538 September 2007 Family Medicine

Letters to the Editor

Letters to the Editor Section

Editor's Note: We are sad to report the death of Karl Miller, MD, the editor of the Letters to the Editor Section. In the interim until a new editor is appointed, please send letters to the editor to **bdweiss@u.arizona.edu** or to Barry D. Weiss, MD, University of Arizona, Department of Family and Community Medicine, 1450 North Cherry, Tucson, AZ 85719. 520-626-6975. Fax: 520-626-4064. Electronic submissions (e-mail or on disk) are preferred. We publish Letters to the Editor under three categories: "In Response" (letters in response to recently published articles), "New Research" (letters reporting original research), or "Comment" (comments from readers).

In Response

What Should Residents Know About Hypertension?

To the Editor:

We read with interest the article by Lee et al¹ in the April 2007 issue of *Family Medicine*, and we congratulate the authors on the use of a creative methodology to assess the content of our Self-assessment Module (SAM) on Hypertension. For the most part, their findings provide independent, external validation of the methodology that we have utilized to create the SAMs.

The SAMs were designed as tools to help family physicians assess their knowledge of the current state of the art in managing diseases or conditions deemed to be of the highest priority by the Institute of Medicine (IOM). Eventually, we will have developed SAMs for each of the 20 areas detailed in the IOM's recently released report, "Priority Areas for National Action: Transforming Health Care Quality."

We would agree with the authors that "determining competencies, by working backward from a self-assessment process, is not ideal." Therefore, a knowledge development team (KDT) of family physicians and content experts is created

for each SAM to develop the core competencies that will drive the generation of questions for the knowledge assessment component of the module. It is important to note that family physicians are provided feedback for each of these competencies and must achieve a score of 80% to successfully master each competency.

After questions are generated by each member of the KDT, they are reviewed by an independent expert for content and accuracy and then peer reviewed by the entire KDT for content, accuracy, and clinical relevancy. As a result of this process, questions are kept, discarded, or revised for review again by the KDT. This processed group of questions then undergoes a final peer-review process by our Examination Committee, with particular emphasis placed on assessing the clinical relevancy of each question. Given this process, we were somewhat surprised with the authors' finding "that about 30% of the content involved information irrelevant to or seldom used by family physicians."

Relevance, like beauty, is frequently in the eyes of the beholder. Nicholas Pisacano, MD, used to quip that "When a family physician complains about the relevance of a question, that is usually code for 'I don't know the answer!" However,

in this study, the definition was much more precise. The coders independently determined relevance for the diagnostic knowledge questions by deciding "whether the question addressed a clinical issue that is either frequent or uncommon in typical family practice."

We might argue that using this classification methodology is less than ideal. Some uncommon conditions are relevant for the family physician to know. For example, meningococcemia is an infrequent disease seen by family physicians, but failing to recognize its clinical features and rapidly initiating therapy can have disastrous consequences.

That point notwithstanding, we have difficulty reaching the same 30% figure that the authors cite in their discussion section. Since the diagnosis category contained 31 of the 213 items, and 58.1% or 18 items were uncommon (from Table 2), that would imply that 18 of 213 items or 8.5% of the all items were irrelevant. Even if one were to apply the same methodology to the therapy questions, 15 items in that category were found to focus on uncommon issues, and therefore a total of 33 of 213 or 15.5% of all of the items would be categorized as irrelevant. Further clarification of how this figure was obtained would be helpful.

Letters to the Editor Vol. 39, No. 8 539

We wish to applaud the authors for their rigorous evaluation of the content of the SAM. We strongly believe that all of our assessment tools must be continuously scrutinized to ensure their validity.

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REFERENCE

 Lee AL, Gordon AE, Shaughnessy AF. What should physicians know about hypertension? The implicit knowledge requirements in the maintenance of certification self-assessment module. Fam Med 2007;39(4):280-3.

More on the Hypertension Article

To the Editor:

I appreciate the interest and analysis by Lee et al¹ in the April 2007 issue of *Family Medicine*. We at the American Board of Family Medicine (ABFM) believe that Maintenance of Certification for Family Physicians (MC-FP) should be continuously evaluated and refined; we welcome feedback and suggestions on our components to continuously improve the process, and we will carefully consider the information provided in the analysis.

Whereas the certification/recertification exam is designed to assess "the baseline level of knowledge necessary to be board certified in family medicine," the role of the self-assessment modules (SAMs) is to promote and demonstrate lifelong learning. SAMs are designed to provide the diplomate with a baseline self-assessment of current knowledge and evidence, provide feedback on the "knowledge gaps," engage diplomates in a self-directed learning activity based on their specific gaps, and reassess their learning to a predefined threshold of knowledge mastery. The Clinical Simulations then provide the

opportunity to "practice" applying the knowledge.

We agree with the authors that prospective determination of competencies is preferable to "backing into them." I would differ, however, with the statement that the skills and knowledge in the SAMS are not predefined. Our self-assessment development process starts with knowledge teams (predominantly family physicians) defining the key competencies believed to be important for family physicians in each topic area. These competencies are outlined in the learning objectives of each module. Questions are then developed in each competency/objective area; levels of internal review now include an assessment to help align questions with these predetermined objectives. We would welcome independent analysis of the concordance of SAM questions to these predefined objectives.

I was also surprised to see the "30% irrelevant" figure. We ask diplomates to rate the degree that each SAM module meets each specific learning objective. Diplomates predominantly rate the success of the SAM in meeting each objective 5 or 6 on a 6-point Likert scale (6 being the highest); they similarly rate the overall relevance of the modules as 5 or 6. Further, more than 55% of our diplomates selfreport the intent to implement new learnings in practice as a result of completing the SAM modules. Nonetheless, we appreciate that different analytic methods may lead to different conclusions. We find analyses such as that by Lee et al quite thought provoking and would appreciate more detail on the questions felt to lack relevance, so we can consider those comments in conjunction with our other data to continuously improve our process. We could then feed this data back to knowledge teams, along with the other evaluation data and diplomate comments we currently review,

since we continuously evaluate and evolve the modules.

I wholeheartly concur with Lee et al that creation of a (predefined) specific set of competencies would help align family medicine residency training and MC-FP. Along with other members of the family of family medicine, we look forward to being part of the conversation. David W. Price, MD American Board of Family Medicine Lexington, Ky

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 Lee AL, Gordon AE, Shaughnessy AF. What should physicians know about hypertension? The implicit knowledge requirements in the maintenance of certification self-assessment module. Fam Med 2007;39(4):280-3.

Authors' Reply:

We thank the representatives of the American Board of Family Medicine (ABFM) for their interest in our research and for their explanations of the process used for developing the self-assessment modules. We feel the modules are innovative and a huge step forward in encouraging and facilitating continuous professional development of family physicians.

We echo the concern expressed by Dr Puffer and colleagues and Dr Price regarding the high number of questions deemed to be irrelevant by our analysis. The difficulty calculating the figure of 30% from the data we presented occurs because we used, as the denominator, the number of questions containing at least one irrelevant item and not the total number of items. This approach made more sense to us for this aspect of the analysis.

We can think of two reasons why our findings regarding relevance differ from the experience of the ABFM. First, the methodology we used, content analysis, requires several iterations using different data sets. These sets should include relevant and irrelevant items, and the evaluators practice using different data sets until their agreement is 540 September 2007 Family Medicine

nearly 100%. This formal process will produce more accurate results using just two trained evaluators as compared with using many untrained evaluators.

Second, both evaluators are highly trained in the concepts of information mastery¹ and may have defined relevance differently than untrained evaluators. The concept of relevance in the information mastery framework is different than "nice to know" or "interesting," which may be the definitions used by casual evaluators. For example, knowing that renal hypertension due to fibromuscular dysplasia is not a cause of isolated systolic hypertension in children (question 14) may be interesting but is not relevant to the practice of most family physicians.

We encourage the ABFM to make the key competencies mentioned by Dr Price available to residencies interested in developing a competency-based approach. It was our desire to develop such competencies that led us to conduct this project.

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REFERENCES

 Slawson DC, Shaughnessy AF, Bennett JH. Becoming a medical information master: feeling good about *not* knowing everything. J Fam Pract 1994;38:505-13.

New Research

AHLTA: Teaching Medical Students Without Falling Behind (or, Another Take on the Five Microskills of Precepting)

To the Editor:

There are many strategies that clinicians use to promote medical student education in the outpatient setting. One of the most commonly used is a model called the 1-minute preceptor. This model emphasizes five specific microskills of precepting.¹ These skills are:² (1) Get a commitment from the learner. What is the diagnosis? (2) Probe for supporting data. What leads you to your conclusion? (3) Point out strengths. What did the learner do well? (4) Correct errors. What does the learner need to improve? (5) Teach a general principle. What does this case illustrate?

This model has been shown to increase teaching skill³ and increase student confidence.⁴ It is not, however, the only model available for preceptors to use. Some people, it appears, are "born to teach." In a cohort of such people, one study found some individuals to be more efficient in their clinical practices working with students than without them.⁵ For these clinical teachers, students did not slow them down or significantly alter their work flow.

The military health system (MHS) is a unique medical enterprise. It is similar to other large managed care organizations. We have similar productivity metrics, and we have a universal electronic medical record called AHLTA. Given the realities and business constraints of modern medicine, how can physicians efficiently teach students without going crazy or falling interminably behind? Here is another AHLTA strategy that provides a system-based alternative to the 1-minute preceptor.

AHLTA: Efficient Student Precepting Skills

A: Advanced Planning

Look at your patient roster before clinic. Scan your scheduled patients and plan who the student should see. A reasonable strategy is to have the student see every second or third patient. If you know the patient, give the student some background information about the patient. This will save them some time and facilitate information sharing. Before the student sees the patient, tell the student your specific expectations of what they should bring back to you from the encounter.

H: Hands-on Help

The traditional teaching strategy is that students visit with patients, take a history, and perform a physical examination. They then present their findings to you, and you both go back to the exam room to finalize the encounter. Typically, students present subjective and objective data and then pause to await your instructions. Without directly observing student behaviors, it is difficult to evaluate them on anything but oral case presentation skills. Make it a point, therefore, to directly observe at least one patient history and one patient physical examination for each student during each clinic. This is tough to do without adequate advanced planning.

L: Listen

Most of us interrupt student presentations too early. Students naturally pause after their case presentation. Avoid the temptation to rush in with an assessment and plan. Allow students to speak and articulate their medical decision making. Listen to the presentation first, then explore areas that merit redirection.

T: Teach

Make sure that each patient encounter has at least one take-away teaching point. Ask students "Tell me one thing you learned from this patient encounter." If students appear to be struggling with a particular concept, give them a brief homework assignment and have them follow up with you the next day. Hold them accountable for self-directed learning.

A: Accountability

There are many ways to hold students accountable. Require students to document each encounter,