

M. AFIFI, M. AL-HUSSEIN. **Benchmark study for technological options available for older adults to reduce family and caregiver burden.** *Gerontechnology* 2014; 13(2):164; doi:10.4017/gt.2014.13.02.161.00 **Purpose** Current technology provides various means for older adults to facilitate communication within the family context. In addition, technology provides assistive tools required to improve quality of life. Older adults are expected to reach quarter of the total Canadian population by 2060. With respect to this aging population, the family paradigm is claimed to be shifting based on demographic and family pattern changes<sup>1</sup>. On the other hand, concurrent with this paradigm shift, Information and Communication Technology (ICT) and/or Assistive Technology (AT) continue to advance in support of the aging population. Both ICT and AT are possible solutions to reduce family and caregiver burdens, and promise to improve quality of life for older adults<sup>2</sup>. This paper proposes an Integrated Tree Analysis (ITA) of potential technological solutions to reduce family and caregiver burden. **Method** The proposed method is divided into three stages. First, ongoing paradigmatic changes with regard to the family and technology are defined and discussed. Regarding the family paradigm shift, we have observed that demographic trends are expected to shift with increased life expectancies and lower fertility rates, as well as decreased numbers of family members available to provide necessary support to elderly populations<sup>1</sup>. However, a technological paradigm shift in ICT, such as mobile phones and Internet access through computer or tablet, will be investigated from the perspective of enabling older adults to improve communication with family. In addition, AT such as smart homes and telehealth technology will also be investigated<sup>3-6</sup>. Second, an Integrated Tree Analysis (ITA) will be built for the proposed technology, to represent an integrated framework that combines all aspects related to technology for family caregiving in later life within the home environment. Only evidence-based studies will be selected to construct the ITA. Third, the challenges and potential opportunities related to families in later life within the proposed technological options shall be discussed. **Results & Discussion** The ITA is constructed for the proposed technology which visually represents all aspects related to technological options available for families in later life. The resulting tree analysis is in Figure 1.

## References

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**Keywords:** health & self-esteem, technology, older adults, family, smart home  
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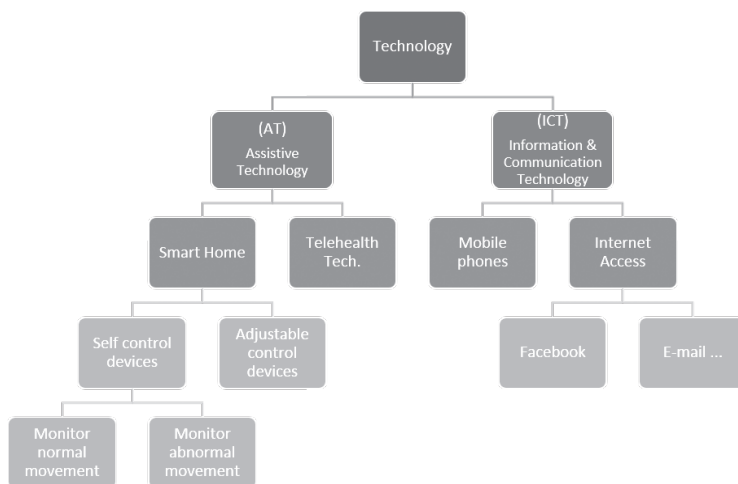


Figure 1. A proposed tree analysis of the current available technology