# Dealing with the Dementia Deluge

Ruth Wozencroft

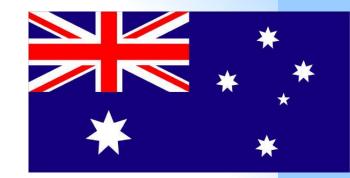
### Agenda

- 1. Introduction to Dementia and its prevalence
- 2. Potential improvement opportunities Dementia friendly environments
  - Room layout
  - Way finding
  - New technologies
  - Lighting and colour contrast
- 3. Specialist training
- 4. Conclusion and future engagements
- 5. Questions

#### Dementia a Global Concern

- As of 2012, 35.6 million people have Dementia globally<sup>4</sup>
- Every year, there are more than 7.7 million new cases<sup>4</sup>
- Equates to one new case every 4 seconds<sup>4</sup>
- It is estimated that 115.4 million people worldwide will be living with Dementia by 2050<sup>4</sup>
- The current economic impact is US\$ 604 billion per year<sup>4</sup>

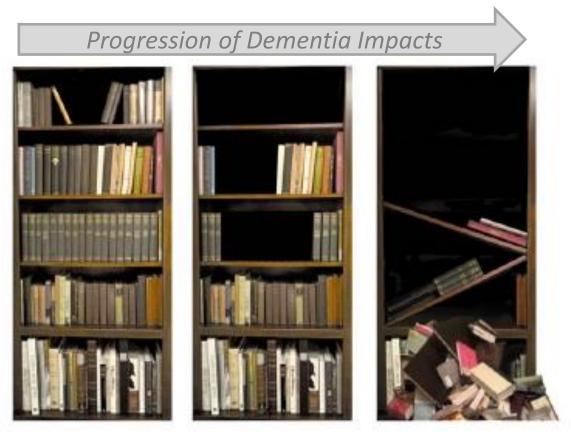
#### Dementia in Australia



- 332,000 Australians living with Dementia<sup>5</sup>
- Expected to increase by one third to 400,000 in less than ten years<sup>5</sup>
- An estimated 1.2 million people are carers of a person with Dementia<sup>5</sup>
- Total direct expenditure in the health and aged care system on people with Dementia was at least US\$ 4.9 billion in 2009-10<sup>5</sup>

#### What is Dementia?

Dementia is a syndrome in which there is deterioration in memory, thinking, behaviour and the ability to perform everyday activities<sup>3</sup>.



### Opportunities

Dementia Friendly
Environments

New Technologies

Specialist Training



#### Dementia Friendly Environments

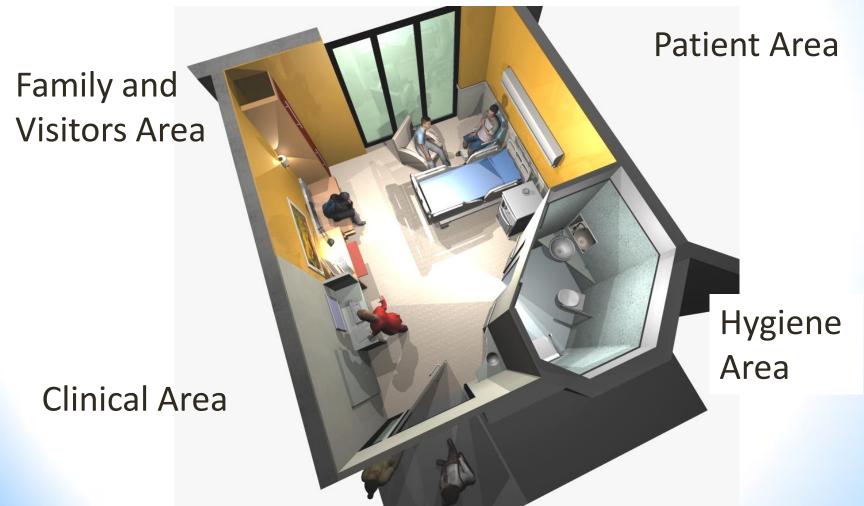
- High risk of falls<sup>6</sup>
- High risk of injury
- Cost of falls and injuries



Comorbidities also contribute to increased risk<sup>7</sup>

#### Dementia Environment - Room Layout

Achieve your facilities' clinical and safety goals by thinking beyond products



# Wayfinding 12







- Specialist clear signage
- Direct access to the bathroom
- Means of support such as handrails along the way

# New Technologies - Day Clock 13

"My mum was struggling with acknowledging what time of day it was after waking up after a day time nap or even what day it is after a night's sleep ... for mum the clock provided relief & reassurance"





## Lighting & Colour Contrast 14

Colour contrast

 Different materials and textures

Specialist lighting







# New Technologies - Light Tray 15,16,17





• "Better than bedside light as it did not hurt eyes" age 90

 "It was handy just being able to touch, it gave enough light to get out of bed" age 67

### Dementia Friendly Room



# Specialist Training

"Empathy for elderly people is promoted by using age simulation. The effectiveness of an age simulation suit as a teaching and learning aid is evidenced" 18



#### Conclusion

- The Dementia challenge is still growing
- Using evidence based research to create new ideas and technologies can contribute to Dementia friendly environments
- Dementia friendly environments can mitigate the risks associated with Dementia and improve efficiencies
- Considering the needs of Dementia patients at the design stage or when refurbishing existing facilities is crucial to creating Dementia friendly environments
- Specialist training is valuable in improving empathy towards Dementia patients

#### Future Engagements

 Looking for sites to engage with on testing new technologies and training techniques

 Gather feedback from facilities on new requirements and developments for existing products

Identify priorities to support Dementia care in your facilities

# Questions



#### References

- 1- Dementia Friends Organisation
- 2- Dementia: A Public Health Priority, World Health Organisation 2012
- 3- World Alzheimer Report 2013
- 4- World Health Organisation fact Sheet No 362 April 2012
- 5- Dementia in Australia, Australia Institute of health and welfare 2012
- 6- Alzheimers New Zealand Information Sheet 8 Preventing Falls.
- 7- Oliver D et al. Risk factors and risk assessment tools for falls in hospital inpatients: a systematic review. Age and Ageing. 2004
- 8- IHI, Reducing Harm From Falls..
- http://www.ihi.org/IHI/Topics/PatientSafety/ReducingHarmfromFalls/. Information found on April 7, 2011
- 9- Joint Commission, It's a Long Way Down: Reducing the Risk of Patient Falls retrieved from http://www.jointcommissioninternational.org/Web-Based-10- Education/Its-A-Long-Way-Down-Reducing-The-Risk-of-Patient-Falls/1435/ on January 18, 2011
- 10- Bates DW, Pruess K, Souney P, Platt R. (1995) Serious Falls in Hospitalized Patients: Correlates and Resource Utilization. The American Journal of Medicine, 99(2): 137-143
- 11- NPSA (National Patient Society 2010), UK
- 12- Brawley, E., 1997. Designing for Alzheimer's Disease: Strategies for Creating Better Care Environments. Brisbane: John Wiley and Sons.
- 13- Designability Bath Institute of Medical Engineering
- 14- University of Stirling
- 15-SomNia Research project http://www.somnia.surrey.ac.uk/
- 16-Carey-Smith, B. E., Evans, N.M. and Orpwood R.D. (2013) 'A user-centred design process to develop technology to improve sleep quality in residential care homes.' *Technology and Disability*, 25 (1): 49-58 17-Eyers, I, Carey-Smith, B.E., Evans, N.M. & Orpwood, R.D. (2013) 'Safe and sound? Night-time checking in care homes', *British Journal of Nursing*, 22 (14): 827-830.
- 18- Julius-Maximilian University of Wurzburg http://www.age-simulation-suit.com/effectiveness.html

#### With Thanks

 Bath Institute of Medical Engineering <a href="http://www.designability.org.uk/">http://www.designability.org.uk/</a>



Mrs Mary Chapman

