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The Urgent Need for Rigorous Studies of Telehealth for Older Adults Who Are Homebound

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Older adults who are homebound face isolation, high rates of hospitalization, and difficulty accessing medical services, all of which can further compound underlying chronic medical and psychiatric conditions.[1] The social distancing restrictions and reduction in many community-based services that ensued in response to the COVID-19 pandemic further exacerbated these challenges and led to an urgent need for innovations in telehealth to bridge the gap for older adults who are homebound.

Wong et al[2] launched a randomized clinical trial in the summer of 2020 with 68 older adults who were homebound, defined as those who had not left their home more than once a week in the preceding 6 months. The intervention group received nurse-led case management telephone calls as well as weekly text messages that included a video of tips or reminders targeting self-care skills that individual participants had identified as goals they wanted to achieve. Compared with the control group, who received only a weekly social telephone chat with a research assistant, the intervention group did not report significantly higher self-efficacy (their primary outcome measure) but did report greater medication adherence and quality of life at 3 months. Interestingly, both groups reported improvements in terms of depression and both basic and instrumental activities of daily living during the 3-month period.

Despite representing up to 20% of the older adult population,[3] older adults who are homebound are rarely included in randomized clinical trials, potentially because of difficulty reaching them through usual recruitment strategies; in addition, a high prevalence of multimorbidity and cognitive impairment may result in their being excluded from trials. In fact, review of abstracts from a PubMed search (homebound AND [“older adult” OR

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geriatric OR elderly] AND [RCT OR randomized]) revealed only 43 such studies. Thus, undertaking a randomized clinical trial at any time, let alone during a pandemic, is laudable. So is the use of nurses as principal case managers, who were supported by social workers as part of an interprofessional team, to address the complex medical and psychosocial needs of older adults who are homebound. Although the use of telephone calls, texting, and sending links for the viewing of online videos is not strictly telemedicine because it does not include synchronous face-to-face video encounters, the use of telephone and text messaging does qualify as mobile health and likely allows clinicians access to a broader range of older adults, many of whom do not have video conferencing capabilities because of financial, geographic, or technological literacy constraints.[4]

This study by Wong et al[2] is a valuable addition to the landscape of telehealth for older adults, as many unanswered questions remain about how to best increase the reach of telehealth to vulnerable older adults for whom in-person visits posed a challenge even before the pandemic. Barriers to older adults accessing telehealth include access to technology, such as smartphones or tablets; access to reliable broadband internet, which varies greatly by socioeconomic status and rurality; and general digital literacy.[5] For many older adults, personal assistance is needed to set up a telehealth visit, and, while some health care systems such as the Veteran's Affairs system provide technology devices and assistance, most do not.[6] Investment in education and hands-on assistance to be able to participate in telehealth may expand this vital technology to those least able to access it.

Other older adults may have difficulty accessing telehealth visits because of hearing or vision impairment and may need accommodations within the telehealth interface for a successful video encounter. For older adults who are homebound in particular, further integration with remote monitoring can allow clinicians to receive important clinical information, such as vital signs and blood glucose monitoring. The study by Wong et al[2] may have reduced the barrier to entry into telehealth by using telephone-based technology such as text messaging, which is more accessible to patients with low digital literacy. Investment in technological interfaces that are accessible and easy to use is critical to expanding access to telehealth among older adults who are homebound.

Future research in telehealth for older adults who are homebound should focus on how telehealth can enhance care around the age-friendly domains of mobility, mentation, medications, and what matters most, for which many evidence-based interventions for geriatric care urgently await study and validation in the telehealth sphere.[7] Although the study by Wong et al[2] focuses on telehealth care's potential to improve medication adherence and mood among older adults who are homebound, future randomized clinical trials should investigate telehealth interventions to maximize mobility as well as align care with what matters most to each older person who is homebound.

As the COVID-19 pandemic continues to restrict the abilities of older adults who are homebound to access the medical and psychosocial care they need, randomized clinical trials such as the study by Wong et al[2] demonstrate a path forward to expand clinical care delivery and unlock the potential of innovative telehealth modalities. Person-centered studies to elucidate appropriate implementation of telehealth along with safe triage protocols

for in-person care will be essential. Ongoing investigation into overcoming barriers to telehealth among older adults who are homebound, along with critical investments in in-home caregiving, will ensure that all individuals will have access to the care we need as we age.

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