**Development and evaluation of online medication support tools for older people: a systematic review protocol**

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**Introduction.** The explosion of Health Information Technologies (HIT) has ushered in new paradigms in healthcare with a shift towards consumer-led care models via the development of online consumer-facing healthcare applications including online medication support tools. Emerging evidence indicates that use of online HIT by patients and caregivers is high, even among older people (Mace et al. 2022). However, little is known about the development and evaluation of online health and medication applications for older people (Gleason et al. 2023).

**Aim**. To systematically evaluate the literature on the development and evaluation of online medication support tools for older people.

**Methods**. A systematic search from inception to June 2024 will be conducted in OVID, PubMed, and Embase to identify relevant studies on the development and evaluation of online medication support tools for individuals. The protocol will be registered in PROSPERO, following PRISMA guidelines. Two authors will independently screen the titles and abstracts of identified studies, review the full texts of short-listed articles, and assess study quality using the Joanna Briggs Institute Risk of Bias assessment tool. Covidence will be used for data extraction and results will be synthesized systematically. The plausibility of a meta-analysis will also be assessed.

**Discussion.** The rapid pace of innovation in health systems’ use of online patient platforms and rising global prevalence of older people and medication use, warrants a systematic review of the evidence surrounding online medication support tools for older people. This systematic review will inform the development of a similar intervention to be developed during my PhD candidature.

Gleason, K. T., et al. (2023). "Patient portal interventions: a scoping review of functionality, automation used, and therapeutic elements of patient portal interventions." JAMIA Open **6**(3): ooad077.

Mace, R. A., et al. (2022). "Older adults can use technology: why healthcare professionals must overcome ageism in digital health." Transl Behav Med **12**(12): 1102-1105.