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From guideline to bedside, improving evidenced-base care

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The translating of clinical guidelines into actionable medical practice remains a persistent challenge across various healthcare fields. Whereas evidence-based guidelines are vital tools for standardizing care and improving patient outcomes, the study by Wilson *et al* highlights that their impact is ultimately analyzed by their usability and implementation feasibility.[1]

A critical aspect of this discussion is the transition from static documents to algorithm-based, context-aware clinical support tools. This shift aligns with standard process improvement practices. Error proofing the implementation of a new process or guideline exists on a spectrum, with passive interventions—such as narrative text and educational materials—proving less effective compared with more translatable and feasible guidelines that can go right from the guideline to a care center and implemented at bedside. Further, the traditional reliance on text-heavy, narrative-based guidelines has proven inferior to clinical decision support systems automatically integrated into a physician's work flow—especially in fast-paced, high-stakes environments such as trauma care.[2] At one of our institutions, the distribution of evidence-based guidelines through end-user engagement (via emails, posters displayed in the Emergency Department, shared app-based media, order sets, and during multidisciplinary meetings) resulted in a 27% reduction in unnecessary CT scans for pediatric blunt trauma, without an increase in missed injury.[3] This allows ease of use, high accessibility, and user engagement and feedback to optimize implementation at the bedside.

Beyond the structural limitations of guidelines, the discussion also highlights the broader implementation challenges posed by resource variability across different healthcare settings and applicability to different patient populations. Many guidelines are developed in high-resource environments and fail to account for the logistical constraints of lower-resource facilities, a common issue in both domestic rural hospitals and global health settings.[4 5] This reinforces the need for flexible and adaptable recommendations that can be modified based on available resources, provider expertise, and institutional capacity. Research in global health has demonstrated that guidelines that incorporate tiered recommendations—providing alternative strategies for different levels of healthcare systems—improve uptake and sustainability.[6] The key is delivering the evidence-based recommendations that can be applied at the bedside in a variety of clinical environments.

This study's proposal of the TRAUMA framework is an important step towards standardizing implementability considerations in guideline development. However, its success will ultimately depend on real-world validation and iterative refinement based on feedback from trauma providers across diverse clinical settings. This study serves as a call to action for healthcare organizations, policymakers, and researchers to move beyond the traditional paradigm of guideline development and towards a more user-centered, technologically integrated, and behaviorally informed approach. The future of clinical guidance must prioritize not just what the best practices are, but how they can be effectively integrated into care delivery.

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