

To the Editor: Reply to “Clinical Decision Rules: A Starting Place in Medical Education, Not a Destination”

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In “Clinical Decision Rules: A Starting Place in Medical Education, Not a Destination,” Drs Woods, Barnes, and Waggoner-Fountain note the ways clinical decision rules and clinical pathways have changed medical education.¹ I agree with the authors’ insights into how the overreliance on clinical decision rules can impede trainees’ development of illness scripts and more sophisticated clinical reasoning. As a medical education fellow and emergency physician with an interest in technology and informatics, I also see how similar problems arise when trainees overly rely on order sets within the electronic medical record to manage patient care. Educators should also be aware of how the use of order sets may create barriers to learning and should incorporate this into their bedside teaching.

Order sets standardize care and translate national guidelines into pragmatic rules for care delivery.² While order sets may increase patient safety and ensure guidelines are followed, the simplicity of implementing a comprehensive order set may allow a trainee to miss specific details of managing a condition. For example, diagnosing and treating a complex condition like diabetic ketoacidosis (DKA) may only require a clinician to implement a single order after the condition is suspected. Once implemented, a comprehensive DKA order set and its default selections can obtain laboratory studies, initiate fluid resuscitation, replace electrolytes as needed, and start insulin without any input from the clinician. A resident could care for dozens of patients with DKA during their residency but may miss the nuance of electrolyte management and insulin administration if these decisions are automated within an order set. This leaves the potential for a gap between a resident’s ability to care for a patient at the bedside and their performance on standardized examinations where these streamlined orders are not available.

The overreliance on order sets during training may leave trainees who excel in the clinical setting but who can struggle in standardized examinations

or when they are left to care for a patient without the same well-developed order sets. Trainees may have a limited understanding of the condition in general but may not develop a more sophisticated understanding of managing a disease when these details are automated by the use of an order set. Without explicit exploration during training, these deficiencies may only be exposed during formal examinations or when the trainee transitions to a new practice environment with different order sets available. Educators should be aware of this potential gap and tailor their teaching to these nuances. Guiding trainees through the full extent of how an order set may guide a patient’s care can address these knowledge gaps and ensure that trainees are building the depth of knowledge needed for practice.

As medicine increasingly relies on order sets and other automations in the electronic medical record, we must examine how these tools impact the ways we train and evaluate learners. The overreliance on these tools may conceal gaps in knowledge. Educators should continually assess their learners’ depth of knowledge when using order sets and other automations within the electronic medical record.

References

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