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Old Age Population, New Age Solution: Implications and Utility of Perioperative Telemedicine-based Care for Geriatric Patients

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Keywords

Abstract

Background: Perioperative telemedicine services have increasingly been utilized for ambulatory care, although concerns exist regarding the efficacy of virtual consultations for older patients who may have reduced technology literacy. We sought to evaluate efficacy of telemedicine services for geriatric patients evaluated at a hernia repair and abdominal wall reconstruction center.

Methods: A retrospective review of telemedicine encounters between May 2020 and May 2021 was performed. Patient characteristics and encounter-specific outcomes were compared among geriatric (older than 65-years-old) and non-geriatric patients. Downstream care utilization, time-savings, and perioperative complications were assessed for all encounters.

Results: A total of 313 telemedicine encounters (geriatric: 41.9%, n=131) were conducted. Geriatric patients presented with higher rates of recurrent or incisional hernias (87.9% vs 70.7%, $p<0.01$). Potential travel time was longer for geriatric patients (104min vs 42min, $p=0.03$) in the preoperative setting. No differences in downstream care utilization were identified among geriatric and non-geriatric patient populations. Only 8.6% of preoperative encounters resulting in recommendations for supplemental in-person evaluation. Operative plans were coordinated for 42.5% of all preoperative telemedicine encounters. There was no difference in complication rate between geriatric and non-geriatric patients ($p>0.05$) in the postoperative setting, with no complications directly attributable to telemedicine-based care.

Conclusions: Telemedicine can provide a safe option for perioperative care among geriatric patients seeking hernia repair and abdominal wall reconstruction. Downstream care utilization for telemedicine-based encounters is appropriate with a low-rate of supplemental in-person evaluations. Telemedicine use resulted in significantly more time

saved in potential commutes for geriatric patients. These findings suggest that patient age should dictate decision making related to telemedicine-based perioperative services.