

We will try to publish authors' responses in the same edition with readers' comments. Time constraints might prevent this in some cases. The problem is compounded in a bimonthly journal where continuity of comment and redress are difficult to achieve. When the redress appears 2 months after the comment, 4 months will have passed since the original article was published. Therefore, we would suggest to our readers that their correspondence about published papers be submitted as soon as possible after the article appears.

## Value of Review of Systems

*To the Editor:* I agree that it is important to study history taking, including the review of systems. In fact, while I was in medical school, 2 of my fellow students and I completed a research project on the review of systems. In contrast to Verdon and Siemens,<sup>1</sup> we looked at the yield of general questions (short version with 39 questions) versus specific questions (an oral long version and the written Cornell Medical Index, which was nearly 200 questions). Thus, we compared, "Have you had any trouble with your chest?" with a series of specific questions such as, "Have you had chest pain or pressure?" We found that the general questionnaire picked up many of the important items with a shorter completion time with some exceptions. For example, patients did not apparently perceive rectal bleeding as important and would not mention it in response to a general question.

Although we never submitted our paper for publication (but I got a "pass" for that research elective!), my experience with the research and my use of the review of systems in practice led me to some reflections on Verdon and Siemens' paper. First, their results highlight one of the shortcomings of review of system questionnaires: malpractice liability because a symptom is noted in the record but unaddressed. For example, there was no documentation for follow-up of a substantial number of cases, including something as potentially serious as rectal bleeding. If we are going to ask, we need to be ready to address the answer. Second, their patient population is young and their review of systems questionnaire is shorter than any I have ever used, which might affect its usefulness and generalizability.

Thus, I would take issue with concluding "there would be few life-threatening consequences from eliminating the ROS section from a self-administered questionnaire" (page 27). I suspect more work is needed with different questions in different populations to come to this conclusion. It could be that there are a few well-chosen questions, such as regarding rectal bleeding in an older population, that would have high yield. For example, a recent report<sup>2</sup> found that serious disease (including 13 cancers) was present in 24 percent of 297 middle-aged men who responded posi-

tively to the rectal bleeding question in a short review of systems questionnaire. We need to continue our search for the right, high-yield questions.

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## References

1. Verdon ME, Siemens K. Yield of review of systems in a self-administered questionnaire. *J Am Board Fam Pract* 1997; 10:20-7.
2. Helfand M, Marton KI, Zimmer-Gembeck MJ, Sox HC Jr. History of visible rectal bleeding in a primary care population: Initial assessment and 10-year follow-up. *JAMA* 1997; 277:44-8.

The above letter was referred to an author of the article in question, who offers the following reply.

*To the Editor:* Dr. Bowman's comments raise an important issue. The yield of any review of systems might depend on the population studied. One approach to the review of systems might be to tailor the questions based on age and other demographics. More published research is needed in a variety of settings to further our information on this subject. The results would help determine whether there is an ideal set of questions and with whom and when it should be used. Screening is a science, and we are just beginning the study of this commonly used tool.

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## Pneumococcal Vaccination

*To the Editor:* Elangovan et al investigated an important issue in "Improving Pneumococcal Vaccination Rates in an Elderly Population by Patient Education in an Outpatient Clinic."<sup>1</sup> The article title is a bit misleading, however, in that there was more than just patient education being studied.

It is unclear from the methodology whether the physicians were in any way blinded: that a study of vaccination is being performed will obviously enhance compliance with such, regardless of the intervention (Hawthorne effect).<sup>2</sup>

Another aspect of the intervention involved the research nurse flagging the charts: there is no control arm of the study to separate the impact of chart flagging from patient education. This oversight is important in that other investigators have found no effect of patient education on compliance,<sup>3</sup> but checklists have been shown to improve vaccination rates significantly.<sup>4,5</sup> Consequently, the reader cannot tell whether the results of the study might be due entirely to the flagging of the charts.

This criticism should not detract from the excellent compliance rates achieved in the study population, nor