

M. LO BIANCO, S. PEDELL, G. RENDA, A. KAPOOR. **Designing for disparities: Harmonising the divergent goals and perspectives of service providers and the elderly regarding fall prevention.** *Gerontechnology* 2016;15(suppl):47s; doi:10.4017/gt.2016.15.s.624.00 **Purpose** This research investigates the goals and perspectives of older adults and fall prevention service providers. These two groups share related goals. However, for older adults the ability to pre-conceive environmental modifications for fall prevention is limited by analogue design methods within service delivery¹. Fall prevention services lack goal-oriented communication tools to design empowering and transparent care solutions¹. **Method** This qualitative study includes eleven fall prevention industry professionals and eight older adults. Industry participants range from occupational therapy, physiotherapy, architecture, aged care business development as well as management. Older adult participants are seventy years of age and older, live within their own homes and have had experience with falls prevention and home modifications. Interviews with both groups contrast and compare goals and service requirements, as well as the translation of older adults' goals into service design drivers. Additionally, an augmented reality visualisation application prototype is evaluated as a design communication tool to supplement the home modification process. This tool allows both participant groups to express and communicate goals through shared design interactions. **Results & Discussion** Findings demonstrate communication discrepancies between older adults and fall prevention industry professionals. While many older adults find home modifications beneficial, the majority fail to initially consider their need for modifications or struggle to comprehend the importance of their own goals within the design process. The shared experience and truthful design processes offered by digital tools facilitate a more person-centered approach to falls prevention service design. Built on the data of both groups we propose a service design process (*Figure 1*) based on the Design Council's Double Diamond – a design framework to converge divergent thinking². The model details an iterative fall prevention service design process that allows for differences in stakeholder perspectives. Additionally, it accommodates for innovative communication technologies as supplementary healthcare design tools. The ability for an older adult to communicate their goals and see their wishes reflected in practice is a vital move towards service delivery where older adults are active contributors to their care outcomes, rather than passive receivers³.

References

1. Lo Bianco M, Pedell S, Renda G, Kapoor A. HCI Methods for Empowering Discussion on Person-Centered Fall Prevention with Older Adults. Proceedings of OzCHI, Melbourne; 2015; doi:10.1145/2838739.2838767
2. Design Council. Innovation by design: How design enables science and technology research to achieve greater impact. London: Design Council; 2015
3. Taylor G, Hawley H. Key Debates in Health Care. Maidenhead: Open University Press; 2010

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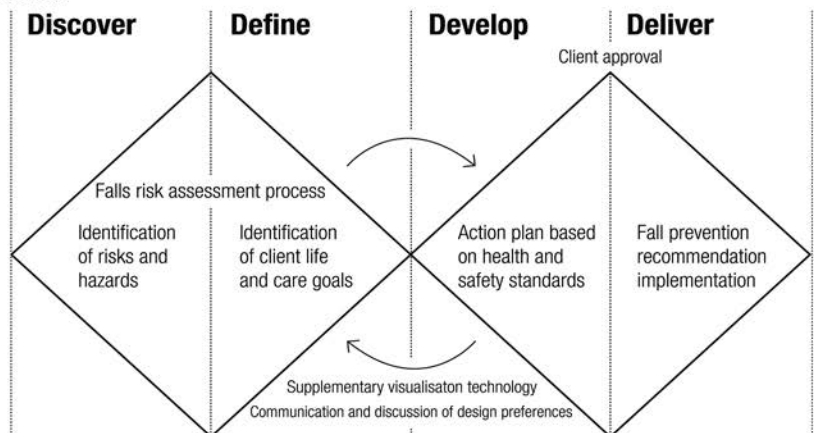


Figure 1. Service design process to harmonise divergent stakeholder goals