Introduction:

Of the concepts ranked by medical educators as the most important to the practice of medicine, the nephron ranks high in conceptual difficulty in the areas of basic science and clinical practice. Learning complex physiology and pathology with traditional educational tools requires the learner to create and store mental representations of images, propositional rules, structures, functions, and processes. Inaccurate or deficient conceptual models can adversely impact learner knowledge, grades, and effectiveness in communication during patient encounters. Interactive virtual models offer learners the opportunity to interact with otherwise complex abstract ideas and principles by bringing concepts to life.

Objectives:

To ascertain whether first-year medical students in the CV/Pulm/Renal block who have access to an interactive virtual model of the nephron show improvement in their knowledge of the functions and processes involved in the nephron as measured by exam scores and expert knowledge structures than students who do not have access. The virtual model will be evaluated on learner satisfaction and usability.

Methods:

All first-year medical students enrolled in the CV/Pulm/Renal block in 2009 will be randomly assigned to either an experimental group that will have access to the interactive, virtual model of the nephron or to a control group without access to the virtual model. The exam scores and expert knowledge structure scores will be compared between groups to assess learning gain, learner satisfaction and usability.

Results/Discussion:

The results will show that virtual models help learners accurately visualize difficult concepts and processes that are not directly observable and are significant educational innovations.

Reflections in the Field: Teaching Emotional Intelligence & Humanism During Global Health Programs

Alexis D Armenakis, Amin Azzam, Menraj Sachdev, Arianne Teherani, Evaleen Jones

Introduction

Research supports that global health electives catalyze changes in attitudes about professionalism and nurture humanistic qualities. After international experiences, students demonstrate an increased desire to understand patients' cultural contexts and advocate for communities' wellbeing. Therefore, immersion programs may provide an antidote to the well-documented decline of humanistic values during training.

Methods

In spring of 2008, CFHI piloted an educational intervention to teach humanism, cultural humility, and emotional intelligence to a population of American medical and premedical students participating in global health immersion programs in La Paz, Bolivia and Oaxaca, Mexico. The 4-week curriculum consisted of a 30-minute online module, 8 hours of on-site small group discussions, and weekly journaling exercises. Process-oriented discussions about program experiences and culture shock were used as the catalyst to examine attitudes and explore self-care strategies. Classroom techniques involved group contracting, self-reflection exercises, role-plays, self-assessment and action plans, critical incident reports, meditation/relaxation exercises, and short didactics about emotional intelligence theory. We evaluated our educational intervention using mixed methods in a time-series study design to assess the impact of the curriculum on student attitudes. We also interviewed facilitators to evaluate the effect of this experience on their identity as educators.

Results

This presentation will share our initial data analyses and lessons learned in the first two implementation cycles of our curriculum.

Discussion

This study is one of the first to pilot an intervention focused on teaching humanism and cultural humility in the global health context. If successful, the program may serve as a model curriculum for nurturing humanistic values and professionalism.

"A Life Worth Living:" Teaching Ethical Decision-Making for Patients with Disabilities

Tami Rowen

Context:

A growing body of literature stresses the importance of training healthcare professionals in disability studies. Several recent studies highlight differences between patient and provider attitudes towards living with a disability. These studies demonstrate both the importance of training future healthcare providers as well as how their training relates to ethical decision-making about life with a disability.

Objectives:

We designed an interactive lecture on disabilities studies for third year UCSF medical students. The session objectives included:

- understand new research relating to the difference between physician and patient's understanding of life with a disability
- articulate how disability studies can be applied to ethical questions in medicine
- discuss how physician attitudes about a "life worth living" can influence provider counseling patients about major medical decisions, including end-of-life care and prenatal testing.

The session included an introduction to the current literature, an interactive component, and panel speakers.

Key Message:

Given the universal exposure medical students have to patients with disabilities, new curricula should be designed to address ethical decision-making, specifically including differences between patient and provider attitudes towards disability. The third year of medical school provides an ideal opportunity to apply clinical experiences to ethical questions relating to treating patients faced with a life with a disability.

Conclusion:

Our curricular module provided an interactive learning session introducing ethical decision-making through an evidence-based approach to the clinical and social literature about treating patients with disabilities.

Teaching Chronic Illness Management Through a Longitudinal Standardized Patient Case for Pre-Clinical Medical Students

*Lauren E. Carpenter, Calvin L. Chou, Bernie Miller, Beth Wilson, Manju Deshpande,
Helen Loeser, Maria A. Wamsley*

Context

Almost half of all Americans live with at least one chronic illness, accounting for three-quarters of national healthcare expenditures. However, medical students show insufficient skill or interest in managing chronic illnesses and current education may worsen student attitudes towards caring for patients with chronic illness. Innovative educational initiatives are needed to teach chronic illness management skills. Recurrent visits with a standardized patient (SP) provide a unique opportunity for exposure to longitudinal care and chronic illness management in a structured setting.

Objectives

To design a longitudinal SP case for first- and second-year medical students to 1) enhance early exposure to patients with chronic illness 2) improve student skills in chronic illness care 3) positively impact student attitudes towards caring for patients with chronic illness.

Key Message

We created the case of "Jane Henderson," a SP with chronic illness and complex psychosocial issues that affect her adherence to treatment. Students conduct interviews in small groups with this SP during months 2, 4, and 9 of their first year and month 1 of their second year of medical school. Preliminary evaluation data suggest a high degree of student satisfaction with the case; most students recommended continuing this case for subsequent classes of medical students.

Conclusion

Our longitudinal standardized patient case is one way of increasing medical student exposure to chronic illness care. Most students thought this case was a valuable experience; further studies will evaluate its effect on student clinical skills, attitudes towards patients with chronic illness and future career goals.

Three Days with Diabetes

George Donald Comerci, Ruth Bear, Barbara Macmillan, Linda Reineke, Toni Wood

Context

Medical and PA students today can expect to confront the challenges of treating diabetic patients regardless of their eventual specialty choice. *Three Days with Diabetes* is a teaching activity that enables students to supplement their learning about diabetes by living as an insulin-requiring diabetic for three days

Objectives

Students were expected to:

- 1) Demonstrate the ability to manage a diet prescribed by a Certified Diabetic Educator (CDE).
- 2) Perform regular assessments of capillary blood glucose with a glucometer.
- 3) Inject “insulin” (normal saline) at regular intervals to manage blood sugar.

Key Message

Second year medical and PA students were invited to participate in a teaching activity designed to supplement their understanding of living with insulin-requiring diabetes. Seventeen students met with CDEs and were trained to eat a diet with a fixed carbohydrate content, check their CBG with a glucometer and to inject a dose of “insulin” (normal saline) calculated on the basis of their carbohydrate intake. The students spent three days managing their diet and “insulin” injections as an insulin-requiring diabetic patient. Students felt that many aspects of living with diabetes were difficult. They also felt that this experience would influence their discussion about and treatment of diabetic patients and that it enhanced their empathy towards patients with diabetes. They thought that this was a valuable learning experience (Table 1).

Conclusion

A teaching activity that enabled students to live as a diabetic patient was not only beneficial to their learning about diabetes, but also increased understanding of and empathy towards diabetic patients.

See back of this page for:

Table 1: Student Responses to Survey Questions about this educational activity

Table 1: Student Responses to Survey Questions about this educational activity

Survey Questions	Response: Likert Scale (1-5)	N	Mean
Managing my diet was:	Very Difficult = 1, Very Easy = 5	16	2.0
Adhering to my schedule of CBG monitoring and insulin injections was:	Very Difficult = 1, Very Easy = 5	16	1.9
Managing my diabetes with CBG monitoring and insulin injections was:	Very Difficult = 1, Very Easy = 5	16	2.1
Living with Diabetes had a significant impact upon my daily life	Strongly disagree = 1 Strongly agree = 5	16	4.4
This experience will influence how I treat my patients with diabetes:	Strongly disagree = 1 Strongly agree = 5	16	3.8
This experience will change how I discuss diabetes with my patients:	Strongly disagree = 1 Strongly agree = 5	16	4.3
My friends/family were supportive of my diabetes self management tasks:	Strongly disagree = 1 Strongly agree = 5	15	3.7
This experience has increased my empathy towards patients with diabetes:	Strongly disagree = 1 Strongly agree = 5	16	4.9
This experience had educational value for me as a student"	Strongly Disagree = 1 Strongly Agree = 5	15	4.9

**Evaluation of “Neighborhood Walking Tour” Curriculum to Support
Future Physicians of Underserved Populations**

Jolene Elizabeth Collins, Elisabeth Wilson

The IOM outlined the low work force of physicians in communities and recommend medical education as a route to better train future physicians to work with diverse communities. Likewise the LCME has advocated for population health education to be required for medical students in order to understand the importance of socioeconomic and culture factors in health care. In response to this the Program in Medical Education for the Urban Underserved was designed at UCSF to increase the number of medical students who pursue careers working with underserved populations by fostering their interest and providing training to work with special populations. “A Neighborhood-Based Introduction to Underserved Communities in San Francisco,” is an innovative walking tour that takes students out of the classroom into the community in order to aid the students in engaging the community as a partner, recognizing its resources, and understanding the social and cultural determinants of health, while reflecting on their own individual roles as health care providers. This semi-structured complex segmental design of focus groups and surveys compares the views and involvement between participants of this session and those in the general curriculum to determine if the session meets these objectives. Comparisons will be made between the two groups to determine the strengths of such curriculum and how to improve it to achieve its goals and to reach a greater student audience. The final results will help to produce diverse physician leaders with a strong commitment to reducing health care disparities and providing care to underserved populations.

Enhancing Medical Education Careers With a Junior Faculty Teaching Scholars Learning Community

Kenneth Wolf, Laurie Richlin, Kevin Heslin

Description:

The panel will discuss a faculty learning community that assists selected early-career faculty in developing their teaching abilities and interests by enabling them to participate in a two-semester series of special activities and to pursue individual projects related to teaching. Participants select and work with experienced faculty who agree to be mentors and with students who are involved as consultants. The objectives of the Teaching Scholars Community are to provide participants with the following:

- Information on teaching and learning
- Opportunities to observe, assess, and practice innovative teaching and uses of technology
- Development of syllabi, including articulation of clear learning objectives
- Strengthening of basic teaching skills, for example, leading class discussions, testing, and balancing both lecture and active learning
- Clearer communication with students
- Ways to build a course around assessment of learning, for example, determining that students achieve stated learning objectives
- Investigation and incorporation of ways that difference can enhance teaching and learning
- A multiplicity of ways to gather and provide information for both formative and summative evaluation of teaching
- Awareness of teaching as an intellectual pursuit and exploration of ways to engage in the scholarship of teaching

Session Outcomes:

Participants in this session will be able to describe:

1. The structure and benefits of a faculty learning community (FLC) model
2. How participation in an FLC can enable junior faculty members to be more successful in their teaching careers
3. Issues to consider in utilizing the FLC model on their own campuses.
These will be assessed with a unique post-session evaluation form.

This session will be useful to current and future medical educators in all specialties and at all levels.

Using a Faculty & Professional Learning Community on Simulation Technology

Peregrina Arciaga, Sylvia Merino, Laurie Richlin

Context:

The Charles Drew University of Medicine and Science is dedicated to providing state-of-the-art medical education using dynamic teaching tools. Simulation is uniquely useful for teaching cultural awareness and professionalism, which need to be practiced within the context of situations. These are concepts related to “art” in the practice of medicine and are not usually covered well in classroom discussion.

Using a faculty learning community model, members of the Sim FPLC receive support to design activities to improve student learning in their own courses. In addition, members of the Sim FPLC are designing the *Medical Education Module* that will be used to educate and train other CDU faculty members and medical students in the use of simulation technology to enhance learning.

Objectives:

After interacting with this poster, participants will be able to

- *describe* the processes and benefits of the faculty and professional learning community model for faculty and curriculum development
- *describe* a wide array of types and uses for simulation technology

This session will be useful to current and future medical educators in all specialties and at all levels.

Key Message:

Using a faculty and professional learning community model is an excellent method for faculty members to design educational activities to improve student learning and promote cultural awareness and professionalism.

Conclusion:

The regular meetings and support provided by a Faculty & Professional Learning Community result in the design of meaningful learning experiences that promote cultural awareness and professionalism in a way that medical educators can facilitate, assess, and document.

Teaching Ethics Taking Discussion and Dialogue Deeper: Faculty Development

Janet L. Trial, Alexander Capron, Jo Marie Reilly, Pamela Schaff

Introduction: Keck School of Medicine (KSOM) has developed an integrated pre-clinical ethics curriculum that utilizes a constructionist theoretical framework to educate medical students in the concepts of medical ethics. Faculty using this curriculum, which involves a variety of small group discussions, case examples, and written narrative reflections, have identified a need to develop teaching skills that would better enable them to facilitate discussion and give feedback.

Objectives:

1. Establish the method and content of a program to increase instructors' perceived competence and confidence in teaching medical ethics.
2. Compare changes in faculty perceptions at specific curricular intervals.
3. Identify further faculty development needs in teaching medical ethics.

Methods: KSOM Faculty (n=22) participated in a 2.5 hour faculty development workshop. First, expert faculty demonstrated small-group ethics discussion using a mock "medical student group." Key techniques for leading an interactive discussion followed. Next, expert faculty engaged the instructors in discussing examples of students' written work and dialogued about the feedback instructors could provide to stimulate students' understanding. Effectiveness of these novel faculty development activities were assessed by three assessments from the instructors in the program (pre-workshop, post-workshop and post-curriculum execution). Both competence and confidence of individual faculty's perceived abilities were assessed.

Results: Faculty competence and confidence in their ability to lead ethical discussions and give meaningful feedback on written work increased significantly and was sustained over time.

Discussion: Suggestions for revisions in workshop content and future faculty development targets were identified. Faculty also indicated that they would gain content expertise (and increased confidence/competence) if an expert faculty member could provide an in-depth review of the basic ethical decision making models.

Promoting Reflection to Enhance Medical Error Disclosure

Lynne S Robins, Carolyn D Prouty, Peggy S Odegard, Sarah E Shannon, Thomas H Gallagher

Context

Despite recognition of the importance of open communication with patients following errors, clinicians face many barriers to error disclosure. Risk managers are increasingly asked to coach clinicians in how to disclose their errors to patients. Yet teaching effective disclosure skills is difficult due to the emotional distress that clinicians often experience after errors. In addition, few risk managers have been trained to serve as disclosure coaches, and often rely on giving learners disclosure lectures that may not meet learners' needs. Therefore, as part of an education intervention, we taught twelve risk managers from three institutions a novel disclosure coaching model based on the "ask-tell-ask" reflection and teaching rubric. Risk managers were trained to assess individual clinicians' gaps in content knowledge, emotion handling and communication skills and then provide targeted disclosure coaching. This focused approach solicits clinicians' active reflection, and represents a shift from current practice of didactic, generalized preparation for disclosure.

Objectives

Our objectives were to instruct risk managers in reflective coaching skills, and assess their reactions to a novel approach to disclosure coaching.

Key Message

Despite initial discomfort with adopting the new approach, the risk managers reported finding value in listening more and talking less, using clinicians' reflections to customize their advice and offering just a few learning "pearls" at a time.

Conclusion

The outcomes of this project are potentially transformative: risk managers are taking on new identities as teacher-coaches, training clinicians to engage patients with more open, transparent communication around errors in their care.

Providing Support to Preceptors in the Unique Culture of Rural Medicine

Clair Kuykendall Birkman

Context

The culture of rural medicine presents challenges to patients and health care providers. Outreach/educational support to these practitioners needs to adapt to these circumstances to effectively serve those practicing medicine in rural areas.

Objectives

To provide library resources/support to rural preceptors in Colorado, maintaining sensitivity to the unique cultural context of rural medicine.

Key Message

A number of distinct cultures are represented in Colorado, not only ethnic cultures (e.g., the Southern Ute tribe or Hispanic communities in Southern Colorado), but also a large percentage of Colorado is rural, which is a culture in and of itself. Of Colorado's 64 counties, 24 are classified as rural, and 23 as frontier (six or fewer people per square mile). Much of Colorado is officially defined as a medically-underserved area.

Patients in these medically-underserved areas confront obstacles to accessing health care such as distance, no or inadequate insurance (e.g., family-owned farms, migrant farmer workers), or a simple lack of health care providers (many Colorado counties had no physician at all, and medical care may be provided by a Nurse Practitioner, or travelling County nurse).

In the culture of rural medicine, providers are often "everything to everyone" with few colleagues, colleagues at a great distance, a drive of many hours to conference or continuing education opportunities, and limited or no access to a medical library or medical literature databases. Additionally, many resources such as Up-to-Date are prohibitively expensive for a small or single-physician practice.

Conclusion

The Colorado Area Health Education Center (AHEC) system provides outreach and educational support to residents – both patients and providers – throughout Colorado. We will describe outreach programs of the Colorado AHEC reference librarian to support our rural preceptors, tailored to accommodate the challenges facing them, as practitioners in the unique culture of rural medicine.

Promoting Educational Scholarship in Medical Education Fellows

Sebastian Uijtdehaage, Paul Wimmers, LuAnn Wilkerson

CONTEXT

The main objective of our Medical Education Fellowship (MEF) is to prepare faculty members for educational leadership by promoting a scholarly approach to curriculum development, implementation, and evaluation. The MEF consists of two seminars, one of which focuses on issues related to educational research: formulating a research question, conducting educational literature searches, designing a valid research protocol, survey design, ethical issues, preliminary analyses, and reporting. In the following year, fellows are expected to complete an educational study under the mentorship of MEF faculty. In the past, many participants have not been able to complete a study in its entirety.

OBJECTIVES

To provide support mechanisms for MEF fellows to complete an educational research study.

KEY MESSAGE

It has been difficult for MEF fellows to complete their research once the seminars are over. Recently, we have tried pairing up each fellow with an MEF faculty member who checks in regularly to provide support. We added regularly meetings during which each fellow gives a progress report and seeks input from the group. We have also identified existing data sets for secondary analysis, removing the onus of collecting new data from the fellow. Furthermore, we have offered the option of publishing the intervention itself through MedEdPortal as an alternative form of educational scholarship.

CONCLUSION

The initial results suggest that these interventions are key in supporting busy MEF fellows in the completion of a piece of scholarship during the second year of their fellowship.

Fourth-Year Students as Instructors in a First-Year Ethics and Professionalism Course

Cynthia MA Geppert, Justin Roesch, Craig Timm, Ellen M Cosgrove

Introduction: There has been increasing recognition that for undergraduate medical ethics education to be effective it must be developmentally attuned. The involvement of senior students in teaching ethics and professionalism has been suggested as one means of improving the relevance of instruction and content.

Objectives: Appraise the value of pairing senior medical students with faculty preceptors as instructors for a first-year medical student ethics and professionalism course. Appraise student satisfaction with the course when compared with prior years without fourth-year students participation.

Methods: A fourth-year student leader assisted the course director in revising the modular based syllabus to be more student-oriented and helped train the 9 student instructors. Each student co-facilitated with the faculty preceptor six 90-minute seminars involving 10-12 first year students in case-based seminar format discussions of introductory clinical ethics topics.

First-year students completed several real-time feedback evaluations at the end of sessions and also the standard post-course evaluation used for the past 3 years.

Results: Overall course ratings improved substantially from an average of 3.9 (Likert scale 1-5) before the student facilitators to 4.3 with them. Over 92% of students agreed or strongly agreed that the participation of student-preceptors enhanced the relevance of ethical principles and cases. Qualitative comments also emphasized the benefit of student and faculty preceptors presenting their distinctive perspectives on ethical issues.

Discussion: The inclusion of fourth-year medical students as co-preceptors with faculty instructors for a first-year ethics and professionalism course improved the learning experience and satisfaction of all involved.

A Novel, Quantitative Measure for the Impact of a Summer Prematriculation Course on Medical Student Performance

Paul Alexander Kingston, Steve Schneid, April Apperson, Nora Laiken

Introduction: Many medical schools offer prematriculation courses (PMCs) to improve the performance of educationally disadvantaged students. While the medical education literature states that students gain significant benefits from PMCs, support for this claim is almost entirely subjective.

Objective: Develop and implement a quantitative measure for the impact of our summer PMC on student academic performance in the first year of medical school.

Methods: We plotted distributions of exam scores for all medical students ($n = 569$), including those who completed our PMC ($n = 51$), from three first-year classes. We then established a baseline for PMC student performance based on their position within the distribution on exams not targeted by summer instruction ("control"). We repeated this step for exams targeted by summer instruction ("targeted"). The difference between these two values yields " Δ Performance", an internally-controlled measure for the academic benefit gained by PMC participants.

Results: On average, PMC students scored 0.30 SD below the mean on "control" exams, and 0.02 SD above the mean on "targeted" exams. These two values differ significantly ($P < 0.0001$, paired t-test), and yield a Δ Performance value of +0.32 SD that serves as quantitative evidence of the positive impact of our PMC.

Discussion: Our data support the conclusion that a PMC provides tangible academic benefit to educationally disadvantaged students. Further analysis has revealed valuable insight into how we might optimize our PMC to benefit students. In addition, this analysis demonstrates a method for evaluating the impact of a PMC that we believe can be readily applied at other institutions.

Student and Faculty Perceptions of the Medical Education Experience in Taiwan

David Peng, Arianne Teherani, Chi-Wan Lai, H. Carrie Chen

Introduction

The Taiwan Medical Accreditation Council and Ministry of Education are interested in initiating major national reforms to improve medical education in Taiwan. It is unknown whether other stakeholders share their perceived need for reform. Two key stakeholders are the Taiwanese medical students and the faculty who teach them.

Objectives

The purpose of this study was to assess Taiwanese medical student and faculty perceptions of medical education in Taiwan.

Methods

In Fall 2008, we conducted focus groups and semi-structured interviews with medical student and faculty groups from four different Taiwanese medical schools. Participants were asked open-ended questions about their perceptions of the strengths and weaknesses of the medical education experience in Taiwan and encouraged to share their ideas for improvement. Multiple sessions were held until saturation was achieved. Transcriptions from the focus groups and interviews are currently being reviewed by the study investigators to identify major themes, and will be coded using an internally developed scoring rubric. Results from the student groups will be compared to that of the faculty groups.

Results

Twenty-three students and thirteen faculty representing four of the eleven medical schools in Taiwan participated in the study. Major themes will be summarized, similarities and differences between the student and faculty groups highlighted, and representative comments compiled and presented.

Discussion

The findings from this study will inform next steps in the needs assessments being conducted for eventual medical education reform efforts in Taiwan. Through this process, we hope to also discover insights for improvement of medical education here in the United States.

Student-Run Health Clinics: Steps to Success

Linda Hodes Villamar

Context: Overview of the history, organization, challenges, and ongoing plans for The University of New Mexico School of Medicine's student-run clinics, including Health Care for the Homeless, Immigration Clinic, and the Sex Education Program.

Objective: To provide students in health profession programs a step-by-step guide to identifying tools, resources and management pearls to organize a student-run health clinic at their respective institutions.

Key Message: Key steps include 1) Identifying a target community in need; 2) Identifying faculty partners and institutional support; 3) Organizing management structure and human resources; and 4) Ensuring continuity and growth.

Conclusion: While students face many challenges in the process of organizing a student-run clinic, there are many little-known resources and tools within the student community which may help make these clinics successful and fulfill a much needed public service in our communities.

2009 AAMC Western Regional Conference
Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine

Keynote Lecture
Location: Sweeney AB
Santa Fe Community Convention Center

Sunday, April 19, 2009
11:15 AM – 12:15 PM

Abraham Verghese, MD, MACP
Professor for the Theory and Practice of Medicine
Stanford University Medicine and Senior Associate Chair
of the Department of Internal Medicine

Abraham Verghese

Abraham Verghese, MD, MACP, is Professor for the Theory and Practice of Medicine at the Stanford University School of Medicine and Senior Associate Chair of the Department of Internal Medicine.

Early Years

Born of India parents who were teachers in Ethiopia, he grew up near Addis Ababa and began his medical training there. When Emperor Haile Selassie was deposed, he completed his training at Madras Medical College and went to the United States for his residency as one of many foreign medical graduates. Like many others, he found only the less popular hospitals and communities open to him, an experience he described in one of his early *New Yorker* articles, *The Cowpath to America*.

From Johnson City, Tennessee, where he was a resident from 1980 to 1983, he did his fellowship at Boston University School of Medicine, working at Boston City Hospital for two years. It was here that he first saw the early signs of the HIV epidemic and later, when he returned to Johnson City as an assistant professor of medicine, he saw the second epidemic, rural AIDS, and his life took the turn for which he is most well known – his caring for numerous AIDS patients in an era when little could be done and helping them through their early and painful deaths was often the most a physician could do.

First Books

His work with terminal patients and the insights he gained from the deep relationships he formed and the suffering he saw were intensely transformative; they became the basis for his first book, *My Own Country : A Doctor's Story*, written later during his years in El Paso, Texas. Such was his interest in writing that he decided to take some time away from medicine to study at the Iowa Writers Workshop at the University of Iowa, where he earned a Master of Fine Arts degree in 1991. Since then, his writing has appeared in *The New Yorker*, *Texas Monthly*, *Atlantic*, *The New York Times*, *The New York Times Magazine*, *Granta*, *Forbes.com*, and *The Wall Street Journal*, among others.

Following Iowa, he became professor of medicine and chief of the Division of Infectious Diseases at Texas Tech Health Sciences Center in El Paso, Texas, where he lived for the next 11 years. In addition to writing his first book, which was one of five chosen as Best Book of the Year by Time magazine and later made into a Mira Nair movie, he also wrote a second best-selling book, *The Tennis Partner : A Story of Friendship and Loss*, about his friend and tennis partner's struggle with addiction. This was a *New York Times*' Notable Book.

Emphasis on the Physician-Patient Relationship

As founding director of the Center for Medical Humanities & Ethics at the University of Texas Health Science Center at San Antonio, the empathy for patient suffering that had been honed by his previous experiences enabled him to focus on medical humanities as a way to preserve the innate empathy and sensitivity that brings students to medical school but which the rigors of their training frequently suppress. In San Antonio, also, he became more focused on bedside medicine, inviting medical students to accompany him on bedside rounds. Rounds gave him a way to share the value he places on the physical examination in diagnosing patients and demonstrating attentiveness to patients and their families, which he sees as key to the healing process.



Dr. Verghese's deep interest in bedside medicine and his reputation as a clinician, teacher and writer led to his being recruited to Stanford University in 2007 as a tenured professor. Today, in his writing and his work, he continues to emphasize the importance of bedside medicine and physical examination in a time in medicine when the use of advanced technology frequently results in the patient in the bed having less attention than the patient

data in the computer. His recent article in the New England Journal of Medicine, Culture Shock – Patient as Icon, Icon as Patient, clearly lays out his viewpoint. In his book, Cutting for Stone , he also addresses the issue – “I wanted the reader to see how entering medicine was a passionate quest, a romantic pursuit, a spiritual calling, a privileged yet hazardous undertaking. It's a view of medicine I don't think too many young people see in the West because, frankly, in the sterile hallways of modern medical-industrial complexes, where physicians and nurses are hunkered down behind computer monitors, and patients are whisked off here and there for this and that test, that side of medicine gets lost.”

2009 WGEA WGSA WMAS WAAHP CONFERENCE

MERC * CRIME * LIME * CurrMIT

AAMC Western Regional Conference Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine
April 18-21, 2009

PROGRAM

Monday, April 20, 2009

ROOM

Santa Fe Convention Center

7:00 - 8:00 am	Continental Breakfast	Sweeney AB (CC)
7:00 - 8:00 am	WMAS Business Meeting	DeVargas (CC)
7:00 - 8:00 am	WGEA Undergraduate Medical Education	Coronado (CC)
7:30 - 9:00 am	WAAHP Business Meeting	Lamy (CC)
8:00 - 9:00 am	WGEA Plenary Session Research Collaborations: What We Can Learn From Theory and Practice <i>Patricia S. O'Sullivan, EdD</i> Professor, Department of Medicine Associate Director for Educational Research Office of Medical Education University of California at San Francisco	Sweeney AB (CC)
9:00 - 10:15 am	WAAHP Professions Update Session #2 Moderator: <i>Greg Vaske</i> Allopathic Medicine: <i>Henry Sondheimer</i> Osteopathic Medicine: <i>Gina M. Moses</i> Naturopathic Medicine: <i>Leila Turner</i> Podiatric Medicine: <i>David Tran</i> Optometry: <i>Jane Ann Munroe</i>	Sweeney AB (CC)
9:15 - 10:15 am	Breakout Sessions	
(WMAS)	1. The Pathways: Cultural Awareness Inclusion in Medical School Curriculum <i>Pam Racansky, Vicki Pinkham</i>	Kearney (CC)
(WMAS)	2. Healthcare Disparities: Patients & Providers - An E-Learning Course <i>Eileen VanSchaik, Janice Sabin</i>	Milagro (CC)
(WGSA)	3. Understanding the Culture of Facebook: A Cross- Generational Assessment of Online Professionalism <i>Meredith Szumski, Elizabeth Yzquierdo, Neil Parker</i>	Coronado (CC)

Monday, April 20, 2009

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| (WGSA) | 4. Diversity Recruitment Efforts in the Expanding Western Region
<i>Antony Hazel</i> | DeVargas (CC) |
| (WGSA) | 5. Progress on the NRMP Re-Match Process
<i>Henry Sondheimer, Mona Signer</i> | Peralta (CC) |
| (WGEA) | 6. Strategies for Integrating the Visual Arts into The Curriculum
<i>Marin Gillis, Pamela Brett-MacLean, Gerri Frager</i> | Lamy (CC) |
| (WGEA) | 7. Quality Assurance for Standardized Patients: The Why's, the How's, and What to do with the Results
<i>Denise Marie Souder, Win May, Robert MacCaulay, Anita Richards, Diane Ferguson, Debra Dansforth</i> | Nambe (CC) |
| (WGSA) | 8. "How Student Services Can Promote Mental Health and Wellness in Medical Students
<i>Neil Parker, Maureen Garrity, Christine Moutier, Henry Lamberton</i> | O'Keefe (CC) |
| (WGEA) | 9. MedEdPORTAL: Advancing Learning and Scholarship for Teaching
<i>Eric Q. Wilkerson</i> | Pojoaque (CC) |
| 9:30 – 11:30 | Breakout Sessions (2 Hours) | |
| (WGEA) | 10. Errors in Clinical Diagnosis: Psychological Principles and Preventative Practices
<i>Paul F. Wimmers, Guido F. Schauer</i> | Ohkay Owingeh (CC) |
| (WMAS) | 11. Teachable Moments When Medicine and Culture Collide: What Effective Teaching Tools Will You Need?
<i>David Acosta, Victoria Gardner, Mark Wicks</i> | La Terraza (LF) |
| (WGEA) | 12. Integrating Spirituality into Medical Student and Resident Curriculum: A Workshop for Faculty
<i>Cynthia M.A. Geppert</i> | Exchange (LF) |
| (WGEA) | 13. Designing Evidence Based Courses
<i>Laurie Richlin</i> | Stiha (LF) |
| (WGEA) | 14. Teaching and Assessing Reflective Ability in Medical Education
<i>Louise Aronson, Julie Reichert</i> | Boardroom (LF) |
| (WGEA) | 15. Finding the Leader in You: Teaching Leadership Skills through Self-Reflection and Cultural Immersion
<i>Meta Tjan Lee, Jill Omori</i> | Coronado (LF) |

Monday, April 20, 2009

10:15 - 10:30 am Break

10:30 - 11:30 am Breakout Sessions

(WAAHP) **16. Interprofessional Education Workshop** Sweeney CD (CC)
Tina Meyer, John Tegzes

(WGEA) **17. Achieving Student Success in post-Baccalaureate Premedical Program: What Works and Why?** Kearney (CC)
Steven Michael Mitchell, Pamela DeVoe, Cheri Koinis, Marcy Osgood, Julie Reichert

(WMAS) **18. Holistic Review Project: The Arizona Experience** Coronado (CC)
Linda Don

(WGSA) **19. Bridging the Millennial and Administrative Divide** DeVargas (CC)
Meredith Szumski, Neil Parker, Peggy Dupey, David Glodowski

(WGEA) **20. Quantitative Evaluation of Clinical Cultural Competence: The Case of Josie Parada** Peralta (CC)
Denise Souder, Janet L. Trial

(WGEA) **21. Problem-based Learning: Variations in Missions, Implementations, and Outcomes Among Four Medical Schools** Lamy (CC)
LuAnn Wilkerson, Sally Krasne, Carol Hodgson, Amin Azzam, Martha McGrew

(WGEA) **22. Remediation Practices in California Medical Schools** Nambe (CC)
Win May, Michael Prislin, Karen Hauer, Shawn Harrity, Tamara Shankel, Carl Stevens, Neil Gesundheit, Malathi Srinivasan

(WGEA) **23. Using Diverse Teaching Strategies on a Clinical Rotation** Pojoaque (CC)
Paritosh Kaul

(WGEA) **24. Innovation in Professional Practice Education: Academic and Community Clinic Collaboration to Provide Best Practice Care for Underserved Patients with Chronic, Complex Diseases** Milagro (CC)
Sanjeev Arora, Saverio Sava, Summers Kalishman

(WGEA) **25. Preclerkship Clinical Skills Education for Medical Students: What, Why, Who, How and When?** O'Keefe (CC)
Donna Elliott, H. Carrie Chen, Tamara Shankel

11:30 - 1:00 pm Lunch on Own

Monday, April 20, 2009

11:30 - 1:00 pm	WGEA Steering Meeting	Boardroom (LF)
1:00 - 2:15 pm	WGSA Plenary Session Update from N Street and a Brief Guided Tour of LCME <i>Henry Sondheimer, MD and Robert Sabalis, MD</i>	Sweeney AB (CC)
2:15 - 2:30 pm	Break	
2:30 - 4:00 pm	Hot Topics: An Interactive Session with Audience Response 1. Should Facebook and MySpace be Used Formally in the Admissions Process? A Pro/Con Discussion 2. Workforce Issues 3. Texting and Emailing for Official Communications	Sweeney AB (CC)
4:00 - 5:30 pm	WAAHP AMCAS Transmission of Letters Electronically Through AMCAS and Virtual Evals <i>Jayme Bograd, Kay Singer</i>	Milagro (CC)
4:00 - 5:30 pm	Business Meetings WMAS OSR WGEA WGSA	Peralta (CC) Kearney (CC) Coronado (CC) O'Keefe (CC)
6:30 - 9:00 pm	Dinner and Private Tour at the Museum of International Folk Art <i>(Transportation will be provided from the La Fonda Hotel)</i>	

Monday, April 20, 9:15 AM
Location: Kearney
Santa Fe Community Convention Center

WMAS: Panel Discussion – Breakout #1

The Pathways: Cultural Awareness Inclusion in Medical School Curriculum

Pam Racansky and Vicki Pinkham

University of Washington School of Medicine

The inclusion of cultural awareness or cultural competency into current biomedical curriculum has been a challenge throughout the United States. The University of Washington School of Medicine adopted four "pathways" that allow medical students with an interest in a particular patient population to gear their learning to that area of interest. The Indian Health Pathway, (initiated 1992), the Underserved Pathway (initiated 2005), the Global Health Pathway (initiated 2006) and the Hispanic Health Pathway (initiated 2008) are the four pathways currently being offered. Each pathway has a specific population focus and uses different learning techniques and requirements: non-clinical classes, online modules centered on health and health care disparities, clinical clerkships at sites with a high prospective population, volunteering in the community, and research. These requirements allow medical students the freedom of choosing an area of interest to focus their studies within the medical school curriculum, while increasing their awareness of other cultures. Medical students can elect to participate in one or more pathways in the first or second year of medical school. All pathway requirements must be completed in their final year of medical school at which time they are awarded a "Certificate of Completion" with they receive their medical degree at graduation. The goal of the pathways is to provide knowledge, tools, and raise self-awareness of the student, to ultimately increase the chance these pathway students will eventually serve in the prospective communities.

Monday, April 20, 9:15 AM
Location: Milagro
Santa Fe Community Convention Center

WMAS: Panel Discussion – Breakout #2

Healthcare Disparities: Patients & Providers, an E-Learning Course

Eileen VanSchaik and Janice Sabin

University of Washington

Objective: We will present an interactive healthcare disparities e-learning course designed to: 1) improve knowledge of healthcare disparities, 2) increase self awareness of possible unconscious bias, and 3) enhances skills for patient-provider communication.

Methods: Talaria Inc., in collaboration with the University of Washington, is developing *Healthcare Disparities: Patients & Providers*, a three module e-learning course for physicians and physicians in training. Workshop participants will view each module and be invited to engage in the interactive exercises and provide feedback on the course through guided discussion.

·*Module 1: Healthcare Disparities*, presents the evidence on racial/ethnic disparities in healthcare, explores the changing meanings of race, and examines the causes of disparities. The module features interactive graphs, surveys, quizzes and self assessments and presents data from peer-reviewed articles and the IOM report, *Unequal Treatment*.

·*Module 2: Self Awareness*, provides two Implicit Associations Tests which allow participants to gauge their own attitudes about obesity and race.

·*Module 3: Enhancing Skills for Patient-Provider Communication*, presents two interactive case studies highlighting dimensions of the patient-provider relationship that have been linked to healthcare disparities. Interactive role plays with simulated patients provide opportunities to practice skills for patient-centered care that foster partnering, participatory decision making, trust, and respect with racial/ethnic minorities.

Intended outcomes: The goals of the presentation are to, 1) improve knowledge of racial/ethnic disparities, 2) increase self awareness of unconscious attitudes, 3) enhance skills for patient-provider communication, and 4) provide feedback for final development of the course prior to a formal evaluation.

50-word Summary

We will present an interactive healthcare disparities e-learning course designed for physicians, physicians in training and health care providers. The session goals are to, 1) improve knowledge of racial/ethnic disparities, 2) increase self awareness of racial attitudes, and 3) enhance skills for patient-provider communication. Researchers will elicit participant feedback.

Monday, April 20, 9:15 AM
Location: Coronado
Santa Fe Community Convention Center

WGSA: 60-minute Workshop – Breakout #3

**Understanding the Culture of Facebook: A Cross-Generational Assessment of
Online Professionalism**

Meredith Szumski, Elizabeth Yzquierdo and Neil H. Parker
David Geffen School of Medicine at UCLA

Introduction

The culture of online social networking proves challenging for medical schools when addressing issues of professionalism. Do students' perceptions of professionalism mirror those of medical administrators and are there areas of agreement that transcend generations?

Objectives

1. Identify professionalism policies already in place at various higher educational institutions regarding social networking
2. Gain an understanding of generational perceptions and how they influence the development of professionalism policies
3. Develop strategies to address online lapses in professionalism

Methods

Summarize survey conducted at UCLA regarding attitudinal views of social networks. Specific focus will be on what the Silent, Boomer, X, Y, and, the Millennial Generation considers "professional lapses."

Discussion

Workshop participants will have an opportunity to reflect on their own institutions and share strategies for addressing this new culture of online social networking

Monday, April 20, 9:15 AM
Location: DeVargas
Santa Fe Community Convention Center

WGSA: Panel Discussion – Breakout #4

Diversity Recruitment Efforts in the Expanding Western Region

Antony Hazel

University of California, Irvine

The Western Region is comprised of 16 medical schools each serving a distinct population. It is important to discuss the different challenges these schools face in creating a diverse class composed of students from varied backgrounds who will also serve the specific target population. The proposed panel discussion will be led by 3-4 students from different medical schools representing schools serving both urban and rural populations. Students will have worked with their diversity recruitment office and student affairs deans to discuss issues and challenges facing their particular school and will present these topics during the presentation.

Monday, April 20, 9:15 AM
Location: Peralta
Santa Fe Community Convention Center

WGSA – Breakout #5

Progress on the NRMP Re-Match Process
Henry Sondheimer, Mona Signer

Monday, April 20, 9:15 AM
Location: Lamy
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #6

Strategies for Integrating the Visual Arts into the Curriculum

Marin Gillis, University of Nevada School of Medicine

Pamela Brett-MacLean, The University of Alberta

Gerri Frager, Dalhousie University

Summary: The panel is composed of medical educators who are members of the newly formed special interest group on Medical Education of the Society for Arts in Healthcare. Current programming integrating the visual arts into medical education will be reviewed, including a survey of peer-reviewed literature and extant programming in US medical schools. Panelists will examine opportunities and barriers to the successful implementation of these programs, focusing on the development of programming at audience members' home institutions.

Objectives

1. Review of medical school programs that integrate the visual arts in the curriculum
2. Compare and assess educational outcomes, clinical and humanistic, that such integration promises
3. Explore opportunities and barriers to integrating such interventions in medical schools today
4. Provide audience with take-home arts in medical education programming

Monday, April 20, 2009
Location: Nambe
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #7

Quality Assurance for Standardized Patients:

The Why's, the How's, and What to Do with the Results

Denise Marie Souder & Win May, Keck School of Medicine, University of Southern California

Robert MacCaulay and Anita Richards, University of California, San Diego

Diane Ferguson, UT School of Medicine at San Antonio

Debra Dansforth, College of Medicine, Florida State University

Standardized patients (SPs) have been incorporated into medical education curricula for years to realistically simulate patient scenarios (Tamblyn, Klass, Schnabl, et al., 1990), and evaluate clinical and communication skills of medical students (Vu et al., 1992; De Champlain, Margolis, King, et al., 1997; Williams, 2004).

Heine, Garman, Wallace, et al. (2003) found that frequency and nature of SP errors during clinical examinations whether, through omission or commission, affect case scores. While Colliver et al. (1990, 1994) found that variability resulting from individual actors was relatively small, Lurie et al. (2008) found SPs' ratings in communication skills differ. Such SP differences and errors decrease the reliability of measurement and impact students' clinical reasoning. Implications of SP error are two-fold: (1) the detriment of leading students to inaccurate clinical reasoning due to inaccurate performance; and (2) inflation or deflation of individual student scores due to SP omission or commission errors.

Objectives

Participants will be able to:

1. Identify various methods for assessing quality assurance for cases utilizing one or multiple SPs.
2. Identify challenges within their respective institutions regarding SP quality assurance.
3. Integrate and utilize suggestions from the panel and the audience to improve quality assurance in their respective programs.

Discussion questions

1. What methods are used by panel and audience participants to assess quality assurance in SP performance and checklist evaluation?
2. What are the barriers to QA?
3. How do the panel institutions utilize their QA results?
4. How can audience participants integrate QA into their SP programs?

Format

20 minutes: Presentation by panel

30 minutes: Moderated group discussion of question

10 minutes: Q & A, Wrap-up

50 Word Summary

Standardized patient (SP) errors contribute to decreased reliability of measurement and can influence the clinical reasoning of medical students. For this reason, ongoing quality assurance of SP

portrayal and checklist accuracy is a critical component of SP programs. This panel explores challenges to QA and methods to effectively address issues that may arise.

Monday, April 20, 9:15 AM

Location: O'Keefe

Santa Fe Community Convention Center

WGSA – Breakout #8

How Students Can Promote

Mental Health and Wellness In Medical Students

Neil H. Parker, Maureen Garrity, Christine Moutier, Henry Lamberton

Monday, April 20, 9:15 AM
Location: Pojoaque
Santa Fe Community Convention Center

WGEA: 60-minute Workshop - Breakout #9

MedEdPORTAL: Advancing Learning and Scholarship for Teaching

Eric Q. Wilkerson

AAMC

Faculty invests significant time and effort into creating teaching materials and assessment tools. Peer-review and sharing of such tools encourages creation of high quality educational scholarship and promotes adoption of innovative materials in education. The Association of American Medical Colleges (AAMC) developed MedEdPORTAL (www.aamc.org/mededportal) to serve as a prestigious publishing venue and dissemination portal through which medical educators can share their educational works. MedEdPORTAL is an international free service that was designed to promote collaboration and educational scholarship across institutions by facilitating the exchange of high quality peer reviewed educational materials and solutions. MedEdPORTAL's collection of over 1,000 successfully peer-reviewed published teaching and assessment resources include standardized patient cases, assessment instruments, tutorials, virtual patient cases, and faculty development materials. MedEdPORTAL is being utilized in over 1,700 medical schools, teaching hospitals, and other institutions in over 57 different countries.

Summary: The presentation will begin with an overview of the MedEdPORTAL system and provide examples of the types of materials already published. Participants will learn about the submission and peer review process as well as the criteria used to evaluate the scholarship of published resources. The presentation will also address issues associated with intellectual property and explain how MedEdPORTAL staff helps potential authors address those issues.

Monday, April 20, 9:30 AM
Location: Ohkay Owingeh
Santa Fe Community Convention Center

WGEA: 120-minute Workshop – Breakout #10

Errors in Clinical Diagnosis – Psychological Principles & Preventive Practices

Paul F. Wimmers and Guido F. Schauer

UCLA School of Medicine

In this workshop, we examine the mechanisms of problem solving and decision making abilities and how errors and biases occur. After an introduction to the foundations of decision making we look at how reasoning changes with increasing expertise, as well as how strategies and supports can help or hurt.

CONTEXT

Did you know that diagnostic errors represent the second largest cause of harmful patient outcomes? A part of all diagnostic errors occur through cognitive errors, especially those associated with failures in perception, failed heuristics, and biases. How do mental processes factor into such mistakes, and how might expertise, special training, or expert systems factor into their prevention?

METHODS and INTENDED OUTCOMES

In this workshop, we examine cognitive processes underlying medical decision making. After an introduction to the foundations of decision making, including prior learning, knowledge representation, and basic thinking processes, we delve into the mechanisms of problem solving and decision making abilities and how errors and biases occur.

We look at how reasoning changes with increasing expertise, as well as how strategies and supports can help or hurt. Cognitive psychological explanations will be related to day-to-day experiences in medicine throughout the workshop. In this workshop, participants develop a deeper understanding of clinical reasoning and not only understand the basic principles but also the heuristics and biases involved. They will also learn to assess clinical reasoning in themselves and others, in the interests of considering how medical decision making can be improved.

OBJECTIVES

After finishing this workshop, participants:

Have the ability to identify cognitive errors in clinical diagnosis

Know the impact of failed heuristics and biases on clinical reasoning

Have the ability to identify the most important reasoning changes with increasing levels of expertise

Have knowledge about how medical decision making can be improved to reduce cognitive errors

Monday, April 20, 9:30 AM

Location: La Terraza

La Fonda Hotel

WMAS: 120-minute Workshop – Breakout #11

Teachable Moments When Medicine and Culture Collide:

What Effective Teaching Tools Will You Need?

David Acosta, Victoria Gardner and Mark Wicks

U of Washington School of Medicine

One challenge in medical education is finding simple tools that facilitate student and resident cultural awareness while helping to advance learning through skill acquisition. This workshop will demonstrate assessment tools that can serve as a catalyst for medical students and residents to examine their internal record (including an examination of their assumptions and stereotypes) and how it may affect their approach to patient encounters and decision-making. Each participant will receive a DVD of the tools, steps for including the tools in instruction, and supporting literature. Target audience is WGEA, also helpful for WGSa and WMAS.

Objectives:

1. To demonstrate and explain the Cross-Cultural Adaptability Inventory
Method: Large group activity; participants will take the CCAI & self-score; facilitated discussion on how to interpret results and how this can be used in teaching
Outcome: Participants will leave with personal cultural awareness.
2. To demonstrate and explain Cultural Mapping
Method: Facilitator will explain activity and model; participants will complete their own cultural map and share in small group of 3; and large group reflection
Outcome: Participants will understand the role that active reflection and personal experiences have in understanding personal biases.
3. To educate participants about the concept of Cultural Bumps
Method: Facilitator will explain cultural bumps and outline activity; participants will review cases and questions in small groups; facilitated large group discussion, including tools for successfully defusing cultural bumps.
Outcome: Participants will understand cultural bumps, the personal triggers associated with them, and the barriers and tools for defusing them.

50 Word Summary:

This workshop will demonstrate assessment tools that can serve as a catalyst for medical students and residents to examine their internal record (including an examination of their assumptions and stereotypes) and how it may affect their approach to patient encounters and decision-making.

Monday, April 20, 9:30 AM

Location: Exchange

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #12

Integrating Spirituality into Medical Student and Resident Curriculum:

A Workshop for Faculty

Cynthia M.A. Geppert

University of New Mexico School of Medicine

Introduction: Clinician-educators are increasingly recognizing the importance of spirituality in medicine yet many do not feel competent or comfortable in incorporating spiritual issues into the curriculum for medical students and residents or teaching trainees to integrate spirituality into clinical care.

Objectives: (1) To assist participants in identifying possibilities as well as barriers for incorporating spirituality into current medical student and resident curriculum; (2) to train participants to use the FICA (Faith, Importance and Influence, Community, and Address) spirituality assessment and to facilitate teaching trainees to take a spiritual history; (3) to provide participants with resources and ongoing mentoring for development of spirituality curricula at their institutions.

Methods: This skill-based interactive workshop will devote 45 minutes to a background presentation on spirituality in medicine and then spend 30 minutes with participants taking each other's spiritual histories using the FICA. A 45-minute discussion with question and answer on how to identify potential curricular areas to incorporate spirituality instruction and how to anticipate and manage possible institutional, ethical and clinical obstacles to curricular integration of spirituality into training will conclude the workshop.

Intended Outcomes: (1) Participants will be able to use the FICA to obtain key elements of a spiritual history. (2) Participants will receive individualized assistance to develop a plan integrating spirituality into existing medical student or resident curriculum. (3) Participants will receive an extensive list of written and print resources and ongoing consultation to assist in incorporating spirituality into their teaching.

A 50-Word Summary: Many physicians do not feel comfortable or competent to teach trainees to address spiritual issues in clinical care. This workshop will provide an introduction to spirituality and medicine, hands-on practice in taking a spiritual history and individualized assistance with incorporating spirituality into extant medical student and resident curriculum.

Monday, April 20, 9:30 AM

Location: Stiha

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #13

Designing Evidence-Based Courses

Laurie Richlin

Charles Drew University of Medicine and Science

In this session participants will learn how to use evidence-based learning and teaching to help their students learn better, save time on all aspects of teaching including grading, get better teaching evaluations, and have more fun in the process. It is an intensive faculty workshop on principles and practices for designing and conducting evidence-based courses. Topics and activities include the design of learning objectives, assignments, rubrics, tests, and grading schemes; student learning and diversity; designing a variety of learning experiences; and continuing instructional improvement strategies through scholarly teaching and the Scholarship of Teaching and Learning.

Upon completion of this workshop, participants will be able to

- *describe* a wide array of concepts and theories providing evidence for successful learning and teaching
- *reflect* on their own teaching goals in their discipline and for their students,
- *use* the theories and concepts of evidence-based course design to design/redesign a course with clear learning objectives; useful learning experiences; and effective assessment of students learning
- *select* scaffolding techniques for students to develop deeper learning and cultural awareness
- *document* student learning
- *reflect on and explain* course design choices

This session will be useful to current and future medical educators in all specialties and at all levels.

Monday, April 20, 9:30 AM

Location: Boardroom

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #14

Teaching and Assessing Reflective Ability in Medical Education

Louise Aronson, University of California, San Francisco

Julie Reichert, University of New Mexico

Reflection is rapidly being adopted by medical educators. Many educators use the term reflection without understanding the educational intent of reflective ability, how to elicit effective reflections from learners, or how to evaluate the written reflections they assign. With the move toward Portfolios, educators will need to understand how to apply and assess reflective exercises with learners in both UME and GME. The goal of this workshop is to provide participants with the knowledge and skills to develop and evaluate reflective ability in their learners.

Methods. During this workshop, participants will:

- Discuss the theory and literature on reflection in education and medical education and become familiar with the tool (UCSF LEAP) for teaching and learning reflective ability.
- Evaluate reflective ability in written reflections by UME and GME learners.
- Practice developing an effective exercise in critical reflection for use in one of their courses or clerkships.

Objectives and Outcomes. At the end of the session, participants will be able to:

- Define reflection as used by educators
- Describe five applications of reflection in medical education
- Use the LEAP tool to elicit and assess reflective ability in written exercises
- Design an effective reflective exercise for use in their teaching

Many educators use the term reflection without understanding its educational intent. In this workshop, participants will discuss the literature on reflection, learn how to elicit and evaluate effective reflections from learners, and practice developing an effective exercise in critical reflection for use in a course or clerkship.

Monday, April 20, 9:30 AM

Location: Coronado

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #15

**Finding the Leader in You: Teaching Leadership Skills through
Self-Reflection and Cultural Immersion**

Meta Tjan Lee and Jill Omori

University of Hawaii

Introduction: Leadership is an integral part of the medical profession. As health care experts, physicians are expected to provide leadership to their patients and communities. The goal of this session is to share various educational experiences that use self-reflection and or cultural immersion to teach leadership skills to medical students, residents, and junior faculty.

Objectives:

Define leadership and its importance in medical education

1. Discuss the effectiveness of leadership training as reported in the medical literature
2. Describe core leadership principles and how they might apply to learners at different levels of training
3. Identify different teaching models that can be used to develop leadership skills
4. Discuss the importance of self-reflection in leadership training
5. Discuss how cultural awareness can influence leadership development

Method: Workshop facilitators will describe the importance of leadership training in medical education, review core leadership principles, and provide examples of educational activities that have been used to teach leadership to medical students, residents, and junior faculty. Participants will spend reflective time in small groups defining leadership, identifying leadership opportunities at their institution, and brainstorming ways to apply leadership training in their home institutions and medical communities.

Intended outcomes: This session is intended for anyone interested in providing leadership training to learners at any level of medical education. Participants who attend this session will be able to appreciate the importance of leadership training in medical education, identify key books that can be used as teaching material, and identify different teaching models that can be used in leadership training.

Monday, April 20, 9:15 AM
Location: Peralta
Santa Fe Community Convention Center

WAAHP – Breakout #16

Interprofessional Education Workshop
Tina Meyer, John Tegzes

Monday, April 20, 10:30 AM
Location: Kearney
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #17

**Achieving Student Success in Post-Baccalaureate Premedical Programs:
What Works and Why?**

Steven Mitchell, DeVoe Pamela, Cheri Koinis, Marcy Osgood and Julie Reichert
University of New Mexico School of Medicine

Introduction and Background

Medical schools across the nation are committed to recruiting and training future doctors from a wide variety of environments and educational backgrounds. One way that schools have addressed this is with premedical enrichment or training programs to enhance student readiness for medical school. The focus of this panel will be to explore the commonalities regarding the best-practices and essential components of a successful post-baccalaureate program. The panel will be moderated by the University of New Mexico with invitations extended to Hawaii, UCLA, and UC Davis thus far. Further invitations to follow.

- Panelists will explore the commonalities that make post-baccalaureate programs successful. Discussion topics will include (but are not limited to):
- Student team-building
- Faculty collaboration
- Critical-thinking skills
- Metacognitive skills
- Life-long learning
- Essential basic-sciences
- Class size
- Student backgrounds and experiences

Each panelist will provide information on the use of these educational components at their institution, how effective they are in a successful post-baccalaureate experience, and why they were chosen as part of the curriculum. Discussions will review both the literature and the individual experiences of the various schools. The panel will be moderated by a faculty member from the University of New Mexico School of Medicine.

Objectives

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

- Define what elements of post-baccalaureate programs have proven successful at universities within the Western region.
- Recognize potential obstacles to implementation of successful academic enrichment programs.
- Identify strategies for implementation of effective academic enrichment programs.

Monday, April 20, 10:30 AM
Location: Coronado
Santa Fe Community Convention Center

WMAS: Panel Discussion – Breakout #18

Holistic Review Project: The Arizona Experience

Linda Don

U. Arizona College of Medicine

In fall 2008, the AAMC launched the pilot stage of the Holistic Review Project: Aligning Admissions to Mission. The purpose of this effort is to “develop tools and resources that medical schools can adopt or adapt to create and sustain medical student diversity. The project focuses on the application and admissions process in the context of medical school mission and goals and other institutional efforts that promote diversity (e.g., outreach, recruitment, financial aid, and retention).” The first resource and set of tools were unveiled with the March 2008 publication of "Roadmap to Diversity: Key Legal and Educational Foundations for Medical Schools." (available at www.aamc.org) Two medical schools, Drexel University and the University of Arizona, were identified as pilot institutions to test the ideas and proposed instruments such as the institutional diversity self-assessment and action plan template. The schools are drawing upon the conceptual work of a national constituent advisory committee and expertise and technical assistance from AAMC's Diversity Policy and Programs. This session includes a panel of AAMC professionals and members of the University of Arizona College of Medicine pilot project team who will discuss the latest developments and potential impact of this far-reaching project and the experience of one of the pilots. Session attendees will have the opportunity to learn about the key foundations for creating mission-driven, educationally sound, and legally defensible diversity policies and programs, as well as provide input and ideas for future activities of this AAMC project.

Moderator/Discussant: Linda Don, Assistant Dean, Outreach and Multicultural Affairs, University of Arizona College of Medicine-Tucson

Discussants: Ruth Beer Bletzinger, Director, Special Projects, Diversity Policy and Programs-AAMC; Lily May Johnson, Manager, Diversity Policy and Programs-AAMC; Henry Sondheimer, MD, Senior Director, Student Affairs and Student Programs-AAMC; Patricia Rodriguez, Associate Director, Outreach and Multicultural Affairs, University of Arizona College of Medicine-Phoenix

Monday, April 20, 10:30 AM
Location: DeVargas
Santa Fe Community Convention Center

WGSA: Panel Discussion- Breakout #19

Bridging the Millennial and Administrative Divide

Meredith Szumski, David Geffen School of Medicine at UCLA

Neil H Parker, David Geffen School of Medicine at UCLA

Peggy Dupey, University of Nevada School of Medicine

David Glodowski, University of Nevada School of Medicine

Context

Changes in policies act as a catalyst for an educational culture shift. Generational differences between those who develop and implement policies with those who are expected to follow it can be the cause for conflict and misunderstanding.

In the Millennial culture where questioning authority is taken to the extreme, how can medical schools adapt in order to assure successful implementation and buy-in when creating new policies and procedures?

Objectives

1. Identify the roles and expectations the Administrators, Implementers, and Followers play in policy making and in the enforcement of existing policies
2. Gain an understanding of generational perceptions and how they influence the ultimate success of policies
3. Develop strategies to empower faculty members to avoid being caught in the middle of the divide

Key Message

Utilizing the Audience Response System, panelists present real life policy scenarios. Hot topics include enforcing attendance and professionalism policies. Audience members will participate in an on-the-spot assessment and dialogue regarding culture.

Conclusion

Intended outcome is improved generational understanding and a vision for what is required to implement policies at their home institutions.

Monday, April 20, 10:30 AM
Location: Peralta
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #20

Quantitative Evaluation of Clinical Cultural Competence: The Case of Josie Parada

Denise Souder, Janet L. Trial and Anne Walsh

Keck School of Medicine

Introduction: Curriculum for application and evaluation of cultural competence (CC) skills at the bedside is limited, yet necessary for clinical integration. Beginning in 2005-2006 the Keck School of Medicine participated in 'Enhancing CC in Medical Education' a grant from the AAMC. A comprehensive CC curriculum was implemented exposing students to CC. The Family Medicine (FM) clerkship at KSOM has historically incorporated CC into the FM clerkship and evaluated student ability to deliver CC care. For the past 6 years students have been assessed using the cultural OSCE case in the FM clerkship, 'Josie Parada'.

Objectives:

1. Compare student performance pre-post CC curriculum exposure to determine if there is a significant change of clinical skills
2. Evaluate individual student ability to demonstrate clinical CC.
3. Demonstrate validity of CC assessment items.

Methods: The scores of all students matriculating through the Family Medicine clerkship OSCE during the 2005-2006 ($n = 152$) and 2006-2007 ($n = 158$) academic years were used. A retrospective analysis of the 12 OSCE items specific to CC in the Josie Parada case were analyzed using one-way student T-tests.

Results: Demonstrated significant difference ($p < .05$) between students experiencing the CC curriculum and those who received traditional curriculum.

Discussion: Confounding variables possibly influencing outcomes include race, gender, and prior CC experiences of students. Results are limited to one specific patient case and may not be generalizable. Next steps in development of clinical evaluation of CC would be establishing validity of CC items by further assessment in clinical scenarios.

50 Word Summary

A comprehensive CC curriculum was implemented at Keck School of Medicine in 2005. The Family Medicine (FM) clerkship has historically evaluated CC with the Josie Parada OSCE case. Student performance in CC pre and post comprehensive curriculum was compared to evaluate curriculum impact. Initial results indicate effectiveness of new curriculum.

Monday, April 20, 10:30 AM
Location: Lamy
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #21

**Problem-based Learning: Variations in Missions, Implementations,
and Outcomes Among Four Medical Schools**

LuAnn Wilkerson and Sally Krasne, David Geffen School of Medicine, UCLA,
Carol Hodgson, University of Colorado, Denver, School of Medicine
Amin Azzam, UCSF & UC Berkeley
Martha McGrew, University of New Mexico, School of Medicine

Problem-based Learning (PBL) is currently used in one form or another in the majority of US medical schools, based on data from the AAMC Curriculum Directory. However, there is great variation among these institutions in the ways in which PBL is implemented, predominantly because PBL serves different roles in the various curricula. The proposed panel brings together faculty involved in the implementation of PBL at five different Western Region medical schools with the objective of addressing the following questions about PBL in their curricula:

- 1) How is PBL implemented (e.g. frequency, structure, relationship to other content)?
- 2) What are the primary curricular goals/missions to which PBL is directed?
- 3) How have you tailored PBL to accomplish these goals/missions?
- 4) How successfully has PBL accomplished these goals?

Each panelist will be asked to give a brief (5-7 minutes) presentation that addresses these questions, to be followed by a general discussion (that includes the audience).

Intended outcomes:

By the end of this panel discussion, the attendees should have a greater appreciation of

- 1) How PBL can be interfaced with a variety of curricular structures,
- 2) Some of the different missions served by PBL
- 3) How PBL has been implemented to serve these varied missions
- 4) How successful the institutions represented by the panelists (as well as any programs described by attendees) have been in achieving the curricular goals intended for PBL.

This knowledge will help attendees design and/or improve implementation of PBL in their institutions' curricula.

50-word Summary:

The proposed panel brings together faculty from five different Western Region medical schools to address the missions served by PBL in their varied curricula, the features they have implemented in PBL to accomplish these goals, and how successful they have been in attaining the desired outcomes.

Monday, April 20, 10:30 AM
Location: Nambe
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #22

Remediation Practices in the California Medical Schools

Win May, Keck School of Medicine of the University of Southern California

Michael Prislin, School of Medicine, UC Irvine

Karen Hauer, UCSF School of Medicine

Shawn Harrity, UCSD School of Medicine

Tamara Shankel, Loma Linda University School of Medicine

Carl Stevens, David Geffen School of Medicine at UCLA

Neil Gesundheit, Stanford University School of Medicine

Malathi Srinivasan, UC Davis School of Medicine

Objectives

1. To share common remediation practices in the California medical schools, for students who fail a comprehensive clinical skills examination.
2. To discuss other remediation strategies particular to different institutions within the California Consortium.
3. To exchange ideas with the audience regarding other successful strategies.

Methods

All eight medical schools in the California Consortium for the Assessment of Clinical Competence (CCACC) conduct a common comprehensive clinical skills examination for fourth-year medical students. For students who fail this comprehensive examination, remediation policies are in place in each school. Some strategies and practices are common among all eight schools. There are also certain methodologies which are employed by individual medical schools, particular to their own institution. The moderator will present the common practices, followed by the panellists discussing individual variations in remediation, as well as their success as reflected by the remediated students passing the USMLE Clinical Skills (CS) examination.

Intended Outcomes

Comprehensive clinical examinations are used in many medical schools to assess the clinical skills of medical students (1). These examinations fulfil different objectives, such as ensuring the clinical competence of medical students prior to graduation, helping students prepare for the USMLE CS. Students who fail this examination need to be remediated in order to improve their clinical performance.

This panel will provide participants with educational strategies for remediation that are in place in the California medical schools, and also allow an exchange of information regarding successful remediation practices, with the audience.

References

Hauer KE, Hodgson CS, Kerr KM, Teherani A, Irby DM. A national study of medical student clinical skills assessment. *Acad Med* 2005;80 (Suppl 10):25–9.

Summary

The eight medical schools in California conduct a common comprehensive clinical skills examination for fourth-year medical students. For students who fail this comprehensive examination, remediation policies are in place. The panel will present common strategies for all schools as well as certain methodologies which are particular to individual schools.

Monday, April 20, 10:30 AM
Location: Pojoaque
Santa Fe Community Convention Center

WGEA: 60-minute Workshop - Breakout #23

Using Diverse Teaching Strategies on a Clinical Rotation

Paritosh Kaul

University of Colorado School of Medicine

Objectives

1. To explore the use of videos to stimulate case discussion around clinical issues.
2. Discuss strategies for incorporating role play into teaching clinical medicine
3. To incorporate a student journal into learning activities during a clinical rotation

This workshop will illustrate diverse teaching strategies during a clinical rotation. The group will first view a LIVE (Learning through Instructional Video in Education) video and then will be divided into small groups to discuss how this can be used to discuss clinical issues. The facilitator will then use role play to discuss different responses that might be seen among students. Some case scenarios will be given to participants for practice during the session. At the end the session, goals, objectives and utility of a reflective student journal will be discussed. The workshop is designed to be interactive.

Outcomes

At the end of the session, the participant will be comfortable in using videos, role play and journaling activities towards teaching in a clinical rotation.

50-word summary:

This interactive session will explore diverse teaching strategies on a clinical rotation. It will illustrate the use of videos, role play and journaling for teaching during clinical rotations.

Monday, April 20, 10:30 AM
Location: Milagro
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #24

Innovation in Professional Practice Education: Academic and Community Clinic Collaboration to Provide Best Practice Care for Underserved Patients with Chronic, Complex Diseases

Sanjeev Arora and Summers Kalishman, University of New Mexico SOM,
Saverio Sava, First Choice Community Health

Purpose:

This panel will present Project ECHO (Project Extension for Community Healthcare Outcomes), an educational training model focused on improving access to and best practice care for patients with chronic, complex diseases from rural and underserved populations. Through collaborative learning and technological innovation, academic health center specialists and community providers co-manage community providers' patients during weekly, case-based telehealth clinics. Case-based education is iterative and focuses on development of providers' skills, confidence and knowledge in implementation of care for diseases such as Hepatitis C, arthritis, substance use disorders, diabetes, chronic pain, and HIV/AIDs.

Objectives and Outcomes:

- 1) To provide an overview of the ECHO model and its application with HCV patients through an 8 minute video
- 2) To explain the combined power of technology, the multiplier effect in training providers, and use of teams to address systemic issues associated with access to best practice specialty care for patients with chronic, common and complex diseases.
- 3) To describe the educational impact and systemic requirements needed to implement Project ECHO.
- 4) To engage the audience in discussion about this model and related models focused on improving access to and best practice patient care for underserved patients with exploration of educational theory, work place learning, technology, use of teams, and multiplier effect in training primary care providers and other team members in care of patients with chronic, complex diseases.

Plan:

The panel will begin with an 8-minute video followed by 15 minute presentations each by Dr. Arora (ECHO project director) and Dr. Sava (Medical Director First Choice Community Clinics) associated with Project ECHO from each of their unique perspectives. Dr. Kalishman (educator/evaluator) will introduce the panel and facilitate the audience discussion and participation.

Panelists will present an educational training model focused on improving access to and best practice care for patients with chronic, complex diseases from rural and underserved populations. Academic health center specialists and community providers co-manage community providers' patients during weekly, case-based telehealth clinics. Clinic teams with community health workers share in these knowledge and care networks. Students and residents participate during specific rotations. The session includes a short video overview, panelists' presentations, and audience discussion.

University of New Mexico School of Medicine¹ and First Choice Community Healthcare²

Monday, April 20, 10:30 AM
Location: O'Keefe
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #25

**Preclerkship Clinical Skills Education for Medical Students:
What, Why, Who, How and When?**

Donna Elliott, Keck School of Medicine
H. Carrie Chen, UCSF School of Medicine
Tamara Shankel, Loma Linda University School of Medicine

Description of Topic and Rationale: Increasing demands on resident and faculty time decrease the time available for clinical skills education in clerkships and necessitate that students arrive with requisite skills. In 2008, the AAMC Task Force on the Preclerkship Clinical Skills (PCS) Education of Medical Students outlined eight recommendations for clinical skills learning and performance standards to prepare students for clerkship experiences and placed responsibility for initiating the development of clinical skills on the preclerkship curriculum. It is incumbent upon medical schools to implement developmental, competency-based clinical skills curricula with a variety of learning opportunities and robust skills assessment.

Summary: This panel discussion will share information about current PCS curricula and outcome measures at three schools, and identify priorities in PCS training. After brief presentations on best practices, we will have an open discussion with participants to define optimal models for PCS education.

Objectives:

After the Panel Discussion, participants will be able to:

1. Describe the 2008 AAMC Recommendations for PCS Education of Medical Students
2. List examples of PCS curricula from three medical schools with a focus on assessment methodologies and outcome measures
3. Describe optimal models for PCS education and how these might be implemented

Methods:

Introduction of topic (10 min)

Presentation of three preclerkship clinical curricular models by panelists (30 min)

Presentation of clinical performance outcomes (10 min)

Facilitated discussion of key ideas (10 min)

Intended Outcomes:

Participants will learn about the AAMC Recommendations for PCS Education, consider different curricular and assessment models, and begin to develop ideas for potential implementation in their home institutions

Intended audience: curriculum/ education deans, clerkship directors, residency program directors, directors of or faculty from clinical skills courses.

2009 AAMC Western Regional Conference
Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine



HOT TOPICS

Location: Sweeney AB
Santa Fe Community Convention Center

Monday, April 20, 2009
2:30 PM – 4:00 PM

An Interactive Session with Audience Response:

HOT TOPICS:

1. Should Facebook and MySpace be used Formally in the Admissions Process? A Pro/Con Discussion
2. Workforce Issues
3. Texting and Emailing for Official Communications

2009 WGEA WGSA WMAS WAAHP CONFERENCE

MERC * CRIME * LIME * CurrMIT

AAMC Western Regional Conference Host: University of New Mexico School of Medicine

Promoting Reflection and Cultural Awareness: The Arts and Medicine
April 18-21, 2009

PROGRAM

Tuesday, April 21, 2009

ROOM

Santa Fe Convention Center

7:00 - 8:00 am Continental Breakfast

7:00 - 8:00 am **WAAHP** Wrap Up and Reflection Breakfast

Sweeney CD (CC)

8:00 - 9:15 am **WMAS Plenary Session**

The Secretary Janet Napolitano and Melvina McCabe, MD

Sweeney AB (CC)

9:15 - 9:35 am Awards Ceremony

9:35 - 9:45 am Break

9:45 - 10:45 am Breakout Sessions

(WGSA/WAAHP) **26. Update: Comprehensive Review of the MCAT**

Karen Mitchell

Sweeney AB (CC)

(WMAS) **27. Milestones in Medical Education: Providing Culturally Responsive Approaches for a Diverse Student Body**

Victoria Gardner, Linda Don

Milagro (CC)

(WGSA) **28. Promoting Reflection and Cultural Awareness Among Rural Applicants**

Rita Osborn

Coronado (CC)

(WGSA) **29. Student Showcase: Innovations in Medical School Curriculum**

Antony Hazel

DeVargas (CC)

(WGEA) **30. Enhancing Leadership and Productive Change With a Faculty & Professional Learning Community Model**

Richard Baker, Laurie Richlin, Kenneth Wolf

Peralta (CC)

Tuesday, April 21, 2009

(WGEA)	31. Clinical Performance Assessment at the Undergraduate Level: Norm-Referenced vs. Criterion Referenced Measures <i>Cha-Chi Fung, Win May, Tammy Shankel, Anna Chang</i>	Nambe (CC)
(WGEA)	32. Virtual Microscopy in Medical Education: Practical Aspects and Educational Implications <i>Jenn Stringer, Paulus Djajapranata, Helene Hoffman, Chandler Mayfield, Brian Tobin</i>	Pojoaque (CC)
(WGEA)	33. “Is Your ‘Professionalism’ the Same as Mine?” Anchoring Your Evaluation Strategy <i>Hana Dan-Cohen, Amin Azzam, Kevin Mack, Alan Steinbach</i>	Ohkay Owingeh (CC)
9:45 – 11:45 am	Breakouts Sessions (2 Hours)	
(WMAS)	34. Integrating Cultural Competence Into the Medical Curriculum – Successes & Lessons Learned: The National Consortium for Multicultural Education for Health Professionals <i>David A. Acosta, Sonia Crandall, Elizabeth Lee-Rey,</i>	Santa Fe (LF)
(WGEA)	35. Professionalism Feedback for Students: Crafting the Conversation <i>Melissa Piasecki, Marin Gillis, Peggy Dupey, Deborah Kuhls</i>	Exchange (LF)
(WGEA)	36. Professionalism on Trial <i>Kamal Sami Ajam, Marjorie Wenrich, Ramocita R. Maestas, Amy Baernstein</i>	Coronado (LF)
(WGEA)	37. Storyboards: An Approach to Design for Medical Educators <i>Christian Burke</i>	Stiha (LF)
(WGEA)	38. Techniques for Effectively Teaching Skills Fundamental to EBM in the Pre-Clerkship Curriculum <i>Carl Stevens, Sally Krasne, Rikke Ogawa, LuAnn Wilkerson</i>	Boardroom (LF)
(WGEA)	39. Why Good Feedback is more than “Good Job!” <i>Jay Parkes, Teresita McCarty, Marie Parkes, Nancy Sinclair</i>	Kearney (CC)
(WGSA)	40. Reflection on the Mistreatment of Medical Students: Can the Culture Change? <i>Michael Prislín, Donna Elliott, Neil Parker, Joyce Fried</i>	Lamy (CC)
10:45 - 11:45 am	Breakout Sessions	
(WGSA)	41. Women’s Physicians in American Literature: A Type in Stereo <i>Sonya Erickson</i>	Coronado (CC)

Tuesday, April 21, 2009

- | | | |
|----------|---|--------------------|
| (WGEA) | 42. Postbac Programs: Informational Presentation for Medical Schools and Pre-Health Advisors
<i>Jim Forkin</i> | Peralta (CC) |
| (WGEA) | 43. Designing a PBL Faculty Development Program for Your Institution
<i>Tatum Korin</i> | Nambe (CC) |
| (WMAS) | 44. Our Tradition Continues...American Indian Medical Education – Past, Present and Future
<i>Felicia Espina Miller, Gayle Din'Chacon, Kevin Goodluck</i> | Ohkay Owingeh (CC) |
| (WGEA) | 45. Tools for Program Evaluation: Using a Logic Model to Identify Desired Program Outcomes and Kirkpatrick's Levels of Evidence to Measure Them
<i>Deana M. Richter, Craig Timm, Bronwyn Wilson, Ellen Cosgrove</i> | Milagro (CC) |
| 11:45 am | Conference Adjourns | |

Monday, April 20, 9:15 AM
Location: Sweeney AB
Santa Fe Community Convention Center

WGSA/WAAHP – Breakout #26

Update: Comprehensive Review of MCAT
Karen Mitchell

Tuesday, April 21, 9:45 AM
Location: Milagro
Santa Fe Community Convention Center

WMAS: Panel Discussion – Breakout #27

**Milestones in Medical Education: Providing Culturally Responsive
Approaches for a Diverse Student Body**

Victoria Gardner, University of Washington School of Medicine

Linda Don, University of Arizona

Medical students from different racial, ethnic and cultural backgrounds bring a variety of perspectives, values, and traditions into the medical school pipeline. Medical schools have typically celebrated medical milestones such as transition to clinical education and graduation with a perspective that values Western, dominant culture.

Over the past thirty years, minority affairs and student affairs professionals have believed that one way we can support students in their medical education is to provide ways by which medical milestones are culturally significant to all our students and their families. In this session, we plan to present a number of ways that two medical schools, the University of Arizona and the University of Washington, respectfully honor and celebrate the unique accomplishments of its students.

As we enter a historic political climate, it is becoming increasingly important to clarify the diversity values of our medical schools. What value do we, as institutions, truly place on the cultural contexts that our students bring? Is it helpful or detrimental to hold focused ceremonies that are offered to specific groups but not for others? Does this practice support the idea of increasing cultural relevance and inclusion in our approach to recognizing students? Or, does it perpetuate exclusion and accentuate differences in a profession where socialization and adoption of a specific set of professional behaviors and values is deemed essential to the individual's career success?

A panel of students, physicians, and student affairs professionals will discuss these questions. Attendees will also be encouraged to explore ideas for how we can utilize creativity, reflection and tradition in medical education in ways that are meaningful to the students, their families, and the school.

Tuesday, April 21, 9:45 AM
Location: Coronado
Santa Fe Community Convention Center

WGSA: 60-minute Workshop – Breakout #28

Promoting Reflection and Cultural Awareness Among Rural Applicants

Rita Osborn

Southern Utah University

Through the use of service-learning, leadership, patient exposure and job shadowing, students in the Rural Health Scholars program at Southern Utah University find unique ways to improve their cultural awareness and reflections. These experiences translate into very prepared applicants while significantly improving acceptance rates into medical schools and other programs. Reflection methods will be presented and audience discussion will be encouraged. To offset largely homogeneous backgrounds, Rural Health Scholars coordinate a low-income clinic and participate in patient exposure experiences in Mexico as well as the Four Corners area. This structured enhancement program supports all graduate health care disciplines. The dramatic increase in acceptance rates is attributed not to test scores or grades alone, but to program features that allow students to round out their applications in exploring their health care careers. Primary care and rural health are also explored by Rural Health Scholars. The program began six years ago with 40 students and has increased to nearly 200 students, funded primarily by student program fees of \$350 per year. SUU is a rural regional comprehensive university located in Cedar City, Utah, with over 7,000 students.

Tuesday, April 21, 9:45 AM
Location: DeVargas
Santa Fe Community Convention Center

WGSA: Panel Discussion – Breakout #29

Student Showcase: Innovations in Medical School Curriculum
Antony Hazel

This student led panel discussion would highlight innovative medical school curriculum from medical schools in the Western Region. A particular emphasis would be placed on student led initiatives, unique approaches to clinical rotations and curriculum aimed at addressing health disparities.

Tuesday, April 21, 9:45 AM
Location: Peralta
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #30

**Enhancing Leadership and Productive Change With a Faculty
& Professional Learning Community Model**

Richard Baker, Laurie Richlin and Kenneth Wolf
Charles Drew University of Medicine and Science

Until recently, the academy has viewed the leadership function much as it has regarded teaching: with the assumption that explicit preparation and continuing development is unnecessary. In relation to teaching, it had been widely assumed that attending to the intellectual content of one's discipline was all that was necessary—quality teaching would naturally follow. This assumption about teaching has been successfully challenged. Academic leaders now recognize that explicit preparation and thoughtful reflection about one's performance is also valuable for chairing a department and other leadership roles. This panel will report on a faculty and professional learning community that is investigating and implementing approaches to enhancing academic leadership effectiveness and satisfaction. The community's goals include facilitating information exchange and documenting the collective wisdom and "best practices" of participants; providing a support system for academic leaders; introducing participants to the myriad possibilities for leading colleagues in the enhancement of teaching, scholarship, and service; and developing and implementing individualized leadership development plans.

After interacting with this panel, participants will be able to

describe the processes and benefits of the faculty and professional learning community model of faculty and leadership development

describe best practices in medical leadership development

describe a wide range of individual leadership development plans

This session will be useful to current and future medical educators in all specialties and at all levels.

Tuesday, April 21, 9:45 AM
Location: Nambe
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #31

**Clinical Performance Assessment at the Undergraduate Level: Norm-Referenced vs
Criterion Referenced Measures**

Cha-Chi Fung, UCLA David Geffen School of Medicine

Win May, USC Keck School of Medicine

Tammy Shankel, Loma Linda University School of Medicine

Anna Chang, UCSF School of Medicine

Summary:

Setting a defensible standard for passing clinical skills exams has been a challenge for most medical schools. A new criterion based standard was developed and piloted in 2008. Panelists will discuss their current practices as well as the implications of the new standard on their Clinical Performance Examination.

Abstract:

With the implementation of the Clinical Skills examination associated with Step II USMLE, medical schools are gearing up to prepare their students by adding more standardized patient examinations to their curriculum. In California, the California Consortium of the Assessment of Clinical Competence (CCACC) has more than 10 years of experience implementing such large scale exams. Yet, the CCACC is still facing the challenge of setting a defensible and appropriate performance standard by which students are held accountable. All 8 consortium schools are currently using a variation of norm-based standard setting. A discussion with the schools will hopefully provide some insight into this complicated topic and also opportunities for our panelists to learn from the audience.

This panel represents different methods used by the consortium schools and is aims to meet the following objectives:

- 1) Describe the methods by which performance standards are set by each school and the rationale for these standards.
- 2) Compare the various norm-based standards to a new criterion-based standard and discuss the differences in failure rate and characteristics.
- 3) Summarize the implications of the new criterion-based standard on student's clinical performance.

Tuesday, April 21, 9:45 AM
Location: Pojoaque
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #32

Virtual Microscopy in Medical Education: Practical Aspects and Educational Implications

Jenn Stringer, Stanford School of Medicine

Paulus Djajapranata, UC Davis

Helene Hoffman, UC San Diego

Chandler Mayfield, UCSF

Brian Tobin, Stanford School of Medicine

The use of virtual microscopy as a significant teaching method has been growing significantly over the past decade. Educators need to understand the “why’s and how’s” of virtual microscopy. Panelists will present a variety of perspectives ranging from an institution still using microscopes to another relying solely on virtual microscopy.

Introduction/Rationale

Virtual Microscopy is the digital replication of optical microscopy and one form of computer-aided instruction currently employed in medical education. The use of virtual microscopy as a significant teaching method in histology and pathology courses has been growing significantly over the past decade, as detailed in the Bloodgood and Ogilvie 2006 article “Trends in histology laboratory teaching in United States medical school” in *The Anatomical Record*. The shift away from microscopes is motivated by more powerful networks, cheap storage, student laptops, and the high maintenance costs of optical equipment. As this shift continues, educators need to understand the “why’s and how’s” of virtual microscopy.

Session Structure

The moderator will give a brief introduction and overview. Panelists will present a variety of perspectives ranging from an institution still using microscopes heavily to another relying solely on virtual microscopy. Discussion questions include:

- What technologies are used for microscopy?
- Are you replacing microscopes completely?
- What are advantages & disadvantages of digital?
- What is faculty and student feedback?
- How have you addressed faculty development?
- Impact on teaching and learning?
- Implications for space design (data, power, room types)?

Outcomes

Attendees will leave the session with:

- A better understanding of virtual microscopy
- Ideas for implementation in teaching and assessment
- Agenda for faculty development to support faculty in the optical to digital transition
- Ideas for collaboration and sharing of technologies and slide sets

Moderator:

Jenn Stringer, Director of Educational Technology, Stanford School of Medicine

Panelists:

Paulus Djajapranata, MS, Programmer, Office of Medical Education, UC Davis School of Medicine

Helene Hoffman PhD, Assistant Dean for Educational Computing, UC San Diego School of Medicine

Chandler Mayfield, Assistant Director, Learning Technologies, UCSF School of Medicine

Brian Tobin, Manager of Classroom and Curriculum Technology, Stanford School of Medicine

Tuesday, April 21, 9:45 AM
Location: Ohkay Owingeh
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #33

“Is Your ‘Professionalism’ the Same as Mine? Anchoring your Evaluation Strategy”

Hana Dan-Cohen, Amin Azzam, Kevin Mack and Alan Steinbach

UCB--UCSF Joint Medical Program

Rigorously defining professionalism is a challenge facing the growing number of medical schools that elect to assess professionalism. The UC Berkeley—UCSF Joint Medical Program (JMP) is a Problem-Based Learning pre-clerkship curriculum in which we use a 24 item Likert-scale to assess professionalism. However, due to the lack of rigorous definitions of various levels of professional behavior, faculty and students create their own criteria for assigning numerical performance values under the individual items on the form. This can result in lack of inter-rater reliability, misunderstandings between students and faculty, and complicates disciplinary processes. We tried to address these problems by “anchoring” the scores on our professionalism evaluation form to examples of specific behavior that would merit each score on each item. This anchoring process not only resulted in setting clear expectations for behavior and assessment related to each score on each scale, but also revealed redundancies, allowing us to produce a more concise evaluation strategy.

In this workshop we will lead participants through the process of anchoring a Likert-scale based professionalism form, using specific examples relevant to their own programs.

Objectives

This proposed panel discussion will use both discussant presentations and small “break-out” audience participation groups. By the end of this session, audience members will be able to:

1. Understand the importance of “anchoring” evaluation items to ensure inter-rater reliability.
2. Identify how one medical school modified and anchored an existing “Professionalism Evaluation” form to more closely reflect the expectations and priorities of the faculty members.
3. Utilize newly developed skills to begin anchoring their own professionalism evaluations for use at their home institutions.

50-word Summary

Rigorously defining professionalism is a challenge facing the growing number of medical schools that elect to assess professionalism. In this workshop we will lead participants through the process of anchoring a Likert-scale based professionalism form using specific examples relevant to their own programs.

Tuesday, April 21, 9:45 AM

Location: Santa Fe

La Fonda Hotel

WMAS: 120-minute Workshop – Breakout #34

Integrating Cultural Competence Into the Medical Curriculum – Successes & Lessons Learned: The National Consortium for Multicultural Education for Health Professionals

David A. Acosta, University of Washington School of Medicine

Sonia Crandall, Wake Forest University School of Medicine

Elizabeth Lee-Rey, Albert Einstein College of Medicine of Yeshiva University

Desiree Lie, University of California, Irvine School of Medicine

Workshop Summary: Members from the National Consortium for Multicultural Education for Health Professionals will briefly present the products (curriculum, exercises, case vignettes, assessment tools) they developed to enhance medical school curriculum in cultural competence and share lessons learned in implementation. Participants will examine the products, apply them and give the developers direct feedback.

Abstract: The importance of providing cultural competence training as part of curricula for the training of health professionals is no longer a question for debate. Medical educators and accreditation bodies are increasingly recognizing cultural competency as critical to the professional development of physicians. The dilemma is how to best approach this type of education in content-laden curricula. The National Consortium for Multicultural Education for Health Professionals (NCME-HP) is a collaborative effort of eighteen U.S. medical schools funded by the NIH/NHLBI to develop, evaluate and disseminate cultural competence curriculum for medical students, residents, physicians and other health care professionals. The NCME-HP has the intention of serving as a multicultural education resource hub for medical educators. Four NCME-HP members will present their specific curriculum or tools they each have developed and implemented in their medical school or residency curriculum (i.e. use of the Implicit Association Test, case vignettes, modified TACCT, culturally-responsive care toolkit, etc.), and will discuss the lessons learned. Participants will have the opportunity to interact with the presenters and other participants, examine these curricula closely, apply them to sample case scenarios, and evaluate their applicability. Participants will be provided with a list of resources that have been developed by other NCME-HP members, and will have the ability to access these resources via the NCME-HP website for their own use at their academic institution or residency program.

Objectives:

- Describe practical aspects of and challenges to developing and implementing cultural competence curriculum.
- Identify one tool or curriculum that can assist participants with curriculum development and assessment.
- Discuss the utility of the NCME-HP as a multicultural education resource hub for future curriculum development.

Tuesday, April 21, 9:45 AM

Location: Exchange

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #35

Professionalism Feedback for Students: Crafting the Conversation

Melissa Piasecki, Marin Gillis, Peggy Dupey and Deborah Kuhls

University of Nevada School of Medicine

Nowhere in medical education are feedback skills more critical than in the realm of professionalism. Our workshop begins with a brief overview of the status of feedback and professionalism in medical education. We will next introduce a model of reflective feedback, where learners are supported in a reflection of the potential impact of their behavior. The main activity of the workshop will be videotaped vignettes and formulating feedback conversations for the students in the vignettes using the reflective model. This is a skills building activity that participants can adopt for use with faculty and trainees at their home institutions.

Objectives

1. Describe obstacles to effective student feedback regarding professionalism
2. Practice a model of reflective feedback
3. Contrast feedback for performance vs. professionalism
4. Identify professionalism scenarios for faculty development at your home institution

50 Word Summary

Feedback for professional behaviors can be a major challenge for teaching faculty when student behaviors take us by surprise or raise concerns that fall outside of our usual repertoire. This workshop was developed in response to our experiences with students and faculty and introduces a model of reflective feedback.

Tuesday, April 21, 9:45 AM

Location: Coronado

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #36

Professionalism on Trial

Kamal Sami Ajam, Marjorie Wenrich, Ramocita R. Maestas and Amy Baernstein

University of Washington

BACKGROUND

It is increasingly recognized that professionalism should be addressed at every level of the educational continuum. Medical schools are charged with creating a culture of professionalism that exemplifies the principles set forth in their implicit and explicit curricula. Yet many professionalism educators are challenged with student engagement, faculty concurrence, and resistance to curricular implementation. This workshop will explore these challenges using a debate format; the moderators will briefly present the experience and best practices of the UWSOM.

MODERATORS

Three UWSOM professionalism curricula leaders who have developed student professionalism curricula and participated in an institution-wide professionalism initiative

OBJECTIVES/METHODS

1. Participants will debate the pros and cons of explicit curricula developed for students (1 group pro/1 group con)
2. Participants will debate the pros and cons of institutional initiatives (1 group pro/1 group con)
3. Using cue sheets and role playing, participants will brainstorm the viewpoints of various stakeholders in academic institutions with an interest in developing a culture of professionalism. (Examples of roles: fourth-year student on the honor council; faculty member of the admissions committee; nurse)

INTENDED OUTCOMES

1. Presenters will receive tools in use at the UWSOM to use at home institution.
2. Participants will understand the values and limitations of explicit student curricula for student engagement and creating culture change
3. Participants will learn approaches and recognize the values and difficulties in implementing institutional initiatives. (Example: time pressures, resource use, developing a common definition, politics). The UWSOM experience and action plan will be discussed.

50-WORD SUMMARY

At institutions nationwide, many professionalism educators are challenged with engaging student engagement, faculty concurrence, and resistance to curricular implementation. This workshop will highlight and explore these challenges using a debate forum. The moderators will present the experience and best practices of the UWSOM.

Tuesday, April 21, 9:45 AM

Location: Stiha

La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #37

Storyboards: An Approach to Design for Medical Educators

Christian Burke, University of California, San Francisco

Introduction:

Authoring digital teaching and learning materials involves a new way of thinking that is closely associated with filmmakers or designers. Creating effective digital content involves a systematic process of design and development; this workshop applies storyboarding – a practice regularly used in the creative arts - to medical education. Anyone can learn this simple design approach and use it to target their objectives and create learner-centered materials for online or classroom learning environments that engages the learner as deeply as possible.

Objectives

To explore storyboarding as a tool that empowers learning design. To perform hands-on practice using storyboards to create effective learning experiences. To apply these storyboard principles to your own projects.

Methods

The basic instructional design approaches are discussed and we'll look at real-world examples of learner centered design. Medical education projects are used as targeted examples of using storyboarding effective learning and curriculum. Participants will then break into small groups for hands-on practice. Results After a discussion of basic instructional design theories, participants perform hands-on storyboarding practice, and then apply these principles to their own projects. This workshop has been used successfully for three years at UCSF for faculty and students who are about to create learning materials or curriculum. Many projects from this workshop are reviewed successful and some have been published and disseminated to other schools.

Discussion

This is a learner-centric and team-based approach to design (storyboards become the blue-print for the project used by others). Medical educators can use storyboarding to enhance their expertise and develop more effective learning using these solid design principles.

Tuesday, April 21, 9:45 AM
Location: Boardroom
La Fonda Hotel

WGEA: 120-minute Workshop – Breakout #38

**Techniques for Effectively Teaching Skills Fundamental to EBM in the
Pre-Clerkship Curriculum**

Carl Stevens, Sally Krasne, Rikke Ogawa, and LuAnn Wilkerson
David Geffen School of Medicine, UCLA

As clinical trials and related outcome studies grow in importance as a foundation for medical decision-making, Evidence-based Medicine (EBM) has become a crucial component of medical education in all its phases. Integrating EBM content into already crowded curricula represents a challenge, especially in conferring sustained understanding and ability to apply the material and techniques. Two skills, formulating targeted questions and searching the online literature, are fundamental to EBM. This workshop addresses methods for teaching these specific skills.

Objectives and Methods:

1. Explore how attendees' institutions incorporate teaching EBM skills in their curricula.
2. Demonstrate, using a hands-on, audience response system-based exercise with a series of brief clinical cases, how we use lectures and workshops to teach and PBL cases to practice applying these skills at UCLA.
3. Describe how these approaches address a number of the problems encountered in teaching EBM to undergraduate medical students.

Intended outcomes:

By the end of the workshop, participants should be able to

1. Describe the information sources and methods that distinguish EBM from other approaches to answering clinical questions
2. Identify different approaches, along with their successes and short-comings, for teaching skills in formulating effectively targeted questions stimulated by clinical problems and locating appropriate, high-quality resources for answering these questions..
3. Apply a category-based framework for developing targeted questions related to clinical cases.
4. Develop and utilize a "resource access tool", specific to the participant's medical school and curriculum, which familiarizes students with high-quality resources specific to the particular type of question being addressed.

"50-word Summary"

This workshop will explore techniques for incorporating into medical curricula two skills fundamental to evidence-based medicine: formulating a concise, targeted question about a clinical case and identifying high-quality resources for answering the question. Hands-on exercises will allow participants to apply techniques taught at UCLA's School of Medicine.

Tuesday, April 21, 9:45 AM
Location: Kearney
Santa Fe Community Convention Center

WGEA: 120-minute Workshop – Breakout #39

Why Good Feedback is More Than “Good Job!”

Jay Parkes, Teresita McCarty, Marie Parkes and Nancy Sinclair
University of New Mexico School of Medicine

50-word Summary: Feedback to students can be one of the most powerful learning tools in a medical educator's toolbox. But what constitutes effective feedback is not always intuitive. Using the context of written feedback to students learning patient note-writing, this workshop explores feedback research and provides participants practice in giving effective feedback.

Abstract

Feedback to students can be one of the most powerful learning tools in a medical educator's toolbox. But what constitutes effective feedback is not always intuitive. Using the context of written feedback to students learning patient note-writing, this workshop will explore feedback research and provide participants practice in giving effective feedback.

Objective #1: Participants will gain awareness of their own internal criteria for effective feedback.

Objective #2: Participants will list the research-based characteristics of effective feedback.

Objective #3: Participants will define what "effective" means.

Objective #4: Participants will establish initial skill at providing effective feedback to students.

Methods:

I. What do you think is good feedback? (45 minutes)

- a. Individual participants will consider examples of feedback and rate whether they personally would find that feedback useful. (15 minutes)
- b. Table groups will discuss each example noting differences of opinion on the ratings. (15 minutes)
- c. The entire group will build a list of what was considered effective, ineffective, and contested feedback. (15 minutes)

II. What does the research say is effective feedback? (30 minute presentation)

III. How would you make the feedback better? (30 minutes)

- a. Working in pairs, participants will improve examples of written feedback to make them more effective. (20 minutes)
- b. A second pair will provide feedback on the efficacy of the first pair's suggestions. (10 minutes)

IV. Q&A (15 minutes)

Intended Outcomes: Participants will learn, through presentation and practice, what constitutes effective feedback.

Tuesday, April 21, 9:45 AM
Location: Lamy
Santa Fe Community Convention Center

WGSA: 120-minute Workshop – Breakout #40

Reflections on the Mistreatment of Medical Students: Can the Culture Change?

Michael Prislin, University of California Irvine

Donna Elliott, USC Keck School of Medicine

Neil Parker, UCLA David Geffen School Of Medicine

Joyce Fried, UCLA David Geffen School of Medicine

The mistreatment of medical students received considerable attention during the 1990s. Despite this attention, the issue continues to be a source of concern in medical education. Indeed the Liaison Committee on Medical Education has recently added an accreditation standard (MS 31A) that addresses the issue. Yet existing data suggests that little improvement has occurred. In fact mistreatment of students appears to be derived to a great degree from the culture of medicine and perpetuated by the transmission of that culture during the educational process. The objectives of this presentation will be to:

1. To assist the audience in defining medical student mistreatment. (Method: interactive discussion of case vignettes; use of audience response system.)
- 2 To explore common myths and stereotypes pertaining to medical student mistreatment. (Method: interaction with audience; use of audience response system.)
3. To review the current prevalence of medical student mistreatment. (Method didactic presentation.)
- 4 To identify current national standards of national accrediting bodies pertaining to mistreatment. (method didactic presentation).
5. To discuss best practices pertaining to institutional policy development and responses to student mistreatment (method didactic presentation; interactive discussion with audience).
6. To identify common barriers hindering effective responses to medical student mistreatment. (method interactive discussion with audience)
7. To describe best practices at various institutions in responding to specific instances of medical student mistreatment. (method interactive discussion with audience).

Target Audiences: All parties involved in working with medical students including: WGEA, WGSA, WMAS, OSR, and ORR

Anticipated Length of Presentation: 120 minutes

Tuesday, April 21, 10:45 AM
Location: Coronado
Santa Fe Community Convention Center

WGSA: 120-minute Workshop – Breakout #41

Women's Physicians in American Literature
Sonya Erickson

Tuesday, April 21, 10:45 AM
Location: Peralta
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #42

**Postbac Programs: Informational Presentation for Medical Schools and
Pre-Health Advisors**

Jim Forkin, UC Davis School of Medicine

The objective of this panel presentation is to inform medical school faculty/staff and health profession advisors about premedical postbaccalaureate programs. Medical school faculty and staff, especially those involved in admissions, often express curiosity about the programs. Although they encounter grades from postbac programs in an application, they may not know about the details of the programs and the differences between programs. Similarly, health profession advisors have expressed a desire to learn more about the programs so that can better advise their students about them. An informational presentation on the programs offered to advisors a few years ago was filled beyond capacity, and attendees were very grateful for it.

That presentation was intended specifically for advisors, but this one is intended for both advisors and medical school faculty/staff. A panel of program directors from UC Davis, U New Mexico, UCLA and U Hawaii will explain 1) the kinds of programs (for career changers, for students from disadvantaged backgrounds, etc.); 2) the components of the programs; 3) criteria used in selecting participants; 4) performance of program alumni in medical school; etc. Given the theme of this year's conference, a special emphasis will be placed on postbac programs that serve students from disadvantaged backgrounds. By helping talented students from underserved and low-income communities matriculate into medical school, these programs help to create a more culturally competent physician work force.

After a series of brief presentations, the panelists will take questions from the audience.

50-words Summary:

"The goal of this presentation is to inform medical faculty/staff and health profession advisors about premedical postbaccalaureate programs, which play a key role in creating a more diverse medical student population and a more culturally competent physician work force."

Tuesday, April 21, 10:45 AM
Location: Nambe
Santa Fe Community Convention Center

WGEA: 60-minute Workshop - Breakout #43

Designing a PBL Faculty Development Program for Your Institution

Tatum Korin

David Geffen School of Medicine at UCLA

Context: Problem-based learning is becoming ubiquitous, with 70% of US medical schools reporting its use in the curriculum (Kincade 2005). Meeting the continuous demands of recruiting, training, and retaining PBL facilitators to teach small groups is a challenge for many schools (Hitchcock and Mylona 2000). This is especially true when only half of US medical schools have an office of medical education to support these efforts.

Summary: Based on the Faculty Development Program at UCLA, this workshop will assist participants in designing a program (FDP) focused on PBL small group facilitators. The workshop will address key characteristics of a solid FD program, challenges creating an all-inclusive program that suits both novice and expert PBL facilitators, evaluation design and strategies for researching the effects of a FDP on teaching and learning.

Objectives & Outcomes: Participants will:

1. Create a outline for a PBL faculty development program tailored to their institutional needs
2. Develop an agenda and curricula for a PBL faculty development seminar series
3. Design facilitator evaluations to identify areas of weakness and excellence

Conclusion: PBL is a specialized approach to learning and requires well-trained facilitators with a prescribed skill set. According to Savin-Baden “The current shift towards PBL within higher education suggests that staff and educational development needs to be a central component in any PBL implementation strategy”(2003, p. 77).

Tuesday, April 21, 10:45 AM
Location: Okhay Owingeh
Santa Fe Community Convention Center

WGEA: Panel Discussion – Breakout #44

Our Tradition Continues ...
American Indian Medical Education – Past, Present and Future
Felicia Espina Miller

Panelists: *Gayle Dine'Chacon, Kevin Goodluck*

Description:

The American Indian contribution to medicine is a shared national treasure. The objectives of the workshop will be illustrated by educational outreach programs that honor that contribution by addressing the current health care issues facing American Indians today.

Objectives:

- Gain valuable knowledge of the remarkable contributions American Indians have made to medicine
- Be informed of current American Indian medical education initiatives
- Learn about the hopes and challenges ahead

Tuesday, April 21, 10:45 AM
Location: Milagro
Santa Fe Community Convention Center

WGEA: 60-minute Workshop - Breakout #45

Tools for Program Evaluation: Using a Logic Model to Identify Desired Program Outcomes and Kirkpatrick's Levels of Evidence to Measure Them

Deana M. Richter, Craig Timm, Bronwyn Wilson, Ellen Cosgrove
 University of New Mexico School of Medicine

Background and Purpose: A growing focus on the results of teaching rather than the act of teaching is an important change in medical education. This trend is evidenced across the continuum in LCME, ACGME, and CME, whose criteria increasingly stress providing evidence of outcomes. Faculty development programs designed to improve teaching outcomes are themselves challenged to provide evidence which goes beyond participant satisfaction to demonstrating that they make a difference in participants' knowledge, attitudes, and skills, in the learning of those they teach, and in their institution. Evaluating a program effectively requires thorough understanding of the program's resources, stakeholders, activities, and desired outcomes. A Logic Model¹ is an effective tool for mapping these. Kirkpatrick's Four Levels² provide an excellent framework for creating a chain of evidence. The purpose of this workshop is to provide participants with these tools and the opportunity to practice applying them.

Objectives, Methods, Desired Outcome

<u>Objectives:</u> After this workshop, participants should be able to	<u>Methods:</u> Teaching/Learning Activities
Describe a logic model and how it can be used as a practical tool	· Didactic – Logic Model Template
Use logic model template to map out a program	· Example – Faculty Development Logic Model · Small Group – Developing Logic Model from Template
Use Kirkpatrick's Four Levels to identify program outcome measures	· Didactic, Examples – Kirkpatrick's Framework · Small Group – Applying It
Identify challenges and resources	· Large Group Discussion, Reference Materials

Desired outcome is that participants leave with literature-based program evaluation tools, practical experience applying them, and resources to apply them to programs at their own institutions.

References: ¹Armstrong EG (2007). An Outcomes Approach to Evaluate Professional Development Programmes for Medical Educators. *Annals Academy of Medicine* 36(8): 619-621.

²Kirkpatrick DL & Kirkpatrick JD (2007). *Implementing the Four Levels: A Practical Guide for Effective Evaluation of Training Programs*. San Francisco, CA: Berrett-Koehler Publishing, Inc.

Summary: Evaluating program outcomes requires thorough understanding of resources, activities, and desired outcomes. A Logic Model is a tool for mapping these. Kirkpatrick's Four Levels provide a framework for developing evidence. This workshop is designed to provide these tools, opportunity to practice applying them, and examples from a faculty development program.