

## EDITORIALS

## Where's the Beef? Progress on Reducing Readmissions

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The Hospital Readmission Reduction Program (HRRP)<sup>1</sup> contained within the Affordable Care Act focused national and local attention on hospital resources and efforts to reduce hospital readmissions. Driven by the Centers for Medicare and Medicaid Services' (CMS) desire to pay for value instead of volume, the response of hospitals and health systems appears to be yielding change across the United States.<sup>2</sup> A number of recent publications in the *Journal of Hospital Medicine* (JHM) exemplify the keen interest in reducing readmissions, while providing guidance regarding interventions and where we might target future research. Evidence from an exemplary systematic review of the pediatric literature confirms some experience in adults regarding effective interventions—all studies were multifaceted—and highlights the importance of identifying a single healthcare provider or centrally coordinated hub to assume responsibility for extended care transition and follow-up.<sup>3</sup> Notably, studies of pediatric patients and their families document the effectiveness of “enhanced inpatient education and engagement” while in the hospital.<sup>3</sup> Unfortunately, a study among adults at a top-ranked academic institution indicates poor communication among nurses and physicians regarding patient discharge education.<sup>4</sup> Efforts to improve nurse–physician communication by redesigning the hospitalist model of care delivery at a Veterans Affairs (VA) institution appeared to enhance perceptions of communication among the care team members and reduced length of stay, but disappointingly there was no reduction in readmission rates.<sup>5</sup> Studies such as this are essential in identifying which specific interventions may actually change outcomes such as readmission rates.

In 1984, a diminutive elderly woman provocatively squawked “Where's the beef?”, launching a highly successful advertising campaign for Wendy's hamburger chain.<sup>6</sup> This catchphrase may aptly describe Bradley and colleague's survey study of the State Action on Avoidable Rehospitalization (STAAR) and Hospital-to-Home (H2H) campaigns.<sup>7</sup> Auerbach and colleagues eloquently stated in a 2007 *New England Journal of Medicine* perspective<sup>8</sup> how they had

“witnessed recent initiatives that emphasize dissemination of innovative but unproven strategies, an approach that runs counter to the principle of following the evidence<sup>9</sup> in selecting interventions that meet quality and safety goals. . . .”<sup>10</sup> I firmly agree with this assessment, and 6 years later believe we should be more thoughtful about potentially repeating implementation of unproven strategies.

Do we know if the interventions recommended by H2H and STAAR are what hospital care teams should be attempting? Even the authors mention that “definitive evidence on their effectiveness is lacking.” The H2H and STAAR programs certainly encourage some theoretically laudable activities—medication reconciliation by nurses, alerting outpatient physicians within 48 hours of patient discharge, and providing skilled nursing facilities the direct contact number of the inpatient treating physician for patients transferred. However, do these efforts actually improve patient outcomes? Before embarking on state or national campaigns to improve care, we should consider carefully what are the best evidence-based interventions. Remarkably, some prior evidence indicates that direct communication between the hospital-based physician and primary care provider (PCP) may not actually impact patient outcomes.<sup>11</sup> Newer research published in JHM confirms my belief that the PCP needs to be engaged by hospitalists during a hospitalization. Lindquist's research group at Northwestern nicely demonstrated how communication between a patient's PCP and the admitting hospitalist, complemented by contact between the PCP and patient within 24 hours postdischarge, reduced the probability of a medication discrepancy by 70%.<sup>12</sup> Although no evaluation of the effect on readmissions was reported, this study may provide information on causality related to the importance of PCP involvement in the care of hospitalized patients.

Numerous publications now document research on successfully implemented programs that lowered hospital readmissions, and are cited by CMS as evidence-based interventions.<sup>13</sup> Projects Re-Engineered Discharge (RED)<sup>14</sup> and Better Outcomes by Optimizing Safe Transitions<sup>15</sup> target the hospital discharge process, and both appear to lower hospital readmission rates. The Care Transitions Intervention (CTI),<sup>16</sup> Transitional Care Model (TCM),<sup>17</sup> and the Guided Care model<sup>18</sup> all leverage nurse practitioners or nurses to protect elderly patients during what can be a perilous care transition from hospital to home. CTI and

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TCM have been further validated in effectiveness studies.<sup>19,20</sup> Two recent systematic reviews provide further insight into the complexity of efforts to reduce 30-day rehospitalizations, but unfortunately do not reveal a desired silver bullet. The first focused exclusively on interventions to reduce 30-day rehospitalization, and concluded that no single intervention was successful alone, but identified interventions bridging the hospital-to-home transition (eg, CTI), and a bundle of interventions such as Project RED as showing efficacy.<sup>21</sup> The second review more broadly sought to evaluate the effectiveness of hospital-initiated strategies to prevent postdischarge adverse events (AEs) such as readmissions and emergency department visits,<sup>22</sup> stating “Because of scant evidence, no conclusions could be reached on methods to prevent postdischarge AEs.” The researchers’ sobering conclusion stated that strategies “to improve patient safety at hospital discharge remain unclear.”

With rising federal penalties for higher-than-expected readmission rates, many hospital leaders eagerly join collaboratives aiming to reduce hospital readmissions. H2H appears to be among the largest, reporting >600 hospital participants, and STAAR has been active since 2009, with a recently published qualitative study identifying “gaps in evidence for effective interventions, and deficits in quality improvement capabilities among some organizations” as implementation challenges.<sup>23</sup> Notably, the survey by Bradley and colleagues documented that just half of the hospitals had a quality improvement (QI) team focused on reducing readmissions. Although laudable in their goals, H2H and STAAR may represent expensive commitments of staff and time to efforts that may not improve outcomes. Importantly, recently published research evaluating QI studies showed concerning results among patients with chronic obstructive pulmonary disease (COPD). A randomized controlled trial (RCT) conducted at 6 Glasgow hospitals evaluated supported self-management (home visits by nurses and thorough education) by patients with moderate to severe COPD, but documented no changes in hospitalization or mortality.<sup>24</sup> Another RCT at 20 sites evaluated a comprehensive care management program to prevent hospitalizations among 960 VA patients with COPD.<sup>25</sup> It had to be stopped early due to elevated all-cause mortality in the intervention group, and there was no difference in hospitalization rates.

Moving forward, QI efforts to reduce hospital readmissions should utilize proven interventions unless they are part of a rigorous trial. The emerging field of implementation science (“the scientific study of methods to promote the systematic uptake of research findings and other evidence-based practices into routine practice, and hence, to improve the quality and effectiveness of health services”<sup>26</sup>) needs to be applied to additional research in this area.<sup>27</sup> Another consideration would be for CMS and funders such as the

Commonwealth Foundation or The Robert Wood Johnson Foundation to encourage and fund merging of current initiatives to move away from competition and provide clarity to community hospitals. Regardless, such collaboration should still undertake formal evaluation to discern best approaches to implementation. I applaud the authors for recognizing that “Input from hospitalists who are often critical links among inpatient and outpatient care and between patients and their families is strongly needed to ensure hospitals focus on what strategies are most effective for successful transitions from hospital to home.” Yet, I wonder why neither of the large STAAR and H2H initiatives actively partnered with hospitalists and their specialty society (Society of Hospital Medicine) directly in the leadership of these initiatives? On the other hand, why not ask medical societies engaged in delivery of primary care (eg, American Academy for Family Practice, American College of Physicians, or Society of General Internal Medicine), especially to elderly patients (American Geriatric Society), to contribute directly? Involvement on an advisory board is likely not sufficient. Prior efforts document the willingness of these organizations to collaborate and achieve consensus on principles for transitions of care.<sup>28</sup> As powerfully articulated 6 years ago, “[W]e must pursue the solutions to quality and safety problems in a way that does not blind us to harms, squander scarce resources, or delude us about the effectiveness of our efforts.”<sup>8</sup>

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