



The Future of Longevity Summary

Introduction

The Future of Longevity was hosted by The University of Melbourne's Melbourne Connect on Wednesday 30 July, bringing together researchers, industry leaders, and innovators to discuss the profound implications of increasing human lifespans. While modern medicine has significantly extends life expectancy, this success presents multifaceted challenges across demographics, healthcare, housing, finance, and legal frameworks. The overarching theme of this event was the critical need to shift focus from merely 'adding years to life' to 'adding good life to those years,' emphasising healthy aging, quality of life, and societal adaptation.

Key Themes and Insights

1. The Demographic Revolution: A Success and a Challenge

- **Increased Life Expectancy:** Since the early 20th century, life expectancy in Australia has increased by over 30 years, now standing at 81 for males and 85 for females. This is a 'phenomenal change' and a 'success' to be celebrated (Prof. Tony Blakeley).
- **Declining Birth Rates:** Globally, birth rates are dropping precipitously in all but six countries, falling below the replacement rate of 2.1. This means that populations are getting older due to fewer births, not just longer lives (Prof. Tony Blakeley).
- **Aging Population Structure:** The 'age pyramid' is transforming from a triangle to a 'space rocket', with the proportion of the population aged 65+ expected to rise from 9.8% forty years ago to nearly a quarter in the next 35-40 years (Prof. Tony Blakeley).
- **Economic Strain:** This demographic shift will lead to a significant imbalance: 'many more people 30 years from now expecting financial support from superannuation but far fewer people to actually generate the wealth' (Prof. Eduard Hovy). The ratio of working-age people (25-64) per older person is projected to decrease from 5:1 to 2:1 (Prof. Tony Blakeley).

2. Redefining 'Aging with Grace': Lived Experience - a Keynote by Margaret Harrison

- **Holistic Well-being:** The goal is to 'age happily' and 'with purpose and grace', emphasising the importance of 'close relationships with family and friends' (Ms Margaret Harrison).
- Adding Life to Years: Margaret Harrison, at 80, embodies the quote: 'You can't add years to your life, but you can add life to your years', highlighting the importance of personal attributes like a 'positive attitude', 'a sense of giving to others', and 'remaining interested and immersed in the world around you.'
- Active Engagement: Margaret's extensive career changes and community involvement (e.g., Music Viva, Save the Children, Cubbies) demonstrate that 'life doesn't stop when you retire, no matter at what age.' Staying connected and continually learning new things combats boredom and fosters vitality.
- **Facing Adversity:** Despite significant personal challenges like cancer, chemotherapy, and the loss of her husband, Margaret maintains a positive outlook, emphasising the importance of resilience.

3. Healthcare Evolution: Prevention, Costs, and Ethical Dilemmas

- **Modern Medicine's Success:** Advances in medicine have extended lives by preventing infectious diseases and improving treatments for chronic conditions like cardiovascular disease and cancer (Prof. Mike McGuckin).
- The Chronic Disease Challenge: The emergence of chronic diseases means that 'the next generation may in fact not live as long as we do' and Australians spend 'about 8 years in poor health at the end of their lives.' A significant portion of healthcare costs (approaching 10%) are spent in an individual's last year of life (Prof. Mike McGuckin).
- Quality vs. Quantity of Life: A central question is 'how much do we want to prolong life if it means that people will be not having a good quality of life at the end of their life.' The focus should be on 'how long we can live, but how well we can live' (Prof. Mike McGuckin).
- Modifiable Risk Factors for Dementia: A 'revolution' in understanding protective and modifiable risk factors for dementia suggests that 'if we could address them more successfully, we could prevent 40% of all dementias around the globe', delaying onset and improving quality of life (Prof. Nicola Lautenschlager). This includes physical activity, social engagement, and cognitive stimulation (Prof. Yuting Zhang).
- **New Medications:** While promising, new Alzheimer's medications like Donanemab are 'very early days', 'quite risky', and 'incredibly expensive' (Prof. Nicola Lautenschlager). The challenge is making them 'affordable for everybody and safe for everybody.'
- **Prioritising Prevention:** There is a strong argument for 'prioritising preventive treatment policies that reduce or compress morbidity, not just make people live longer with more disease' (Prof. Tony Blakeley). This raises ethical quandaries about resource allocation, particularly for 'futile care' at the end of life (Prof. Tony Blakeley).

4. Housing and Community Design: Breaking Ageist Stereotypes

- **Undesirable Senior Housing:** Current housing solutions for seniors, such as retirement villages and aged care facilities, are often 'places of last resort', leading to residents feeling isolated, restricted, and regretting their choices (Mr James Kelly, citing 'The downside to downsizing' article).
- Barriers to Innovation: Legislative frameworks (e.g., Retirement Villages Act, Aged Care Act) 'stifle innovation' by cohorting demographics and ruling out intergenerational opportunities (Mr James Kelly).
- Lack of Choice: Individuals face limited options for care location and style, with restrictions on home care packages (Mr James Kelly).
- **Keeping People in Communities:** Solutions involve 'inner urban regeneration opportunities' to allow seniors to remain connected to their established communities, promoting vibrancy and access to services (Mr James Kelly).
- Attractive and Affordable Options: Design needs to create housing that is a 'choice people want to make', including diverse options like townhouses with independent living while connected to broader community amenities. Affordability is crucial, with examples of mixed rental and build-to-sell accommodations that blend seamlessly into the streetscape (Mr James Kelly).
- Intergenerational Living: Models from overseas, like Denmark's 'Langanger house' with
 residential aged care and multi-family housing, offer opportunities for public spaces that foster
 intergenerational interaction, though current Australian legislation prevents this (Mr James Kelly).

• Cultural Shift: There is a 'big problem in Australia' with an 'ageist view' that diminishes older adults. Design can help 'break down that age of stereotype' by creating places that are 'no different to any other part of the community' (Mr James Kelly).

5. Financial Systems: Superannuation, Wealth, and Inequality

- Variability in Life Expectancy: While average life expectancies are high, the 'variability on life expectancy' is a significant factor. A 65-year-old woman projected to live to 95 has only a 'one in 20 or 5% chance of actually dying on the day that the tables say that you'll die', creating unpredictability for retirement planning (Ms Amara Haggani).
- Changing Nature of Retirement: Retirement is no longer a definitive end to work but a 'different life stage' with people 'dipping in and out of working' and doing part-time work (Ms Amara Haqqani). This requires superannuation to adapt to diverse individual needs.
- **Wealth Disparity:** There is a bifurcation between the quality of outcomes for poorer people versus wealthier individuals, with 'mortality improvements... connected to people that have more money.' This creates gaps in quality of life and access to care (Ms Amara Haqqani).
- **Superannuation's Role:** The \$4.2 trillion superannuation pool is a rapidly growing resource that needs to consider its social responsibility beyond just financial returns. The 'best financial interest duty' currently prioritizes returns, potentially at the expense of broader societal investments like housing and elder care (Ms Amara Hagqani).
- **Policy Instability:** Frequent changes to superannuation policy with each new government create uncertainty; consistency is needed (Ms Amara Haqqani).
- **Economic Opportunity:** The aging population, while a challenge, is also a 'tremendous commercial opportunity.' Victoria could position itself as a 'standard bearer of longevity for the future' by building economic enterprises through tech and architecture (Mr Warwick Freeland).

6. Legal Frameworks: End-of-Life Choices and Societal Literacy

- **Lagging Laws:** Australia's 'legal system is lagging behind' in addressing end-of-life issues, with laws 'ill-equipped to respond to the futures of longevity' (Assoc. Prof. Mark Trabsky).
- **Desire for Choice:** Australians 'overwhelmingly want choice towards the end of their lives' regarding 'where, when and how they will die' (Assoc. Prof. Mark Trabsky).
- **Complex Advance Care Directives:** While advanced care directives exist, the legislation is 'overly complicated', documentation 'burdensome', and accessibility unclear (Assoc. Prof. Mark Trabsky).
- Voluntary Assisted Dying (VAD): Victoria was a pioneer in legalizing VAD in 2017, and most other states have followed. However, the framework is 'beset by stringent constraints and bureaucratic delays' leading to people 'dying in sufferable pain before they receive a permit' (Assoc. Prof. Mark Trabsky).
- Limitations for Dementia: A critical challenge is that individuals diagnosed with dementia are currently not eligible for VAD, nor can they pre-emptively state a desire for VAD in an advance care plan. This raises complex moral and ethical questions about autonomy and quality of life for those with cognitive impairment (Assoc. Prof. Mark Trabsky).
- Lack of Legal Binding for Funerary Wishes: Unlike wills for estates, 'funerary wishes are not legally binding in Victoria.' Families can even veto organ donation wishes, despite demand problems (Assoc. Prof. Mark Trabsky).

• **Need for Open Conversations and Literacy**: A major barrier is the societal discomfort in discussing death and end-of-life wishes. There is a critical need to 'increase literacy in our communities of how our legal systems intersect with aging and dying' to enable honest conversations and proper planning (Assoc. Prof. Mark Trabsky).

7. Technology and Innovation: AI, Robotics, and Digital Health

- **Al and Tech Opportunities:** Al and technology are seen as having 'big opportunities for... effectively improving the lives of people in the future.' (Mr Warwick Freeland).
- **Robot Companions:** Robots like 'Roger' and 'Metacat' are being explored as companions for older adults, offering conversation, engagement, and comfort, particularly for those living alone or with dementia. Programs like New York State's LEQ Initiative highlight the potential for 'proactive and empathetic care companions' (Prof. Jenny Waycott, Dr Audrey Bolaska).
- **Ethical Concerns with Robotics:** The use of robot companions raises significant ethical concerns regarding privacy (data collection by care organisations to monitor clients, potentially reducing inperson visits or identifying those needing institutional care), empathy (how robots respond to trauma), dignity (undignified for grown adults), and deception (individuals with dementia believing robot pets are real) (Prof. Jenny Waycott, Dr Audrey Bolaska).
- **Digital Health Slow Adoption:** Australia has been 'really slow' in adopting digital health solutions like national health apps due to concerns about data sharing, despite the use of similar technology in advanced banking systems. Other countries like Taiwan and the UK are more progressive in this area (Prof. Yuting Zhang).

Conclusion

The future of longevity demands a holistic, interdisciplinary approach that extends beyond medical advancements. It necessitates significant societal shifts in thinking about aging, resource allocation and individual autonomy. From adapting housing and financial systems to reforming legal frameworks and embracing ethical technological solutions, the goal is to ensure that increased lifespans are accompanied by enhanced quality of life for all, regardless of socioeconomic status or cognitive ability. Open conversations, policy reform, and embracing innovation will be critical in making 'increasing longevity a success of success.'