

Medical Education Digest



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Med Ed Digest Celebrates 10th Anniversary

The *Medical Education Digest* has completed 10 years of uninterrupted publication. Every other month as many as 15 different publications are reviewed and articles reporting on research and programs that are relevant to the continuum of medical education are selected and designed for the busy medical educator. Like other aspects of medicine and science, the discipline of medical education is quite dynamic. New approaches designed to improve the way future physicians and other health professionals are trained are constantly being introduced, and many become the new way that education/training is provided. The *Medical Education Digest* looks forward to continuing to serve those who are responsible for the training of physicians of the 21st century.

Scientific Writing Skills Workshop for Academic Physicians

The Department of Scientific Publications at the University of Texas M.D. Anderson Cancer Center provided a workshop in scientific writing for faculty and biomedical researchers. The program is especially relevant for faculty, researchers, and trainees for whom English is not their first language, but as one workshop participant indicated, writing manuscripts is something for which academics are poorly prepared. The 18-contact-hour workshop was titled "Writing and Publishing Scientific Articles." The workshop's objectives included

- preliminary steps
- writing the introduction
- ethical issues in scientific publishing
- writing the methods and results section
- navigating the peer-review process
- writing the discussion section
- writing the abstract
- writing an effective title
- cohesion and clarity



Only those who are ready to begin or have begun writing a manuscript are accepted into the program. A fair amount of time is devoted to working on actual manuscripts to ensure that participants are not sitting idly while others are writing. In this way, what is learned is applied immediately. The interaction of participants proved to be valuable since they discovered better ways to convey ideas to each other.

(Cameron C, Deming S, Notozn B, Cantor S, Brgio K, Pagel W. Scientific writing training for academic physicians of diverse language backgrounds. *Academic Medicine*. 84:505-510;2009.)

"Medical Education Highlights for Primary Health Care"

Elder Abuse Education in Residency Training



In many primary care residency programs, elder abuse is not an area of high priority. Yet it is reported that between one- and two-million older adults are victims of elder abuse each year in the United States, with 84 percent of cases not being reported. A survey was performed in Michigan that included ACGME-accredited residencies to determine the extent of elder abuse education in these programs, attitudes by program directors about its importance, and the state of available elder abuse experiences or materials in the residency. The survey revealed that topics on elder abuse in primary care residencies included

- definition of elder abuse
- physical presentation of elder abuse
- risk factors for elder abuse
- screening instruments for elder abuse
- Area Agency on Aging contact information
- mandatory reporting laws for abuse
- ethics of reporting abuse
- social service support
- mental health intervention
- epidemiology of abuse

It was found that more than two thirds of the residency programs indicated that Adult Protective Services does not effectively follow-up with reported abuse. With an elderly population that is continually growing, it is recommended that more effective means to identify and address abuse be mandated.

(Wagenaar DB, Rosenbaum R, Page C, Herman S. Elder abuse education in residency programs: how well are we doing? Academic Medicine. 84:611-618;2009.)

A Look at the One-Minute Preceptor Teaching Script



In an office with a busy schedule, it is a challenge to also teach students. At the same time, the clinician feels a responsibility to determine the educational needs of students, organize information, teach skills and concepts, stimulate critical thinking, and then give feedback to the learner. A Johns Hopkins University medical school geriatrician suggests the use of a teaching script that is used during a preceptor-learner interaction.

This is designed to allow the clinician-teacher to focus on the needs of the patient while doing the same for the learner and not having to think very much about teaching. The script is called the One-Minute Preceptor (OMP). The OMP involves five steps to be followed by the clinician-preceptor:

- obtain a summary from the learner about his/her interpretation of what is happening with the patient
- ask the student what reasoning process he/she used
- help the student organize learning content
- provide the student with feedback
- identify and correct mistakes the student may have made

In addition, at the beginning of each meeting with students, identify one or two learning objectives, and within the time the clinician spends with them, look for opportunities for the students to achieve those objectives. Also orient the students to each patient they will be seeing and indicate the question they need to address before they look at the chart. Avoid difficult patients with a novice, reserving them for more advanced learners.

(Durso SC. When less is more: the one-minute preceptor. Johns Hopkins Advanced Studies in Medicine. 6:42-43;2006.)

Blueprinting: A Technique to Guide Course Creation and Evaluation

The University of Calgary medical school curriculum employed a blueprint process to primarily validate evaluation content and select learning experiences. The course blueprint included a number of steps:

- define and tabulate the curriculum content
- delineate priorities to provide relative weight of curricular content
- solicit input from learners, previous learners, teachers, and course chairs
- choose the total number of evaluation items and allocate a number of items to content areas
- decide on the variety of tasks that can be evaluated such as diagnosing, interpreting, management, prevention, and basic science knowledge
- ensure that the summative and formative evaluation conforms to the blueprint
- create an item bank
- reflect on learning objectives and revise them if necessary
- revise learning experiences so that more time is devoted to content areas more highly weighted
- monitor and evaluate content validity
- distribute the blueprint to teachers so they can plan learning experiences meeting the objectives and evaluation

A blueprint that is well-constructed and reliable can improve teaching and learning as well as course design and evaluation.

(Coderre S, Woloschuk W, McLaughlin K. Twelve tips for blueprinting. Medical Teacher. 31:359-361;2009.)

2008 D.O. Schools Entering Class Data

In 2008, there were 4,575 first-time matriculants to the 24 osteopathic medical schools and 3 branch campuses that applied through the use of the American Association of Colleges of Osteopathic Medicine Application Service (AACOMAS). This was a 21 percent increase since 2006 when 3,781 AACOMAS applicants matriculated—an almost 9 percent increase since 2007. While in 2007 about 50 percent of all matriculants were female, in 2008 there were 47 percent female enrollees.

MCAT scores also continue to rise among those who enrolled in osteopathic medical institutions. The mean cumulative MCAT score for 2007 was 25.11 while in 2008 it was 26.11. For the last three years, scores in every component of the MCAT also increased. Verbal scores in 2006 increased from 8.38 to 8.59 in 2008. In physical science, the increase from 2006 to 2008 was from 8.22 to 8.40. Science scores in 2006 were 8.69 and 9.11 in 2008. Non-science grade-point averages of AACOMAS matriculants also continued to increase with the GPA in the same time period, going from 3.34 to 3.57. The cumulative GPA of AACOMAS matriculants increased from 3.36 in 2006 to 3.46 in 2008.

(Profiling the 2008 entering class of osteopathic medical students. Inside OME. American Association of Colleges of Medicine. 3: Number 4; April 2009.)

Evidence-Based Office Teaching Model

Many family physicians have learned the five-step microskills learner-centered ambulatory teaching encounter model. However, many still do not realize its benefits. This model provides a specific sequence of questions designed to maximize the teaching encounter. The first of these queries is for the preceptor to ask an open-ended question that encourages the learner to commit to at least one aspect of the assessment and management of the patient. After that, the second microskill is for the teacher to use direct questions to bring out and evaluate the learner's knowledge base and clinical reasoning skills. Reports in the literature are identified that provide evidence for the efficacy of the five-step microskill model. In addition, the literature indicates that the microskills model will likely increase the efficacy and effectiveness of ambulatory teaching. This is because it does not prolong the teaching process and provides preceptors with more confidence in evaluating learners. Furthermore, it encourages more feedback from the preceptor as well as motivates students and makes them more active learners.

(Huang W. Evidence-based office teaching: the five-step microskills model of clinical teaching. Family Medicine. 38(3):164-167;2009.)

Disagreement by New Physicians on What Procedures Are Essential to Know

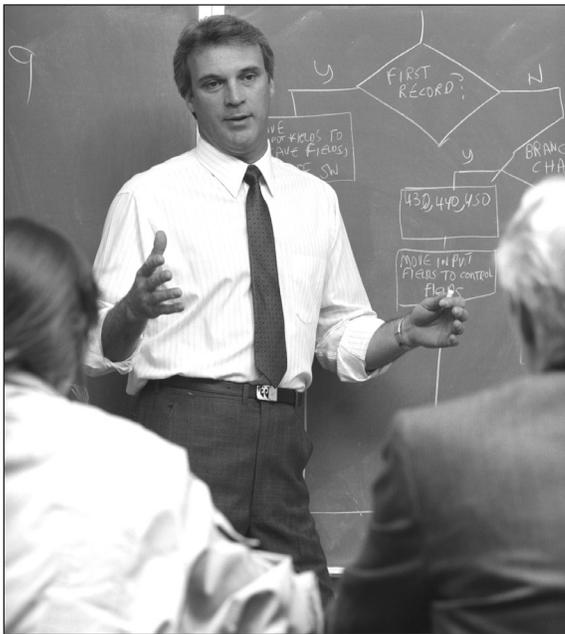
A study conducted at Wake Forest University School of Medicine revealed there is a disagreement between medical school faculty members and physicians who just completed their internship in what procedures are essential before commencing internship. A survey was returned by 39 faculty physicians and 129 new physicians. Fourteen of 31 clinical procedures identified were classified as “must know” by medical school faculty, whereas only 6 of these were so classified by the new physicians.

In addition, the new physicians identified five other procedures they thought were important. Those procedures the new physicians did not feel were important to learn prior to internship included arterial blood gas, phlebotomy, female Foley, IV placement, ECG procurement, oral and nasal airways, nasogastric tube, and throat culture.

However, they felt they should have learned lumbar punctures, doing an incision and drainage of an abscess, an arterial line, intubation, and a central line. From this study, which has limitations because it was done in a single hospital, it appears that new physicians do not agree with faculty members about what procedures are essential before they enter an internship.

(Fitch MT, Kearns S, Manthey DE. Faculty physicians and new physicians disagree about which procedures are essential to learn in medical school. Medical Teacher. 31:379-384;2009.)

Role of Pharmaceutical Companies in CME



Continuing medical education (CME) activities focus on treatment rather than specific products, while pharmaceutical education focuses on a single product. If faculty members are supported by commercial organizations such as pharmaceutical companies, their relationship with those companies must be disclosed and handouts must be reviewed by the CME provider to make sure promotional messages are not inserted into educational materials.

To avoid misperceptions, speakers should be counseled to use generic names during their presentations and to cite all evidence upon which their recommendations are based. Session attendees should ask themselves if the speaker focused on one agent, device, or procedure when others exist. In addition, it also should be asked if the speaker provided a balanced presentation of the benefits and adverse effects of treatment modalities. Another question is whether the speaker used trade names when it was feasible to use a generic name. Finally, were recommendations made based on accepted scientific evidence? In its 2008 *Annual and Summer Meetings* publication, the American Academy of Dermatology reported that 15 percent or more of attendees indicated there was commercial bias.

(Nelson R. Education vs. promotion: what's the difference? Dermatology World. 26; November 2009.)



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