

Secondly, while we recognize the complexity of comorbid illnesses and the vast spectrum of pathology encountered in emergency medicine, many patients we see present challenges for which compelling research evidence exists.

Third, preliminary knowledge translation research suggests that the attitudinal barriers highlighted by Dr. Wears are relevant to only a small number of contexts and clinicians. The evidence on clinical practice guidelines indicates that clinicians report high satisfaction with these efforts, believe in their ability to improve quality of care, and are primarily concerned with issues of practicality.<sup>6</sup>

Fourth, we recognize that there is a great deal to learn about the barriers and effective facilitators of evidence implementation in emergency medicine. The need for scientifically derived insight into these micro and macro-level questions defined the mission of the Consensus Conference initiative.<sup>7</sup>

Fifth, we concur with Dr. Wears that some of the efforts to implement clinical policy have been unidirectional and counterproductive. An important recommendation emerging from the consensus conference was to reinforce the importance of multistakeholder involvement in the creation of health policy and research initiatives designed to improve patient care. Moreover, the term “knowledge translation” (unlike the old term “knowledge dissemination”) implies a bidirectional flow of information in order to maximize patient care through a collaborative approach which engages researchers, clinicians, and policymakers as equal partners in the process. Knowledge translation seeks to avoid the ivory tower abhorred by Dr. Wears by encouraging a constructive dialogue with all of the relevant players. This bidirectional exchange, when it can be achieved, should substantially allay these concerns.<sup>8</sup>

Finally, we submit that ignoring the integration of high quality research into practice is at variance with professionalism and with the ethics of patient-centered care.

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doi:10.1016/j.annemergmed.2007.12.032

**Funding and support:** By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article, that might create any potential conflict of interest. The author has stated that no such relationships exist. See the Manuscript Submission Agreement in this issue for examples of specific conflicts covered by this statement

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### **Appendix. Emergency Care Knowledge Translation Working Group.**

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\*Dr. Wyer did not participate in the editorial review or decision to publish this letter.

### **Making Change in the Emergency Department**

*To the Editor:*

Kudos to Robert L. Wears for “Lost in Translation,” his editorial commenting on why emergency clinicians are “resistant” to adopting many of the practice recommendations suggested by “evidence” and “guidelines.” It’s high time that somebody pointed out that the emperor has no clothes.

In a 25-year career as a department director and change agent in emergency medicine, I saw many wonderful advances in emergency medicine become reality: procedural sedation, ankle, knee and spine imaging criteria, proactive analgesia, and many more. I witnessed an equal number of witless time-consuming efforts that did nothing to advance patient care and eventually fell by the wayside: immediate steroids for spinal cord injury and blood cultures in the emergency department (ED) for pneumonia patients being admitted come to mind as 2

“mandates” that turned out to have defective science behind them.

Dr. Wears goes a long way toward explaining why patients are still getting opiates for migraine headaches, antibiotics for viral illnesses, and unnecessary imaging studies. A crucial factor is staff time. Patient education takes time, and conflict with patients takes a lot more time. A busy emergency physician or nurse has very limited time, and until we figure out how to do the patient education ahead of time, we will bump up against the constant need to balance the time needed to do things the old way and the time needed to talk the patient/family/tech/private doc into doing things a better way. And so we had better be sure it really is a better way, and the battles must be fought selectively.

The accompanying paper, on changing from nebulizers to spacers for treatment of children with asthma in the ED, is a perfect example. It turns out that Hospital A eventually achieved this change by having full-time respiratory therapy coverage in the ED. The cost analysis was confined to the equipment, with no mention of the hospital’s cost for the extra personnel. The thrust of the article was that maybe by taking into account all the various reasons why Hospital B didn’t make the change, they laboriously could succeed in doing it for equivalent results. Nobody asks whether this is a fight worth fighting in an environment where the timely treatment of heart attack victims is getting worse, not better, in our overburdened EDs.

I’m all for evidence-based medicine, but I’d like to see a healthy skepticism toward the latest sure-fire scientific advances, and a careful selection of change efforts emphasizing those that actually improve patient outcomes without demanding time emergency physicians and nurses don’t have.

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doi:10.1016/j.annemergmed.2008.01.340

*Funding and support:* By *Annals* policy, all authors are required to disclose any and all commercial, financial, and other relationships in any way related to the subject of this article, that might create any potential conflict of interest. The author has stated that no such relationships exist. See the Manuscript Submission Agreement in this issue for examples of specific conflicts covered by this statement.

*In reply:*

The Working Group doth protest too much, methinks<sup>1</sup> and the volume of their response confirms that academics who criticize the academy put themselves at risk.<sup>2</sup> However, I fear they have missed the main point.

The motivation for my comments was not to oppose scientific progress, or to yearn for a lost paternalism, or any of the other several assertions made, but rather a fairly simple observation: that knowledge translation seems to be more push

than pull, more the research community delivering its product than practitioners seeking it. As a social phenomenon, knowledge translation has been an activity of academics, not practitioners. One might think of it as a marketing effort for a product that we all agree has not been as successful in the marketplace as we had hoped. This situation suggests one (or more) of 3 possibilities: either the customers (clinicians in practice) have not heard our message; or, they have heard the message but have not been able to act on it due to a variety of barriers; or, the product isn’t very good—from the viewpoint of the customer and only the customer. Drs. Lang et al correctly point out that some very good work has been done addressing the first 2 possibilities<sup>3,4</sup> but the third issue has not been explored, because the product is assumed to be good if it meets the researchers’ standards. I think it would be more useful to address the third question from the viewpoint of the customer, and to do that we need to explore the differences between their perspectives. Dr O’Shaughnessy’s response plaintively addresses this gap between points of view.

The reason for the gap is that practitioners and researchers approach the same topic from different philosophical and scientific paradigms.<sup>5</sup> The dominant paradigm<sup>5</sup> of scientific activity held by researchers stems from positivism, and it clashes with the uncertain, pragmatic realities of clinical activity. The positivist perspective has led the research community to be devoted not to the production and distribution of fundamental knowledge in general, but rather to a particular view of knowledge that fosters selective inattention to practical competence and knowledge-in-action. Unfortunately, these types of practical but difficult-to-articulate activities are essential to professional practice, but are puzzling anomalies that do not fit the positivist paradigm, and thus are discounted if not discarded.<sup>6</sup> The problem is exacerbated by the tendency of the practice community to express itself in terms of intuition or “the art of medicine,” terms which tend to close off rather than open up discussion; and exacerbated again by the tendency of post-structural, non-positivist philosophies of science to stress the proliferation of meanings, the breaking down of existing hierarchies, the shortcomings of logic, and the failures of analytical approaches—elements that may strike modernist scientists as subversive or even destructive.<sup>7</sup> This is unfortunate, because a thoughtful discussion of the appropriate roles and potential values of the positivist versus the interpretivist paradigms in clinical work is, in my opinion, one of the most important intellectual issues in medicine today.<sup>8</sup> A post-structural research paradigm might narrow the gap in perspectives by leading to a philosophy of science focused more on practical results and their implications, grounded in the clinical workplace, and less on the generation of abstract meta-narratives serving to establish legitimacy.<sup>7</sup> That is, to research directed less at producing universal, abstract, conceptual truths, and more at local, timely knowledge of particular, concrete situations that can serve as reasonable guides for action for Dr O’Shaughnessy and her colleagues.<sup>2</sup>