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*In Reply:*—We appreciate the concerns that are raised by Drs. Bailey and Egan in their letter. However, their primary contention, that the extra 3 min per case that are spent between the operating room (OR) and the postanesthesia care unit (PACU) would negate all savings in drugs costs, is fallacious. Their misconception is a common one (repeated in Dr. Riley's letter), so it merits a more complete explanation here. Only a partial explanation (because of limitations on length) can be found in the text of our article. Although it is true that the OR is an expensive environment, it is an expensive environment for a variety of reasons, including administration, cleaning, nursing labor, equipment, and so on. The behavior of most OR costs<sup>1</sup> is such that no actual savings are generated from such a small (3 min) change in operational efficiency. A simplified explanation of the way that hospital accounting systems routinely calculate OR costs/min is necessary to understand this. First, all expenditures are summed and put in the numerator, and all minutes of operation become the denominator. Shaving 3 min from each case does not change any cost that goes into figuring the numerator. Labor costs are unlikely to change, even in institutions who pay their nurses by the hour rather than by the shift. The 3 min added per case in our study, at most (see below) would simply increase the number of minutes (the denominator) used by the hospital accounting system and serve to decrease the cost/min for running the OR. Actual dollars spent would not change. The accounting criticism that Drs. Bailey and Egan (and Dr. Riley, see next letter) offer is not valid in the real world of hard currency.

Looking at this from another angle, if one were to approach any OR director and say, "I can cut three minutes off of each and every case if you simply hand me 1 million dollars," not a single OR manager in the United States would make that deal. That is because no real savings in dollars accrue to the institution; all that happens is the cost/min of running the OR would increase slightly to account for the fact that the same costs are spread out over fewer minutes of operation.

Further, we did not measure the actual turnover time between cases during this period. It is entirely conceivable that the extra couple of minutes that were required were not wasted by the OR nurses as they broke down their trays, and therefore no extension of operating room time occurred.

The same reasoning used in assessing the "costs" of a few added

minutes applies to the extra PACU admission. The extra 45 min/day of work, at a random interval, in exchange for 1 million dollars/yr savings, would be considered a good bargain. Patients recovering from MAC anesthesia, if they do need recovery room care, do not usually require the same close supervision as someone recovering from a long general anesthetic. The actual cost to the institution is negligible.

There are always physicians who respond strongly to any discussion of practice guidelines. Their concerns may be legitimate, or they may simply reflect a fear of doing things differently from what has been done in the past and which are viewed as "tried and true." In this case, Drs. Bailey and Egan suggest the superiority of certain narcotics. If it really made a difference what narcotic one chose, we would all choose the best one. We all have our patients' best interests at heart. The fortunate news (or unfortunate news if one is in the narcotic research business) is that it is not what drugs one administers but how one administers them that really makes a difference. We would welcome further outcome studies that would document the advantages of the more expensive drugs in a clinical setting. The differences between drugs seen in randomized, controlled studies cannot always be realized in the complex arena of perioperative patient flow.

We are well aware of the limitations of our study, although our conclusions are valid. The cost savings are real. The institution is better because of the efforts we have made. And our patients are just as safe.

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