

EDITORIAL

Rapid Response Teams in Teaching Hospitals: Aligning Efforts to Improve Medical Education and Quality

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In this issue of the *Journal of Hospital Medicine*, Butcher and colleagues report on residents' perceptions of a rapid response team's (RRT) impact on their training.¹ RRTs mobilize key clinicians in an attempt to rescue acutely decompensating hospitalized patients. Early recognition is essential, and most systems allow any concerned health professional to activate the RRT. Although the evidence for benefit is somewhat controversial,^{2,3} an overwhelming majority of hospitals have implemented RRTs.^{4,5}

The use of RRTs in teaching hospitals raises important concerns. The ability of nurses and other professionals to activate the RRT without need for prior approval from a physician could potentially undermine resident physician autonomy. Residents may feel that their clinical judgment has been usurped or second guessed. Whether nurse led or physician led, RRTs always introduce new members to the care team.⁶ These new team members share in decision making, which may theoretically reduce residents' opportunities to hone their decision-making skills when caring for potentially critically ill patients.

Despite these potential disadvantages, Butcher and colleagues report that the vast majority of residents found working with the RRT to be a valuable educational experience and disagreed that the RRT decreased their clinical autonomy. Interestingly, surgical residents were less likely to agree that working with the RRT was a valuable educational experience and much more likely to feel that nurses should contact them before activating the RRT.

The results of the study by Butcher et al. highlight several evolving paradigms in medical education and quality improvement. Over the past 10 to 15 years, and fostered in large part by Accreditation Council for Graduate Medical Education (ACGME) duty-hour revisions,⁷ teaching hospitals have moved away from the traditional practice of using residents primarily to fill their clinical service needs to an approach that

treats residents more as learners. Resident training requires clinical care, but the provision of clinical care in teaching hospitals does not necessarily require residents. At the same time, healthcare organizations have moved away from the traditional culture characterized by reliance on individual skill, physician autonomy, and steep hierarchies, to an enlightened culture emphasizing teamwork with flattened hierarchies and systems redesigned to provide safe and effective care.⁸

For the most part, the paradigm shifts in medical education and quality improvement have been aligned. In fact, the primary goal of duty-hour policy revisions was to improve patient safety.⁹ Yet, Butcher and colleagues' study highlights the need to continuously and deliberately integrate our efforts to enhance medical education and quality of care, and more rigorously study the effects. Rather than be pleasantly surprised that residents understand the intrinsic value of an RRT to patient care and their education, we should ensure that residents understand the rationale for an RRT and consider using the RRT to complement other efforts to educate resident physicians in managing unstable patients. RRTs introduce a wonderful opportunity to develop novel interprofessional curricula. Learning objectives should include the management of common clinical syndromes represented in RRT calls, but should also focus on communication, leadership, and other essential teamwork skills. Simulation-based training is an ideal teaching strategy for these objectives, and prior studies support the effectiveness of this approach.^{10,11}

The ACGME has now implemented the Next Accreditation System (NAS) across all specialties. Of the 22 reporting milestones within internal medicine, 12 relate directly to quality improvement and patient safety objectives, whereas 6 relate directly to pathophysiology and disease management.¹² Educating residents on systems of care is further highlighted by the Clinical Learning Environment Review (CLER), a key component of the NAS. The CLER program uses site visits to identify teaching hospitals' efforts to engage residents in 6 focus areas: patient safety; healthcare quality; transitions of care; supervision; duty hours, fatigue management, and mitigation; and professionalism.¹³ CLER site visits include discussions and observations with hospital executive leadership,

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residents, graduate medical education leadership, nursing, and other hospital staff. The CLER program raises the bar for integrating medical education and quality improvement efforts even further. Quality improvement activities that previously supported an informal curriculum must now be made explicit to, and deliberately engage, our residents. Teaching hospitals are being tasked with including residents in safety initiatives and on all quality committees, especially those with cross-departmental boundaries such as the Emergency Response Team/RRT Committee. Residents should meaningfully participate, and whenever possible, lead quality improvement projects, the focus of which may ideally be identified by residents themselves. An important resource for medical educators is the Quality and Safety Educators Academy, a program developed by the Society of Hospital Medicine and the Alliance for Academic Internal Medicine, which provides educators with the knowledge and tools to integrate quality improvement and patient safety objectives into their training programs.¹⁴

In conclusion, we are reassured that residents understand the intrinsic value of an RRT to patient care and their education. We encourage medical educators to use RRTs as an opportunity to develop interprofessional curricula, including those that aim to enhance teamwork skills. Beyond curricular innovation, quality-improvement activities in teaching hospitals must deliberately engage our residents at every level of the organization.

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