

First Prize

P57. OBJECTIVE STRUCTURED VIDEO EXAMINATIONS FOR TEACHING AND ASSESSING THE ACGME COMPETENCIES. Diane Brown, BS¹, Deborah Simpson, PhD¹, Nancy Havas, MD², Medical College of Wisconsin¹ & University of Wisconsin – Milwaukee Clinical Campus² D. Bragg, PhD, K. Denson, MD, S. Denson, MD, E. Duthie, MD, S. Gehl, MD, H. Harsch, MD, M. Heffron, PhD, R. Helm, MD, D. Kerwin, MD, J. Mitchell, MD, MS, M. Ziebert, MD, DDS, Medical College of Wisconsin

PURPOSE: Per the ACGME Outcomes Project, residency programs must demonstrate competency-based curriculums and associated evaluation strategies to assess resident's performance using multiple measures including simulations. However, limited information is available regarding competency based, simulations for teaching and/or assessment. Objective structured video examinations (OSVEs) may be a cost-effective alternative.

METHODOLOGY: A multi-specialty (e.g., geriatrics, family medicine, psychiatry) development group met monthly (e.g., 4 hours) to develop OSVE teaching/assessment tools. Each tool was explicitly designed to address at least 2 ACGME competencies beyond medical knowledge and patient care and includes an Instructor's Guide, a Q & A sheet, a Scoring Key, and an accompanying video trigger. For example, one trigger shows Mrs. Tang, a 78 year old Japanese American female, who is in for a follow-up post hip surgery clinic visit and her records are missing. Residents are asked questions about: (1) how to access records in a short period of time; and (2) exercise. Completed tools were piloted in a variety setting (e.g., rounds, morning report, noon conference).

SUMMARY OF RESULTS: Faculty (N=8) volunteered and piloted the tools to 50 participants (40 residents; 10 medical students) during a 4-week period. Faculty evaluation of the tools was uniformly positive, with one faculty reporting that the tools were "an awesome discussion generator." When asked if the assessment tools were understandable and easy to use, 77% of faculty responded "yes, definitely" and that tool Q and A's were "important and competency-specific" (88%). Upon completion of the pilot, the average time required to administer/score each tool was ≤ 25 minutes with 100% in agreement that they would use the tools within their programs. Residents who were involved in the pilot felt the tools were "an excellent way to learn".

CONCLUSIONS: OSVE tools provide faculty with practical, low-cost instructional resources for teaching and/or assessing the ACGME competencies.

Second Prize

P42. TEACHING TO THE COMPETENCIES: ONLINE VIDEO ON DEMAND SESSIONS.

Jean Hart, PhD, Andrew Thomas, MD, MBA, Erica Twersky Graduate Medical Education, OSUMC

PURPOSE: The ACGME competencies are often taught by observation and require the trainee to be cognizant of when these teaching moments occur. Ohio State GME Office has joined with the Ohio State Medical Association to provide online, video on-demand one-hour long programs that reinforce what is being taught in the patient setting and didactic curriculums. The online series began fall 2003, and currently twenty-two sessions, categorized by competency are available. All residents are required to view at least ten sessions during their training program. Previously, an in-person lecture model was in place. The move to an online format provides housestaff and programs opportunities to view programs, which enhance their training and meet their personal time commitments.

METHODOLOGY: All sessions are assessed for content, usefulness, speaker knowledge and method of presentation. Once a session is viewed, a five-question quiz on content and a six-question evaluation is required before credit is granted. Evaluations were compared between the online sessions and those presented in the in-person lecture model.

SUMMARY OF RESULTS: As of January 2005, 1,210 online evaluations were completed with an average score of 7.5 out of 10 for overall presentation quality.

CONCLUSIONS: The online format has provided a means to increase the number of available presentations annually. Programs use the online lecture series to supplement their current conferences and housestaff can view sessions that are relevant to them throughout their training. All programs are reviewed annually for relevance and all sessions will be updated or removed after three years. Sessions on "Sleep Deprivation" have been incorporated into many program's curriculum as an additional means to educate physicians regarding fatigue and understanding the duty hour requirements.

Third Place

P46. DEVELOPMENT OF A COMPETENCY-BASED VIDEO REVIEW CHECKLIST.

Karla Hemesath, PhD, Mark Gennis, MD & Anthony Otters, MD Department of Internal Medicine, University of Wisconsin Medical School, Milwaukee Clinical Campus and the Aurora Internal Medicine Residency program

PURPOSE: The purpose of this project was to develop a behavior-based video review checklist for use by the Internal Medicine Residency Competency committee members to assess resident performance in the competency areas of ambulatory patient care, communication skills, professionalism and medical knowledge in videotaped encounters. Existing, validated checklists are often limited in focus to psychosocial and communication skills and do not address behaviors in patient care and medical knowledge that we wish to assess.

METHODOLOGY: A list of behaviors that we wished to assess was generated from existing tools and clinical skill texts. They were compared with the communication skills curriculum offered to our PGY 1 residents to ensure they were congruent. This list was circulated to the program faculty and competency committee members for additions, modifications and deletions. After revisions were made, the tool was piloted in reviews of visits of graduated residents to identify areas of rater agreement and disagreement. The final version has been implemented in the competency committee reviews.

SUMMARY OF RESULTS: The 30 item checklist includes behaviors identified by the faculty as essential for an ambulatory visit and are referenced to specific competencies in patient care, medical knowledge, professionalism, and communication skills. Validation and reliability studies are being conducted, as the tool is used in reviews to provide performance feedback to our residents.

CONCLUSIONS: The checklist has been developed and is in use for a first round of resident tape reviews. The competency committee members have endorsed its use and we find that it assists in providing specific, behaviorally based feedback to residents on their performance in continuity clinic visits.

Honorable Mentions:

P40. TEACHING RESIDENTS ACGME COMPETENCIES: A CURRICULUM BASED ON CHRONIC ILLNESS CARE, PATIENT SAFETY, AND HEALTH ECONOMICS.

Voss JD, Plews-Ogan ML, Nadkarni M, Wolf A, May NB, Schorling JB. University of Virginia Health System, Charlottesville, VA

PURPOSE: One of the many challenges faced by US residency programs as they develop methods to teach the ACGME competencies is making the new topics relevant for learners who are focused on medical knowledge and patient care skill acquisition. As part of our internal medicine residents' ambulatory training, we are implementing a curriculum to address systems-based practice, practice based learning, interpersonal and communication skills, and professionalism. Our program is promising because it leverages areas of faculty expertise and interest – chronic illness care, clinical health economics, and patient safety. Residents have the opportunity to participate meaningfully in systems-based approaches to a range of clinically relevant problems.

METHODOLOGY: We have developed a comprehensive, cohesive 24-week curriculum (8 weeks per year over all three residency years) that addresses the four ACGME competencies by integrating our past and current efforts in three areas: (1) chronic illness care for medically underserved patients; (2) patient safety in the ambulatory setting; and (3) clinical health economics. Learners develop competence in these areas by progressing through a series of 3-hour workshops, interactive activities (e.g., motivational interviewing role play and a diabetes self-care simulation), and exercises in which residents examine their own clinical practice. For example, all PGY-2s receive an overview of patient safety and then independently conduct a root cause analysis of an actual error reported to the clinic's Patient Safety Committee. They then present their findings to the Committee for discussion, determine an appropriate intervention and outcome measures, and evaluate its effectiveness.

SUMMARY OF RESULTS: Not applicable.

CONCLUSIONS: By focusing on systems-based solutions to real clinical problems, we are able to provide meaningful learning experiences for residents that address these competencies.

P7. NEUROLOGY TRAINING IN AN INTERNAL MEDICINE GRADUATE MEDICAL EDUCATION

PROGRAM: A SURVEY OF SUBJECTIVE KNOWLEDGE IN 13 COMMON NEUROLOGIC ENTITIES. J. Gonzales, MD, R. Bilynsky, MD, William Beaumont Army Medical Center, El Paso, TX

PURPOSE: The survey is intended to assess if the training in neurology in this GME program is enough to give interns and residents the confidence to evaluate and manage thirteen common neurological problems that occur on the general medicine service.

METHODOLOGY: Survey with eight questions on the neurological exam, nine acute problems and four problems common in hospital or ambulatory care. Survey taken in August, at the beginning of the year at all PGY levels as well as GME graduates (staff). A scale of 1 to 5 was used with 5 the highest score.

SUMMARY OF RESULTS: Most residents and staff scored 4 to 5 in the basic neurological exam. The basic Glasgow Coma Scale revealed 10/16 residents did not feel they could score a 5 on the scale, and 7/17 staff also did not feel they could score a 5. The GCS is used as a basic exam in our ICU. The ranges are wider in other neurological problems, notably in stroke, seizure evaluation and coma. T-test for mean comparisons for staff vs. resident was significant at the 0.05 significance level in delirium tremens, drug overdose, mental status change, stroke, myasthenia gravis, dementia, and neuropathy. In areas without a T-test significant difference, both the staff and residents had widespread scores with very few indicating subjective confidence of knowledge in patient evaluation and management. The Multivariate Analysis of Variance (MANOVA) showed a significant difference between the groups in drug overdose, stroke and neuropathy.

CONCLUSIONS: Internal Medicine residents need more education in the 13 common neurological problems evaluated.

P9. USING PORTFOLIOS TO DOCUMENT EXPERIENCE AND EVALUATE COMPETENCIES. Sally Raty, MD, Department of Anesthesiology, Baylor College of Medicine, Houston, TX

PURPOSE: To design and implement a portfolio system for effectively demonstrating learning, acquisition of crucial skills, and the progressive mastery of a subject for PGY-2 anesthesiology residents.

METHODOLOGY: We developed a portfolio system for our PGY-2 anesthesiology residents to document both their experiences and subject mastery. Faculty mentors attended a retreat to learn about the project and to design detailed guidelines to assist the residents in making meaningful portfolio entries. The guidelines describe the goals of the project, review the core competencies, and detail thirteen categories for entries (the retrospectoscope, lessons learned, simulator diary, airway mastery, practice standards, solutions to system's based problems, ethical practice, challenging patients, obstetrical anesthesia, pre-operative assessment, PACU, self-assessment, and Kudos). Category descriptions include "springboard" questions to assist the resident and a chart noting the competencies that could be demonstrated by an appropriate entry. The project was introduced to the residents during a one-hour presentation. Each resident received a binder and CD-ROM containing a description of the project, references about educational portfolios, the guidelines, and a faculty mentor assignment.

SUMMARY OF RESULTS: Residents have been keeping portfolios for 6 months and meet with faculty mentors monthly to review portfolio entries and discuss demonstrated progress. Residents report that portfolio entries are not significantly time-consuming, help them document experience and progress in a more meaningful way than case logs, and provide them with valuable faculty mentoring.

CONCLUSIONS: Though well known to the graphic arts community, portfolios are relative newcomers to medical education. Documentation of resident experiences and progressive subject mastery can be improved when residents keep a portfolio in which they choose the entries, reflect on personal experience, and receive feedback from a faculty mentor.

Judges Award

P16. USING THE ACGME COMPETENCIES AND CRITICAL INCIDENT METHODOLOGY TO IMPROVE CLINICAL TEACHING. Deborah Simpson, PhD, Jeffrey Morzinski, PhD, Medical College of Wisconsin. J. Charlson MD, L. Currey, MS, B. Damitz MD, J. Degroat MD, L. DeMattia MD, K. Denson MD, S. Denson MD, T. Drewniak PhD, K. Hulbert MD, T. Humbert MD, S. Jacob MD, J. Jevtic MD, G. Lamb, MD, Karen Marcdante, MD, L. Marr MD, C. McLaughlin, L. Meurer, MD, MPH, T. Ottow, R. Rademacher MD, K. Pfeiffer MD, M. Weisgerber MD, M. Ziebert MD, DDS, Medical College of Wisconsin

PURPOSE: In today's complex medical practice environment, physician educators are responding to demands for increased clinical productivity, challenges associated with the recent 80/30 duty hour limitation, and the ACGME competencies. The mandate for competency-based teaching presents a unique opportunity for faculty development (FD) to both improve teaching and meet ACGME requirements.

METHODOLOGY: As part of a longitudinal FD course on teaching, 20 physician educators from medicine, family medicine and pediatrics completed a weekly "Critical Teaching Incident" e-report. Each incident report contained a brief description of the teaching situation, the emotional response evoked in the teacher (e.g., anger, elation, frustration), the intended teaching objectives (framed specific to the ACGME objectives), the teacher-learner interaction, and a critical analysis of interaction. As patient care, medical knowledge, PBL&I, and communication skills were more commonly addressed, the incidents focused on the competencies of professionalism and systems-based-practice. These incidents were then discussed with colleagues and experienced teachers during face-to-face sessions. Subsequently, each participant selected one incident to expand into a written case study that was informed by readings, structured interviews with expert clinical teachers and written responses from program participants and instructors. Cases titles reflect the array of topics addressed and included "Overuse of Lab Tests", "The Superficial Case Presentation", and "Down in the Dumps: Turfing Frequent Fliers".

SUMMARY OF RESULTS: Participants' retrospective pre-post evaluations of their ability to effectively incorporate ACGME competencies into their teaching showed a significant change ($p < .001$) from 2.3 to 4.9 on a 6 point scale (6=exceptional experience/knowledge). Pre-post clinical teaching effectiveness ratings also significantly improved ($p < .001$) from 2.1 to 4.4. Participants written comments reflect strong enthusiasm for the critical incident approach as a method promote structured and constructive dialogue about teaching.

CONCLUSIONS: Critical incidents are an effective FD strategy to improve clinical teaching and to explicitly address the ACGME competencies.

