

Burmeister, O. K., Ritchie, D., Devitt, A., Chia, E., Dresser, G., & Roberts, R. (2019). The impact of telehealth technology on user perception of wellbeing and social functioning, and the implications for service providers. *Australasian Journal of Information Systems*, 23. doi:10.3127/ajis.v23i0.1501

## Review

This post publication review discusses the article by Burmeister et al. (2019) in which the authors present a study evaluating the social, economic, and wellbeing impacts of telehealth technology in the homes of community-dwelling older persons, highlighting its contribution and identifying areas for further research. The article centres on one particular project in which telehealth monitoring systems were used in homes in regional New South Wales.

The reviewed article is a timely contribution to the information systems (IS) literature. The growing number of elderly and fewer number of caregivers to meet the needs of elderly in care is a trend observed globally (Burmeister, 2016; Draper & Sorell, 2017; Poulsen & Burmeister, 2019). There are calls for healthcare IS interventions, such as wearable assistive devices (Fosch-Villaronga & Özcan, 2019), telehealth (Shafiee Hanjani, Caffery, Freeman, Peeters, & Peel, 2019), and care robots (Poulsen, Burmeister, & Kreps, 2018; Poulsen, Burmeister, & Tien, 2018) to help ease the impacts of this trend, particularly in regional or rural communities (Smith, Armfield, & Caffery, 2019).

The work reviewed here creates knowledge which helps to soften the introduction of telehealth technology into the homes of the older population. Burmeister et al. (2019) further our understanding of the particular access needs of such communities, this is essential to improving user wellbeing (Pakrasi, Burmeister, Coppola, McCallum, & Loeb, 2015), social support (Banbury et al., 2020), and health literacy (Banbury et al., 2020) with telehealth technology.

An important area highlighted in the reviewed article is good care with technology. For instance, beyond taking standard health measurements the technologies deployed in this study were adapted to obtain custom measurements related to each user's health condition. The customisation of healthcare technology demonstrates good care as it aligns with aspects of good human-delivered care which is person-centred (Abma, Molewijk, & Widdershoven, 2009) and determined in relationship with the user in context (Upton, 2011).

Combi, Pozzani, and Pozzi (2016) highlight the lack of telehealth literature clarifying lessons learned, challenges, and recommendations related to design emerging from telehealth studies. While the authors of the reviewed article occasionally put the knowledge created throughout this study into several important learnings for future work in this area, a wider impression might have been made by setting out clear principles to guide the design, implementation, and ongoing support of telehealth technologies with older persons, much like Greenhalgh et al. (2015) have done previously. For instance, in the discussion, to mitigate economic concerns associated with telehealth the authors suggested that less expensive personal monitoring equipment alternatives "could be used in conjunction with digital scales and automatic blood pressure monitors" (Burmeister et al., 2019, p. 13), examples of alternative equipment and costs were given. As another example, in the concluding remarks, the authors noted that a nurse who assisted participants throughout the study was instrumental in improving the health literacy of participants.

Although a variety of guiding statements, such as the two examples above, appear throughout the article reviewed, such insights ought to also have been consolidated into a set of principles for practitioners to refer to in future work and research utilizing telehealth technologies with older persons. Furthermore, these principles should link back to the research questions, chiefly promoting wellbeing, social functioning, and positive economic impacts.

On the study's aim to review social functioning impacts, additional social dimensions could have been explored to reveal further social impacts and create an extensive understanding of the *telehealth-older user social ecosystem*. Exemplary social dimensions include the social interactions between older persons and telehealth devices, those interactions between older users and telehealth systems capable of conversing or emotive actions, social effects on general practitioners using telehealth, social factors influencing user perceptions of telehealth technologies, and so on.

Overall, the study presented by Burmeister et al. (2019) makes invaluable contributions to the literature on telehealth and the older population. In future work, further social functioning impacts ought to be explored and the lessons learned in this study should be formulated into a set of principles for addressing the design, implementation, and ongoing support of telehealth for older persons.

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## **Author response**

The authors were given the opportunity to respond, but chose not to.

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doi: <https://doi.org/10.3127/ajis.v24i0.2769>

