We 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 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.

Diagnosis of Bacterial Sinusitis

To the Editor: I would like to comment on the article written by Drs. Little, Mann, and Godbout regarding acute sinusitis (Little DR, Mann BL, Godbout CJ. How family physicians distinguish acute sinusitis from upper respiratory tract infection: a retrospective analysis. J Am Board Fam Pract 2000;13:101–6). This article is well written, but I believe it is typical of the bias that is now present in our literature and unfortunately does not help clarify a difficult antibiotic-prescribing problem.

First, sinusitis is a location diagnosis, not an etiologic diagnosis, and therefore must be clearly differentiated from acute viral sinusitis, acute bacterial sinusitis, and acute allergic sinusitis. Many of today's articles and certainly the public seem to equate the terms sinusitis, bronchitis, pneumonia, and several other location descriptions with the assumption of bacterial illness, which is certainly not the case.

Second, there is unavoidable bias in retrospective analysis. The pressures of reimbursement coding and the scrutiny of peer review encourage physicians to label and document to justify treatment decisions. Thus, if I am going to diagnose a bacterial infection, I will dictate the salient features that will support my diagnosis. I also have a strong tendency to code the "—itis" diagnosis when the infection is bacterial and the upper respiratory tract diagnosis when the illness is viral. As a case in point, I was recently audited by my local health maintenance organization on antibiotic use in bronchitis and was found to be too high in my prescribing. For many years I have been extremely conservative with antibiotics, and as a result, I have had to deal with several unhappy patients. The problem was that I coded bronchitis when a patient was sick more than 10 days and coughing, whereas I coded upper respiratory infection for a patient who was sick only a few days and coughing.

I do not know how to get a uniform description of what constitutes viral vs bacteria symptoms and signs, but I do believe our literature must not only be very clear in the usage of terminology but must also concentrate on well-controlled prospective evaluations and forget retrospective reviews.

Howard Weinberg, MD
Virginia Beach, Va

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

To the Editor: Thank you for the opportunity to respond to Dr. Weinberg's comments concerning our article on the diagnosis of acute bacterial sinusitis.[1] I appreciate his interest in the article, his perspectives on the challenge of diagnosing this condition, and his recognition of the difficulties inherent in studying physician practice patterns in this area.

Dr. Weinberg points out the possibility of sinusitis representing imprecise language being used to imply an acute bacterial infection when there might be other causative factors. This assertion is consistent with the recent Evidence Report issued by the Agency for Health Care Research and Quality (AHRQ).[2] The AHRQ report uses the more precise term "acute bacterial rhinosinusitis." One of the objectives of our study, however, was to examine physicians' use of the diagnostic terminology in this context. Our finding that 98.4% of patients with a diagnosis of sinusitis received antibiotic therapy indicates that the physicians studied do indeed apply this term to cases of suspected bacterial infection.

Dr. Weinberg also raises the issue of the limitations of retrospective analysis in studying clinical issues. Our article acknowledged these limitations as well. The purpose of this study, however, was to examine physician practice patterns. Any other methodology would introduce an obvious observation bias, as physicians can behave differently in situations where they are being observed. This limitation is far greater to understanding clinical decision making. Dr. Weinberg's experience with the diagnosis of bronchitis illustrates that point very clearly. This anecdote is only partially relevant to our study, because the benefits of antibiotic therapy for bronchitis are much less convincing than for sinusitis.[3] But as Dr. Weinberg describes, his practice is to establish a clinical diagnosis, then record the observations that he considers most pertinent to justify the diagnosis and management plans. This is precisely the rationale we used in designing our methodology—that physicians record the details of the illness they consider most pertinent in determining the diagnosis. This illustration confirms our methodology and reinforces the validity of our findings about physician practice patterns.

In summary, both our data and the anecdote provided by Dr. Weinberg reinforce the idea that the clinical diagnosis of respiratory infections is influenced by physician practice patterns. As a result, these patterns need to be examined. We share Dr. Weinberg's concern about the limitations of the retrospective methodology, and we have also approached this question using a simulated case history.[4] Prospective evaluations of physician practices