

# THE EXPECTATIONS AND ACCEPTABILITY OF A SMART NURSING HOME MODEL AMONG CHINESE OLDER PEOPLE AND THEIR FAMILY MEMBERS: A QUALITATIVE STUDY

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## ABSTRACT

The one-child policy and longer life expectancies have transformed China into an ageing society. 'Ageing in place' becomes hardly feasible because of family structure change, and it is difficult for a single adult child in the family to provide care for two parents or four grandparents. Increasingly, Chinese older people are looking for nursing homes as a possible alternative shelter and care. The objective of this study was to explore the perception of Chinese older people on quality nursing homes, and their expectation and acceptability of a smart nursing home that provides nursing care using smart technologies to integrate nursing home operation and medical services. A qualitative case study approach was used to study the perception of Chinese older people and family members in Hainan Island and Dalian city. Participants were sampled purposively through snowball sampling. Semi-structured interviews were conducted on WeChat by using voice calls or voice messages, and audio-recorded. The field notes were recorded and voice messages were converted into texts in English. The Framework Method was used to apply and categorise the data into codes and themes. The qualitative analysis was guided by Golant's (2017) elder consumers smart technology adoption behaviours theoretical model. In this study, thirty-three (33) participants were interviewed, including twenty-seven (27) older people aged 65-75 years old and six (6) adult children, and data saturation was reached. Of these, twenty-two (22) participants were from Dalian and eleven (11) were from Hainan. Nine (9) of these older people had one or one more chronic disease, while the others were reported to be in healthy condition. The perceptions of Chinese older people towards the traditional nursing home included; 1) dissatisfaction with the quality of care; 2) lack of integration of medical services; 3) inadequate healthcare providers (HCPs); and 4) uncomfortable environment in current nursing homes. Their expectation on smart nursing homes was: 1) future implementation needs government support; 2) improving quality of care by using smart technologies; 3) adequate HCPs and skilled caregivers, and 4) integration of medical services. The acceptability of smart nursing homes is associated with stakeholders' perception of perceived efficaciousness, usability and collateral damages to decide on adopting the smart solutions. This coping process is also influenced by the older people's greater resilience to new information, their past experiences and external persuasiveness. Institutional care was perceived as an alternative to replacing home-based care. In addition, the attributes of the older people which included age, education attainment, health condition (severity of illness) were linked to the adoption of smart solutions. People with a better economic status would like to pay more for a higher level of nursing service in meeting their demands. In conclusion, the findings from this study indicate that the Chinese older people and family members perceived positively about the smart nursing home model. The older people's unmet needs and expectations on smart nursing homes are relevant to a broad base of stakeholders

interests, and it provided qualitative evidence to the Chinese government to implement a smart solution for rapid ageing. The smart nursing home model will involve multi-disciplinary collaboration from health sciences, computer science, engineering and business to realise.

**Keywords:** Smart nursing home, Chinese older people, unmet needs, expectation, stakeholders' acceptability