clinical outcomes for all of the patients affected and whether results would be similar in groups of physicians that are less precisely targeted.

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Studies of changes in physicians' prescribing behaviour are necessary and important tools in the current financially constrained but quality-minded health care environment. Dr. Anderson and colleagues' look at the effectiveness of notification of high prescribing, with and without education, is basically a good study. However, although the authors indicate otherwise, I worry that the finding of no difference between the two test groups will be used to dismiss the value of education as a tool to change behaviour. The statistical power to find such a small observed difference between these two groups is extremely low, given the sample size (I estimate it to be less than 0.10). In fact, the power to detect a 100% difference between the groups is only about 0.70. Would anyone reasonably expect that the education program would be twice as effective as notification alone?

The timing of the invitation to attend the education course and of the pretest data collection may have contaminated the analysis. If the course was held on June 12, then the physicians needed to have been informed about it in May or earlier. In fact, Fig. 2 suggests that the physicians in the education plus notification group changed their behaviour before the actual intervention. When did the two test groups receive notice that they were high prescribers and were under scrutiny? This confusion could be corrected by including only the months before physicians actually knew about the intervention.

In some research jurisdictions it has become standard practice to expect power analyses during the design of the study. This is not just an attempt by nit-picking statisticians to make life hard for researchers; inadequate research may well lead to policy decisions. A decision not to run education programs because they appear to not work in this study would be a shame.

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The adage "older and smarter" does not seem to apply to the physicians who were examined in this study, since their mean age was 51. The thrust of this article was distasteful to this older reader, partly because I have experienced the distress associated with having prescribing privileges for regulated drugs cut off, and partly because of the unfair and disparaging comments concerning the physicians in the study group. And what about the plight of their affected patients?

Does not the use of judgemental words such as "violations" and phrases such as "excessive prescribing" display a degree of disdain of these physicians? Also, one is left with the implication that these physicians are creating drug dependence and addiction. Nowhere do the authors suggest that Melzack[1] may have a point in his claim that "morphine for true pain is not addictive," although the authors thoughtfully note that callous cessation of narcotics may — in rare instances — create a boondoggle.

This exercise could be seen as a form of warfare, with one side possessing all the firepower. It is clearly reported that three physicians chose to retire during the course of this study and that two lost their privileges to prescribe controlled drugs. One could have made an educated guess about the effect of this exercise on the prescribing propensities of the physicians who were to be placed into three groups.

This article assumes that reducing the amount of analgesia will hasten a patient's recovery. Alas, we see the opposite: people who were able to go about their business with the help of oxycodone and who can now no longer function at their optimum capacity and spend unproductive time lying in bed.

I have been concerned for some time about the restrictions placed on physicians and their patients. I hear all too often that people are suffering severe pain because they do not have access to adequate analgesia for either acute or chronic pain. Even some patients with cancer continue to be kept in a state of anxiety, wondering if and when they will receive their next ration of narcotics.

If more such studies are being contemplated, I suggest considering feedback from the patients affected by the interference in the prescribing of their physicians and from the physicians themselves.

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Reference

1. Melzack R: The tragedy of needless pain. *Sci Am* 1990; 262 (2): 27–33

[Two of the authors respond:]

Drs. Janet E. Hux and Michael Murray offer some important and helpful comments. Although several of their comments are addressed in the section of our article on study limitations, certain points merit further discussion.

With respect to prescriptions written for palliative care, Hux is correct in stating that the underuse