

# Technology for dementia: occupational therapists attitudes and practices towards technology for way finding.

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Fiona Jarvis<sup>1</sup>, Assoc. Professor Lindy. Clemson<sup>2</sup>, Professor Mark. Mathews<sup>3</sup>.

<sup>1,2</sup>Discipline of Occupational Therapy, Faculty of Health Sciences University of Sydney NSW, Australia

<sup>3</sup> University of Sydney NSW Australia



To explore the attitudes of occupational therapists towards recommending and using assistive technology for people living at home with dementia to reduce difficulties with way finding.

To identify practices by occupational therapists working in both community and hospital settings with clients with dementia who live at home.

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- ❖ What is assistive technology? (A.T.)
  - ❖ A broad term
  - ❖ Can encompass a variety of meanings depending on the context to which it is applied.
  - ❖ A device or system that enables an individual to perform a task they would otherwise be unable to do or make the task safer to do.

(World Health Organisation, 2004 )

# Occupational Therapist (O.T.)

Occupational therapists assist individuals to maintain or develop skills, which are needed to achieve functional independence and maintain their occupational role in everyday life.

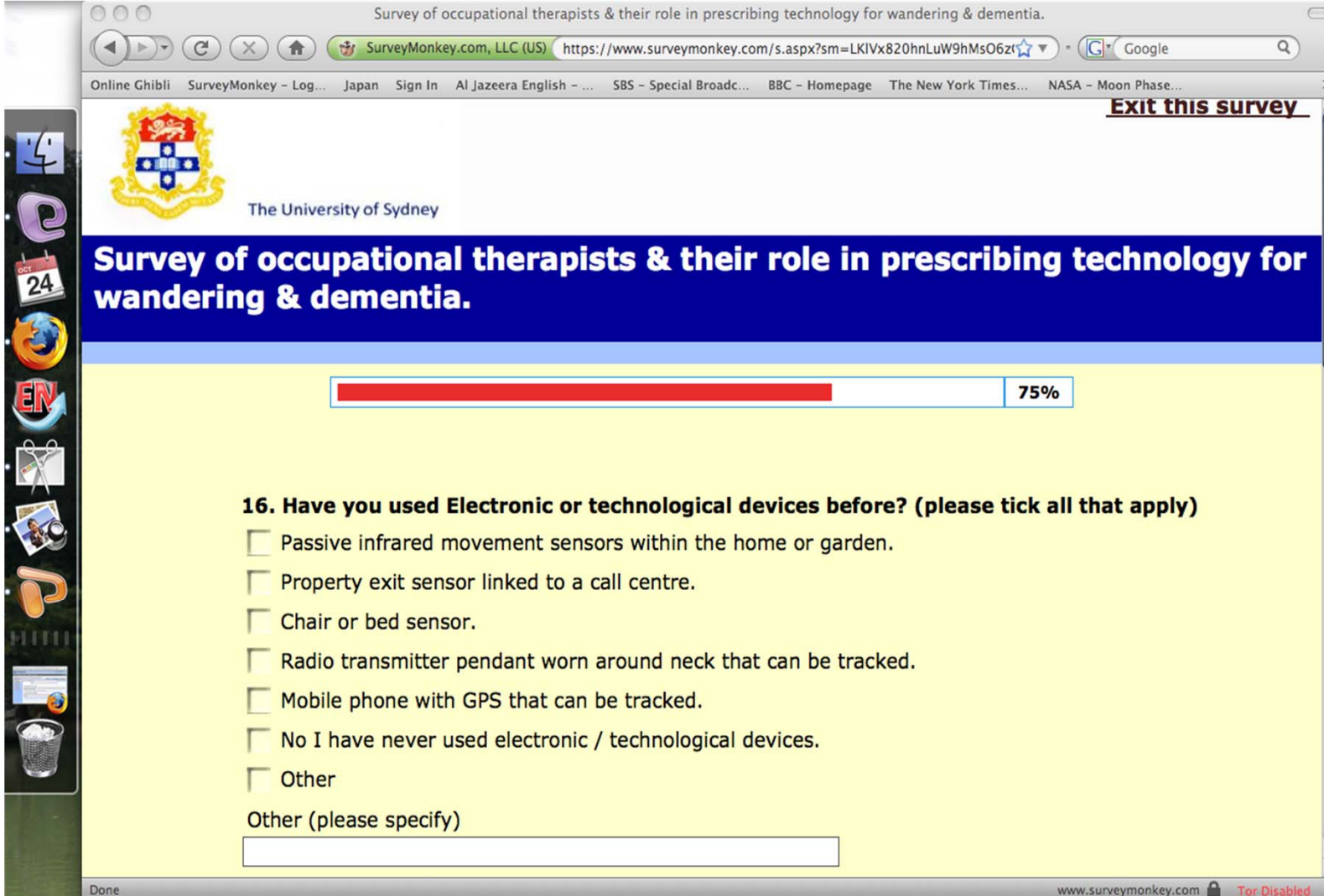
- ❖ Assess individual abilities and needs
- ❖ Occupational analysis and adaptation
- ❖ Environmental analysis and adaptation

(Hagedorn, 2000)

# Why undertake a survey

- ❖ OT asked to provide assessment within hospital or community setting
- ❖ Observations in clinical setting – ‘wandering’ was often a trigger for a move from home to an Aged Care Facility
- ❖ Prescription of assistive technology is key role of occupational therapists practice
- ❖ Limited research on the effectiveness of assistive technology (M. Lovarini personal communication November 2010; Curtin, Lovarini, & McCluskey., 2006)


- ❖ HREC approval University of Sydney
- ❖ Distributed via email to AOTA NSW and link on web page
- ❖ 25 questions web based survey
- ❖ Checklist & two way questions
- ❖ Multiple nominal response questions & space for additional comments



Survey of occupational therapists & their role in prescribing technology for wandering & dementia.


SurveyMonkey.com, LLC (US) <https://www.surveymonkey.com/s.aspx?sm=LKlVx820hnLuW9hMsO6zt> Google

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The University of Sydney

## Survey of occupational therapists & their role in prescribing technology for wandering & dementia.

 75%

**16. Have you used Electronic or technological devices before? (please tick all that apply)**

- Passive infrared movement sensors within the home or garden.
- Property exit sensor linked to a call centre.
- Chair or bed sensor.
- Radio transmitter pendant worn around neck that can be tracked.
- Mobile phone with GPS that can be tracked.
- No I have never used electronic / technological devices.
- Other

Other (please specify)

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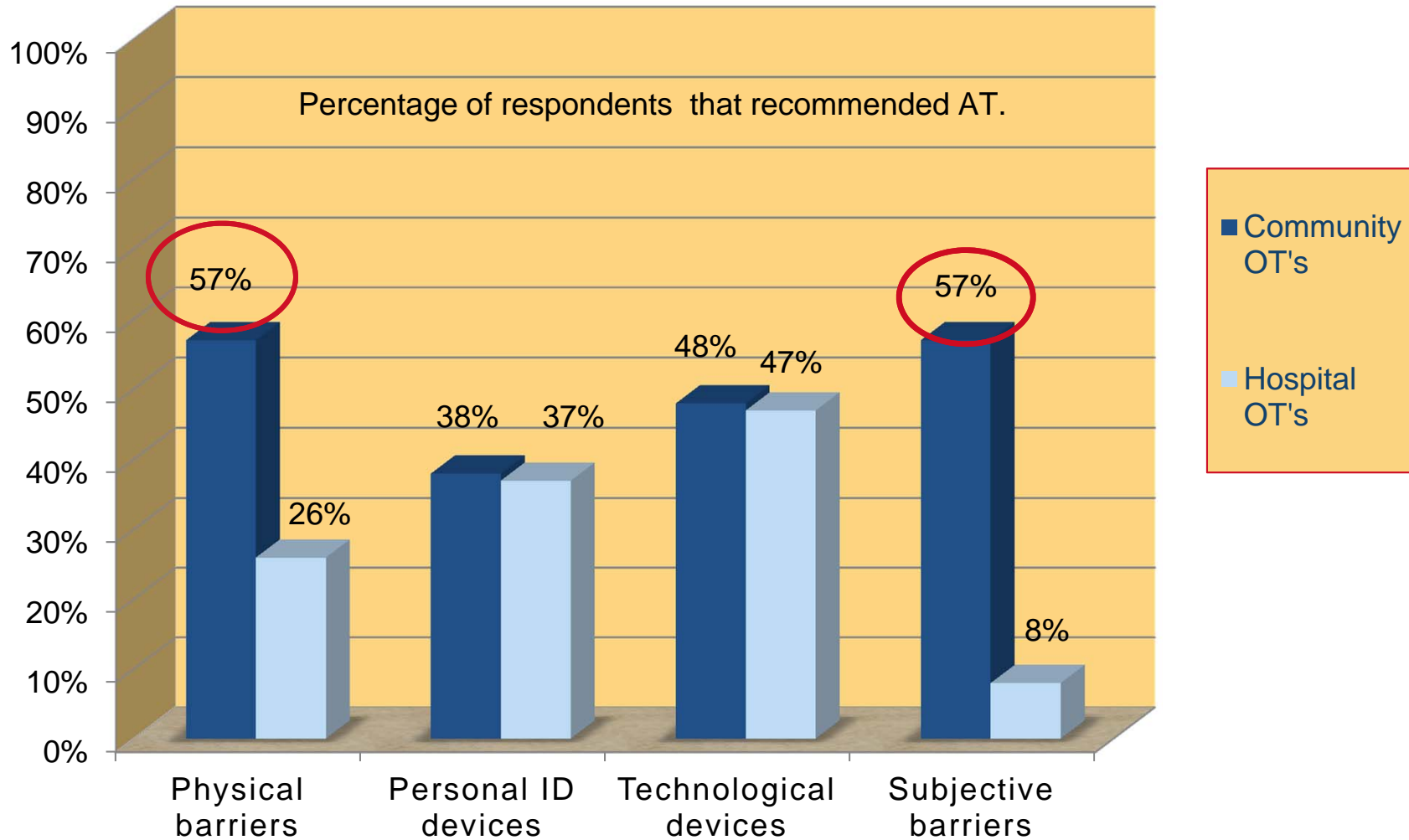
- ❖ Questions asked about:
  - ❖ Gender, age, qualifications and experience
  - ❖ Work setting (hospital, community, other,)
  - ❖ Length of time respondent had worked as an O.T.
  - ❖ Attitudes towards using assistive technology for their clients with dementia
  - ❖ Use of different types assistive technology



- ❖ Population scope – occupational therapists working in NSW with persons who have dementia
- ❖ Sampling frame – members of the Occupational Therapy Association Australia NSW
- ❖ Sample group - 85 responses.

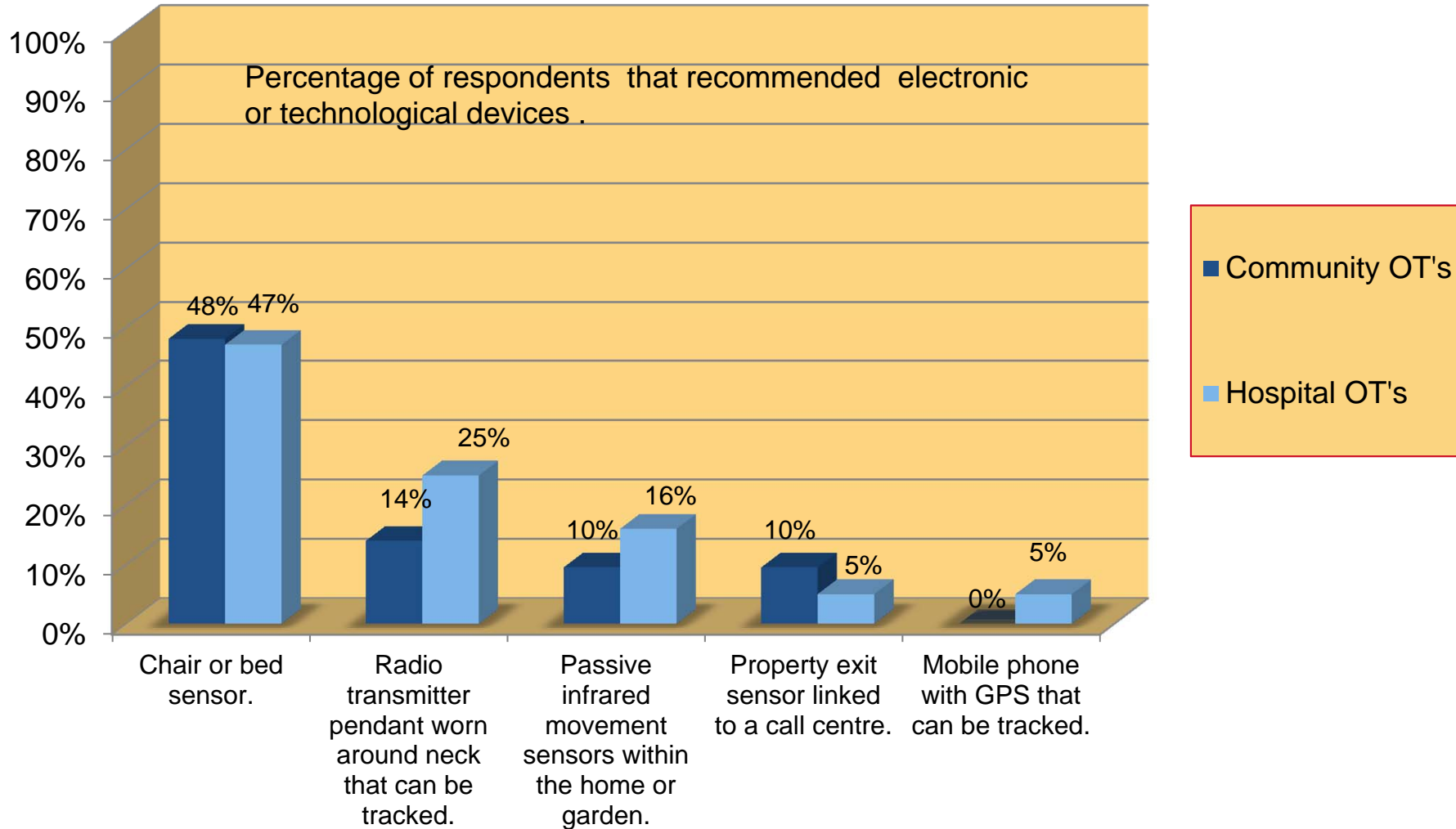
- ❖ Predominantly female 91.8% to male 8.2%
- ❖ 20% of all survey respondents had post graduate qualifications (Masters of Aged Care, Masters of O.T., M.B.A. etc)
- ❖ Time worked with clients with dementia: 3mths to 17yrs
- ❖ Time since graduation 1967 through to 2009

- ❖ Assistive technology devices were listed in the questionnaire under the headings of:
  - ❖ Electronic or technological devices,
  - ❖ Personal identification devices,
  - ❖ Physical barriers, and
  - ❖ Subjective barriers.





# Reported practices.



### Followed up or evaluated?

#### Community based OT's

- ❖ 71% followed up after recommending assistive technology
- ❖ Just over half of the 71% followed up in the first month.
- ❖ All evaluations were completed by 3 months

#### Hospital based OT's

- ❖ 30% followed up after recommending assistive technology
- ❖ Most of the 30% followed up in the first month.

Some OT's indicated that they had difficulty accessing items of AT for persons with dementia as a result of

- ❖ Limited resources and potentially high costs that may be associated with some of the items
- ❖ Rapid changes in technology resulting in changes to availability of particular products
- ❖ Ability to access information on AT\* limited practice

- ❖ Acceptability of different interventions
  - ❖ Ethics '*..it is a fine line between restraint and safety*'
  - ❖ Complexity and uniqueness of the individual and their situation must be considered
  - ❖ Potential of technology to do harm vs potential to provide support
  - ❖ Cautious about using would need more information and up to date information.



- ❖ What supports the use and retention of assistive technology?
  - ❖ Offering choice
  - ❖ Opportunity to try
  - ❖ Providing instructions
  - ❖ Ability to customise

(Waldron & Layton 08)

- ❖ Response rate to survey
- ❖ Social desirability – over reported or under reported behaviours due to nature of questions? (de Vaus 2002)
- ❖ Technology is constantly changing
- ❖ NSW occupational therapists surveyed only (excluding 1)

- ❖ Greatest number of reported recommendations by OT's were for physical or subjective barriers.
- ❖ A much greater number of community O.T.s completed evaluation of their clients than hospital based OT's
- ❖ Variability in the levels of knowledge by OT's on the type of assistive technology that may be used to support a client with dementia
- ❖ 'Cautious' optimism about the future.

- › Curtin, M., Lovarini, M., & McCluskey, A. (2006). Limited high-quality research on the effectiveness of assistive technology. *Australian Occupational Therapy Journal*, 53(1), 50.
- › de Vaus, D.A. (2002). *Surveys in social research (5th ed.)*. Crows Nest, Australia: Allen & Unwin.
- › Hagedorn, R. (2000). *Tools for practice in occupational therapy: a structured approach to core skills and processes*. Edinburgh: Churchill Livingstone.
- › Waldron, D. and N. Layton (2008). "Hard and soft assistive technologies: defining roles for clinicians." *Australian Occupational Therapy Journal* 55: 61-64.
- › World Health Organisation. (2004). A glossary of terms for community health care and services for older persons: Author.