ing an integrated monitoring system. Crit Care Med 2011; 39:65–72
4. Tarassenko L, Clifton DA, Pinsky MR, Hravnak MT, Woods JR, Watkinson PJ: Centile-based early warning scores derived from statistical distributions of vital signs. Resuscitation 2011; 82:1013–8
5. Taenzer AH, Pyke JB, McGrath SP, Blike GT: Impact of pulse oximetry surveillance on rescue events and intensive care unit transfers: A before-and-after concurrence study. ANESTHESIOLOGY 2010; 112:282–7

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In Reply:

We thank Watkinson and Tarassenko for the interest they have taken in our review on patient surveillance.[1]

We are in agreement that in their cited work, they tested mandated five-channel physiologic monitoring *versus* standard care,[2] and that extra monitoring with Biosign™ (OBS Medical Ltd., Abingdon, Oxon, United Kingdom) had no effect on adverse event rates or mortality, which we had summarized as patient outcome. As we pointed out in our review, the study of measuring the impact of patient surveillance or continuous monitoring is challenging.

In addition, we also agree, as described in our review, that deterioration detection must move beyond the use of just static alarm threshold to optimize the balance between "true" and nuisance alarms. In their mentioned recent study of their Biosign ™ monitor in a step-down unit,[3] use of the device decreased the authors' cardiorespiratory instability criteria without changing the rate of medical emergency team (MET) activations. In our own work,[4] we consider a reduction of MET calls a success, a sign of an intervention that happened at an earlier stage of deterioration and therefore prevented a physiologic derangement that necessitated a MET activation. But, if on the other hand, monitoring is used to trigger MET alerts, an increase in activations may be a desirable outcome.

At Dartmouth, all medical and surgical patients are now continuously monitored; we have a physiologic database containing more than 3 million hours of patient physiologic data and more than 20 trillion individual data points of inpatient oxygen saturations and heart rates. Like the Oxford research group, we have seen little variation across patient groups. What we have seen is a hospital-wide reduction of MET alerts and transfers to the intensive care unit: between 10–67% depending on the unit.

The research done at Oxford, Pittsburgh, and other locations is outstanding: more pieces are being added to solve the puzzle of patient surveillance, and our patients benefit.

Andreas H. Taenzer, M.D., M.S., F.A.A.P.,* Susan McGrath, Ph.D. *Dartmouth Medical School, Dartmouth-Hitchcock Medical Center, Lebanon, New Hampshire. andreas.taenzer@dartmouth.edu

References

1. Taenzer AH, Pyke JB, McGrath SP: A review of current and emerging approaches to address failure-to-rescue. ANESTHESIOLOGY 2011; 115:421–31
2. Watkinson PJ, Barber VS, Price JD, Hann A, Tarassenko L, Young JD: A randomised controlled trial of the effect of continuous electronic physiological monitoring on the adverse event rate in high risk medical and surgical patients. Anaesthesia 2006; 61:1031–9
3. Hravnak M, Devita MA, Clontz A, Edwards L, Valenta C, Pinsky MR: Cardiorespiratory instability before and after implementing an integrated monitoring system. Crit Care Med 2011; 39:65–72
4. Taenzer AH, Pyke JB, McGrath SP, Blike GT: Impact of pulse oximetry surveillance on rescue events and intensive care unit transfers: A before-and-after concurrence study. ANESTHESIOLOGY 2010; 112:282–7

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Are Faculties Another Brick in the Wall?

To the Editor:

The investigation in education by Baker[1] is an excellent source of information for practicing academic anesthesiologists involved in resident education. Despite efforts to normalize evaluations and potentially control for bias, concerns remain about the structure of this or any evaluation system because of unavoidable introduction of faculty bias. Baker's results show that none of the residents received a score less than 3 and evaluations consistently increased with progression through CA-1 to CA-3 yr. Although acknowledging the finding, does Baker have any explanation for this, or whether this may be related to the faculty cohort here or for all faculty? In addition to unintentional penalty for being less experienced as a CA-1, the more senior the resident, the longer the time that a particular faculty has spent with a resident. A longer professional relationship will likely lead to greater confidence in assigning a higher evaluation grade, especially if residents with lower scores have been removed from the peer group by attrition.

Of greater significance, is the faculty really free not to be biased? When faculty are aware that their resident evaluations are accessible to the resident, acknowledging that their own teaching evaluations may subsequently be affected in a retaliatory fashion, a positive bias is expected.

As doubts remain whether faculty are assigning unbiased scores of resident evaluations, more information is required from academic educators, including how well residents and faculty are matched in terms of time and cases done together to allow accurate assessment of performance.

Davide Cattano, M.D., Ph.D., The University of Texas, Medical School at Houston, Houston, Texas. davide.cattano@uth.tmc.edu

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