

L. LIU, D. JUZWISHIN, A. MIGUEL CRUZ, T. RUPTASH. **GPS devices for dementia clients: Ethical considerations.** *Gerontechnology* 2016;15(suppl):112s; doi:10.4017/gt.2016.15.s.768.00 **Purpose** The purpose of this paper is to describe a study that examined the user acceptance of GPS or locator devices by 45 dyads of dementia clients and caregivers, and to discuss the ethical considerations of using these devices with cognitively impaired participants. **Method** Over a one-year period, three GPS devices were trialed<sup>1</sup>: (i) a cell-phone device worn or carried on a lanyard (Prime Mobile) (n=21), (ii) a lockable watch (TriLoc) (n=22), and (iii) a GPS shoe insole (SmartSole) (n=3). To examine intention to use (ITU), 45 client-caregiver dyads completed pre- and post-use questionnaires based on the Unified Theory of Acceptance and Use of Technology (UTAUT)<sup>2</sup>. Clients' and caregivers' intention to use a device was determined by how difficult a device was to use. Clients' ITU was also determined by what they thought the device could do for them. Seven focus groups were conducted with caregivers and stakeholder groups including health professionals, ambulance paramedics, police and members of Alzheimer Societies. **Results & Discussion** *Table 1* shows gender and age distributions of clients and caregivers. The duration of usage ranged from 11 days to 254 days (average 5.8 months). Overall, user acceptance was high among client-caregiver dyads. Stakeholder groups supported the use of these devices which they believed complimented and enhanced their services. Ethical considerations for adoption of this technology included: (i) seeking assent from dementia participants after obtaining signed informed consents, (ii) validating caregiver responses as proxies for dementia user acceptance questionnaires, (iii) balancing one's need for personal privacy with one's need to be monitored by GPS for his or her safety, (iv) responsibilities of first responders (ambulance paramedics, police) in using GPS data, (v) role and responsibilities of community organizations like Alzheimer Societies to address public queries regarding GPS technologies, and (vi) responsibilities of researchers providing GPS devices to clients and caregivers.

**References**

1. [http://www.safetracksgps.ca/site/our\\_products?cat=5](http://www.safetracksgps.ca/site/our_products?cat=5); retrieved September 20, 2016
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*Table 1. Gender and age distribution*

<b>Descriptor</b>	<b>Client</b>	<b>Caregiver</b>
Gender, male / female	27 / 19	11 / 35
Percentage male / female	59 / 41	24 / 76
Age, years	76.0±11.5	41-50: 11% 51-60: 35% 61-70: 32% 71+: 15%