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Clinical Decision Support Tools Need to Improve More Than Just Process Outcomes

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To the Editor:

We read with great interest the recent article by Kheterpal *et al*.[1] We would contend that this article highlights an issue common in studies of clinical decision support—namely, that they improve process outcomes but have little demonstrable ability to improve clinically relevant outcomes.[2] To date, there have been few studies correlating clinical decision support to improved patient outcomes in the perioperative literature.[3,4] Given the amount of time and energy investigators devote to designing and implementing clinical decision support, this is, to be blunt, frustrating. Even more so because clinical decision support tools offer a means for using informatics expertise to implement an intervention that has significant face validity. That is, they offer providers timely and relevant information that highlights opportunities for making clinical interventions that they otherwise may have failed to recognize, thereby improving outcomes.

Why, then, the disconnect—inadequate validation and flawed study design, as Dr. Sessler asserts in his editorial?[5] Small effect size? We would contend that it is more likely indicative of a need to perform multicenter validation of clinical decision support tools. As the authors have shown previously, clinical decision support tools may vary in their effectiveness across institutions.[6] We propose that future studies of clinical decision support tools would be best structured as multicenter studies and, where possible, should be designed to demonstrate the intervention's impact on patient outcomes, rather than just process change—the field is ready for that critical next step.

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Competing Interests

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