Invited Commentary | Surgery

Anticipating Needs Among Older Adults After Major Surgery—A Focus on 30- and 180-Day Hospital Readmissions

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The demographic landscape in the United States is undergoing a notable shift, with a consistent rise in the population of individuals aged 65 years and older, which is projected to exceed 20% by 2030.1 These individuals experience lasting functional and cognitive decline and worse long-term survival following both major and minor surgery.2,5 The distinct needs of older adults, marked by higher rates of frailty and a prevalence of comorbid conditions, set them apart from their younger counterparts. Moreover, older adults are known to be the most susceptible to prolonged recovery following any type of surgery.3-5 Despite these considerations, readmission rates following surgery among older adults, particularly beyond 30 days, have not yet been rigorously evaluated until the present study by Wang et al.6 The implications of this evaluation extend beyond the clinical realm, with major financial and policy considerations that impact hospital systems and patients alike. Notably, the authors of this important study underscore the absence of nationally representative estimates of hospital readmissions among older adults undergoing surgery as well as details of which specific geriatric phenotypes are most affected by readmissions.

To address these critical gaps, Wang et al6 assessed population-based estimates of 30-day and 180-day hospital readmissions following major surgery among community-dwelling older US adults, using data from the National Health and Aging Trends Study (NHATS) linked to Medicare claims data. The authors found that of 1780 major surgical procedures performed, nearly 1 in 8 community-living older US adults experienced a hospital readmission within 30 days, while more than 1 in 4 experienced a hospital readmission within 180 days. Patients with frailty and those with probable dementia had the highest risk of hospital readmissions. While these findings may not be too surprising to some, this well-conducted study highlights important implications and supports other work demonstrating that those at highest risk of postoperative morbidity and mortality share similar characteristics.

The authors’ work6 highlights important opportunities to better anticipate the needs of older adults and make inclusive policy changes through this lens. First, the authors studied older adults specifically who underwent major surgery, which they defined as “any procedure in an operating room requiring the use of general anesthesia for a nonpercutaneous, nonendoscopic invasive operation.”6 The authors’ definition of major surgery is notably broad, but their findings support recent work demonstrating that older age when undergoing even minor surgery can have a negative impact on recovery and that a more objective operative stress score, as defined by Shinall et al,3 may be a more comprehensive measure. Second, the type of complication, be it minor or major, can have different implications on a patient’s long-term functional and cognitive decline. Using a similar database, the Health and Retirement Study similarly linked with Medicare data, our own group found higher risk of prolonged functional and cognitive decline in older adults after high-risk surgery, which was amplified by a serious postoperative complication or preoperative frailty.2 Setting realistic expectations for prolonged recovery is critical during preoperative discussions with older adults to anticipate needs in the postoperative setting both while in the hospital and following discharge. Third, while this study adds to the knowledge gap of hospital readmission rates beyond the traditional metric of 30 days, 180 days may be an unrealistic metric to hold hospitals accountable for, given that older adults are overall hospitalized at higher rates whether or not they undergo surgery. This is especially true in this study since little is known about the reasons for postoperative

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complications, which was acknowledged as an important limitation by the authors. While following up patients over time is important to understand the impact of surgery on older adults, holding hospitals accountable for 180-day readmissions may be too stringent, and not having a better understanding of the reasons for admissions limits the ability to anticipate care needs in the postoperative period. Furthermore, some readmissions may be due to inappropriately early discharges from the original hospitalization as hospitals across the country are under increasing pressure to reduce hospital length of stay. As a result, balancing timing of discharges with optimal recovery time for older adults creates competing demands.

Ultimately, focusing efforts on making surgery safer for older adults can profoundly change the quality of life for patients and reduce poorer long-term outcomes including hospital readmissions. Prioritizing quality of life and understanding patient goals are essential for surgical decision-making, which should encompass setting expectations of possible prolonged recovery and potential loss of independence. This is especially pertinent for older adults undergoing nonelective surgery as this study demonstrates that these patients were older, had more frailty, demonstrated greater cognitive impairment, and had lower educational attainment. Furthermore, nonsurgical options, including palliative care, should be considered, particularly among the most frail and most cognitively impaired. A better understanding of the surgical episode allows us to anticipate patient and family needs and facilitate targeted interventions aimed at maintaining health and independence, such as frailty screening, prehabilitation, geriatric comanagement, and optimizing social support, which will ultimately aid in reducing readmission rates.

ARTICLE INFORMATION
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