

Ethics & DEI

A Global Perspective on Barriers and Facilitators for Digital Health Technologies for Marginalized

Older Adults Jelte van Waterschoot, Adriana Ríos Rincón, Marloes Bults, Christine Daum, Gayo Diallo, Vesna Dolničar, Juliana Fernandes, Mathieu Figeys, Olga Beatriz Guzmán Suárez, Simona Hvalič-Touzery, Dan Istrate, Matic Kavčič, Lili Liu, Takeshi Kodama, Antonio Miguel-Cruz, Plinio P. Morita, Margaret Mutumba-Nakalembe, Rehema Namaganda, Toshio Ohyanagi, Marjolein den Ouden, Ismaila Ouedraogo, Noortje Rijken, Pierre Rumeau, Harpreet Singh, Bry Sylla, Nadine Vigouroux. *Gerontechnology* 25(s)

Purpose We examined access to digital health technologies, specifically for marginalized older adults across 11 different countries. Access to digital technologies in one country may not exist in another country. Additionally, cultural differences between countries can create country-specific barriers and facilitators to the implementation of and access to digital technologies. Our aim was to gather insights from different countries to obtain a broader perspective on real-world access to digital technologies and learn about and from each other. **Method** At ISG 2024 we organized a symposium about innovative technologies for health equity in marginalized groups and underserved communities [1]. At this symposium, we asked attendees to participate in a global overview of technology access for marginalized older adults. In addition, we reached out to our broader network to include more countries. We used the WHO GATE's 5P framework to create a questionnaire and gain insight into the people, products, personnel, provision and policy of technologies in the 11 countries [2]. For each "P" (People, Policy, Products, Provision, Personnel) we asked about barriers and facilitators for access. We prioritized information from sources that are more accessible to older adults, such as government and NGOs, instead of academic resources. **Results and Discussion** Eleven countries participated in our call: Australia, Brazil, Burkina Faso, Canada, Colombia, France, India, Japan, the Netherlands, Slovenia, and Uganda. The proportion of older adults varies greatly across countries, reflecting differences in life expectancy and broader social determinants of health. For example, in Burkina Faso only 2.5% of the population is 65 years or older, whereas in Japan 29.3% 65 years or older. Life expectancy is 61 years in Burkina Faso and 84.5 years in Japan. Marginalized older adults share certain characteristics across countries, although specific groups vary by context. They vary from people with lower socio-economic status (France, Japan, Netherlands) to Indigenous groups (Australia, Canada, Colombia), immigrants (Australia, Brazil, Canada, Netherlands), rural-dwelling (Canada, Colombia, France, India, Slovenia), people who are gender-based marginalized (Brazil, Burkina Faso, India), people with mental and cognitive disabilities (Japan, Netherlands), and people who are homeless (Brazil, Colombia). We also found country-specific marginalized older adults, such as victims of armed conflict (Colombia). Use of digital health technologies varies widely across countries. In Colombia, 60% of older adults do not use the Internet because they do not know how to use it, whereas in the Netherlands this proportion is only 10.5%. **Conclusion** Products, provision, and policy vary across countries. In general, industrialized nations tend to have national organizations that develop digital products and services, along with stronger collaboration between industry, government, and academia. In these nations, technology access is especially important for older adults with lower socio-economic status, with cognitive disabilities, or who are immigrants. In contrast, developing countries rely on international products and services, which can create financial, linguistic, and cultural barriers to use and adoption. In these countries, it is important to develop better infrastructure for people, especially in rural areas, to increase access.

References

- [1] Van Waterschoot, J. B. (2024). Innovative technologies for health equity in marginalized groups and underserved communities. *Gerontechnology*, 23(s), 1-1. <https://doi.org/10.4017/qt.2024.23.s.894.1.sp>
[2] World Health Organization & United Nations Children's Fund (UNICEF). (2022). Global Report on Assistive Technology (p. 142). <https://www.who.int/publications/i/item/9789240049451>

Keywords: marginalized older adults, WHO 5P framework, access, digital health technologies, global

Affiliation: School of Social Work, University of Applied Sciences Saxion, the Netherlands and the Faculty of Rehabilitation Medicine, Occupational Therapy, University of Alberta, Canada

Email: j.b.vanwaterschoot@saxion.nl and aros@ualberta.ca.

Acknowledgement This project has been made possible because of the Erasmus+ KA171 International Credit Mobility Program for collaboration between countries.