Sir,

The work of Draycott et al. using simulators to train professionals on obstetric emergencies clearly shows that rigorous simulation-based education improves perinatal outcomes, safety attitudes and teamwork climate (1). We read “The cost of local, multi-professional obstetric emergencies training” (2) with great interest. In their study, the authors report an annual cost for the obstetric training intervention of up to €148 000. Although this is important information, we are concerned that telling only half the story about simulation-based education may have a paradoxical effect. Instead, we believe that researchers should always include cost savings or return-on-investment (ROI) when discussing costs of simulation-based interventions.

Historically, medical education interventions have been considered weak tools for healthcare quality improvement. Yet, several recent studies show that rigorous simulation-based education is an effective quality improvement strategy that yields downstream improvements in patient outcomes (1,3,4). However, more high quality research is needed to fully evaluate the impact of simulation-based education on translational patient outcomes. To achieve this goal, medical educators must learn to build a cost-effective model for simulation-based education by designing studies that address patient outcomes and ROI. One commonly used ROI methodology was proposed by Phillips (5). Phillips’ ROI methodology incorporates seven steps: two inputs – Access and Cost, and five outputs – Reaction, Learning, Application and Implementation, Impact, and ROI. This methodology acts as a process improvement modality that is data driven to ensure that healthcare institutions obtain the most impact from their quality initiatives. Phillips’ model is grounded in implementation science theory and stakeholder engagement strategies, and has been successful in aligning healthcare leaders and funding for quality improvement initiatives (5).

We encourage the authors to perform an ROI analysis on the improved healthcare outcomes shown in their outstanding research program, recognizing that some outcomes may be hard to measure, and outcomes other than financial savings may be important. Focusing only on costs does not address the fundamental question of how best to use simulation-based education to improve the quality of patient care worldwide. We need to include patient outcomes and ROI to tell the whole story about simulation-based education.

Jeffrey H. Barsuk1,2,a, William C. McGaghie1 and Diane B. Wayne1,2

1Department of Medicine, Northwestern University Feinberg School of Medicine, Chicago, IL and 2Department of Medical Education, Northwestern University Feinberg School of Medicine, Chicago, IL USA

*Corresponding Author: Jeffrey H. Barsuk
E-mail: jbarsuk@nm.org
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