

Citizen Science in Prevention Community of Practice

Scaling the voice of older adults - reflections on co-creating healthy ageing smart communities

1 March 2023

Presenters



Ann Borda,
Associate Professor, Melbourne School of Population and Global Health,
University of Melbourne
aborda@unimelb.edu.au
<https://findanexpert.unimelb.edu.au/profile/197899-ann-borda>



Sonja Pedell,
Professor, Director of Swinburne Living Lab,
Swinburne University of Technology
spedell@swin.edu.au
<https://www.swinburne.edu.au/research/our-research/access-our-research/find-a-researcher-or-supervisor/researcher-profile/?id=spedell>

Session overview

This session focused on exploring the barriers and opportunities of co-creating smart communities for healthy ageing, drawing on two 'smart community' case studies informed by citizen science and centred on the involvement of multiple stakeholder groups.

- Population ageing and urbanization are two of the biggest social transformations of the 21st century and cities and communities have a key role in enabling people to live longer and healthier lives while fostering fairer and more sustainable societies.
- Within the context of the UN Decade of Healthy Ageing (2021-2030), the World Health Organisation (WHO) is working with its Member States at national and local levels to develop age-friendly cities and communities that can help to identify and address barriers to the well-being and participation of older people.
- These two qualitative case studies focused on exploring the complex relationships between the age-friendly domains, smart communities and older adults, with particular focus on exploring thematic intersections of the WHO "Age-Friendly Cities and Communities" framework and wearable health technology, bringing together three framework domains "Communication and Information", "Outdoor Spaces and Buildings" and "Social Participation".
- Citizen science and participatory approaches were used to gain an in-depth understanding of the lived experience of older adults, which involved a range of methods including participatory research design, narrative inquiry, co-design and motivational modelling.
- The first case study explored how older adults can be supported to exercise using age-friendly environments and tailored public health data, which included:
 - a survey of 55 semi-independent older adults (aged 65-85 years) who were actively self-monitoring their health (e.g. blood pressure, heart rate, sleep patterns) using wearable devices.
 - narrative interviews with 8 older adults to explore individual motivational goals, preferences and emotions related to using their use of wearable devices and sharing of their health data.

- findings developed through motivational modelling demonstrated the importance of understanding how cities can support older people's preferences, goals and emotions, including how they may be designed to motivate people to lead healthier lives and manage their weight or pain; to feel confident, current, and up to date with technology, and; how cities may be better integrated to allow for interaction between geographical data and personal data.
- The second case study explored how social prescribing can support older adults to be socially connected, which included co-design workshops with healthcare providers, staff and service users.
- The speakers offered reflections on future opportunities for age-friendly communities and cities, including that healthy ageing smart communities need to:
 - consider that older adults have different preferences and emotions (i.e. not "one size fits all")
 - break silos of wearable data collections and general geographical data
 - foster and encourage agency of their citizens with different levels of health and mobility, and
 - consider equally the technical, social and environmental layers supporting and connecting older adults.

For further information about these studies please see the following publications:

- Pedell, S. and Borda, A. (2021). Social Prescribing the Smart City. Proceedings of EVA London 2021. July. DOI: [10.14236/ewic/EVA2021.23](https://doi.org/10.14236/ewic/EVA2021.23)
- Pedell, S. and Borda A. (2021). This is how we create age-friendly smart cities. The Conversation March 4, 2021. <https://theconversation.com/this-is-how-we-create-the-age-friendly-smart-city-152973>
- Pedell, S; Borda, A; Keirnan, A; Aimers, N. (2021). Combining the Digital, Social and Physical Layer to Create Age-Friendly Cities and Communities. *Int. J. Environ. Res. Public Health* 18, no. 1: 325. <https://doi.org/10.3390/ijerph18010325>.