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## CONFERENCE ABSTRACT

### Use of mHealth for promoting healthy ageing and supporting delivery of age-friendly care services: a systematic review

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**Introduction:** The proportion of people aged over 60 years is increasing globally and expected to double by 2050 [1]. The World Health Organization and health systems globally have identified mobile health (mHealth) as an important strategy to address the health needs of this growing population group. Healthcare innovations focused on ageing, including mHealth interventions, provide an opportunity to enhance service delivery. A systematic review [2] was undertaken to answer the following questions:

1. How is mHealth being used to promote healthy ageing and support the delivery of age-friendly health and long-term care services?
2. What are the effective models for implementing mHealth interventions?
3. What are the lessons learnt from implementation of mHealth initiatives?
4. Is there enough evidence to support the impact of mHealth interventions?

**Methods:** The review was conducted in late 2017, following the PRISMA[3] guidelines for systematic reviews. MEDLINE, EMBASE, Global Health, PsycINFO, Scopus, ScienceDirect, CINAHL and the Cochrane Library were searched. A combination of the terms 'mHealth OR mobile health' AND 'healthy ageing' AND 'aged care' was used along with the five domains of the RE-AIM framework [4]. The inclusion criteria were: (i) literature published from 2007 to 2017 on mHealth interventions, and (ii) mHealth interventions conducted on people aged 45 years and older.

**Results:** Of 2883 records identified, 133 studies were included in the qualitative synthesis. Most mHealth interventions were an adjunct to existing age-friendly health services, particularly for older adults with chronic health conditions. There were no examples of scaled-up implementations or systematic evaluations of successful feasibility and usability studies that implemented mHealth. The rapid pace of technological change as well as development, adoption and demise of mHealth apps presents crucial challenges for consumers, health care providers and policy makers. Overall, there is a lack of conclusive evidence regarding cost-effectiveness of mHealth to improve healthy ageing and support age-friendly health services.

**Implications for policy, practice and research:** Future mHealth research needs robust experimental designs and a person-centred, biopsychosocial approach that looks at multi-level determinants of health care. Collaborative partnerships for the design, development, testing, implementation and evaluation of mHealth apps are essential. Robust governance frameworks for mHealth strategies

are also required, as there is a risk the mHealth initiatives will further fragment care due to development and use of too many disparate apps and platforms without shared data frameworks or governance.

### **References:**

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