

Application Fields and Innovative Technologies

Exploring the Virtual Urgent Care Needs of Older Adults S.L. Hitzig, M. Motsenok, O. Kachmarchuk, B. Ingaramoorthy, B. Liu, S. McKay, J. Smith, J. Sugarbrood-Keele, N. Ziegler, J.N. Hall. *Gerontechnology* 25(s)

Purpose During the COVID-19 pandemic, an innovative Virtual Emergency Department (VED) was launched in 2020, and designed to provide care for urgent but non-life threatening medical issues, such as body aches, rashes, sore throat, nasal or sinus congestion, urinary tract infections, etc. Older adults are frequent users of in-person ED, and make up between 20 to 40% of visits (CIHI, 2020; Latham & Ackroyd-Stolarz, 2014). Given the rising proportion of older adults visiting EDs (Ellis et al., 2022), further exploration of ways the VED can be optimized in its implementation for older adults might offer an innovative technological solution to offer better care to this segment of the population. **Method** This multi-phase study on a VED located in a major urban hospital (Toronto, Ontario) included: 1) a retrospective chart review of older adult VED use; and 2) qualitative interviews with 32 key interest groups (18 VED older adults patients, 8 family caregivers, and 6 healthcare providers [HCPs]) about their VED experiences. The chart review extracted socio-demographics, available supports, and VED outcomes. Descriptive statistics and frequencies were used to analyze the data, and chi-squares were used to determine differences across socio-demographic profiles. For the qualitative study, VED patients over the age of 65 self-identified to take part in the study via a recruitment letter from a circle of care following their appointment, and took part in a semi-structured interview about their VED experiences. HCPs providing or who were highly knowledgeable about VED were recruited via convenience and snowball recruitment methods. Interview data were transcribed for analysis. **Results and Discussion** Of the 11,664 VED visits (inception 2020 to January 31, 2025), 12.5% were older adults (N=1,458), and the majority were female (60.8%). While 90.5% had a family physician, female patients were more likely to have one than male patients, $X^2 = 5.55$, $p = .02$. The majority (77.7%) were in the same city as the VED, while the remaining were in surrounding regions, with a small proportion from out-of-province (.04%). Only a small proportion re-visited the Virtual ED within 7 days (7.5%), and only 11.6% required an in-person ED visit following their virtual appointment. With regards to the qualitative findings, patients viewed their VED encounters as being compassionate and personalized (i.e., more time with physician to discuss issues), easy to use, and served to provide additional confirmation on whether an in-person ED visit would be required. However, patients felt their appointments should have been longer, and HCPs noted that more preparatory work might be required by both patients and HCPs due to some of the complexity of care needs associated with older adults. There was a general lack of awareness about the Virtual ED, and many patients learned about the service through family and friends, rather than from HCPs. In summary, the VED is a promising option for older adults for their urgent care needs, where many issues can be resolved virtually. However, some barriers to access remain, including lack of awareness and digital literacy. These issues are exemplified by the fact that the majority of VED users were already well-connected to the health system by having access to a family physician.

References

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