A person-centered approach for fall prevention: Embodying the goals of older adults in personas

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Abstract

This research constructs older adult user personas as design and communication tools to assist in the co-design of person-centered interventions for community-based fall prevention. Designers require innovative approaches to represent the user goals of older adults. Compliance rates associated with fall prevention recommendations are low. In order to create accepted fall prevention interventions, new ethnographic tools are required. If person-centered fall prevention is to be successful, the co-creational design methods underpinning it must embody the goal-driven ideologies of person-centered thinking. A qualitative content analysis of 20 community aged care documents was conducted. The results informed the production of a series of user personas; two of these are presented. The personas were created using a coding and persona design process that embodies the co-creative values of person-centeredness with a focus on the individual goals of older users. The personas represent the voice of older adults and provide a means to communicate, tailor, improve the design of fall prevention interventions and contribute to the decision-making process. We expect that this method of persona-construction and the resulting personas will inform solutions that are better accepted thereby preventing falls amongst older adults. Further evaluation is required to verify the efficacy of this method.

personas; person-centered design; fall prevention; older adults.

The greater proportion of the Australian population is growing older. By 2051, Australian citizens over the age of 65 are forecasted to reach 26% of the total populous, thereby doubling this segment's proportion within the next 50 years (Australian Bureau of Statistics, 2013). As a consequence, the greying of Australia presents a number of challenges including mounting demand for care services for older people who wish to remain living in the

community for as long as possible; this in turn is placing growing pressure on our community aged care system (Australian Institute of Health and Welfare, 2012).

Person-Centered Care

A person-centered approach to deliver community aged care aims to better address individual needs and preferences of older clients (National Ageing Research Institute, 2006). However, this is dependent on the healthcare design being able to be tailored and made appropriate for individuals. This approach is strengthened by the National Health and Hospital Reform Commission stating that "[t]he direction of our health system and the provision of health services must be shaped around the health needs of individuals, their families and communities. The health system should be responsive to individual differences, cultural diversity and preferences through choice in health care" (2008, p. 2).

The foundation of the person-centered care ideology centers around what the older care client *can do* and their *goals*, rather than focusing on their incapability (National Ageing Research Institute, 2006). This kind of healthcare respects the values of patients; moreover, it contends that the failure to do so may lead to non-compliance and non-cooperation with care recommendations (Taylor, 2010). Currently, older people regularly disagree with fall prevention interventions, as many see assistive health approaches as stigmatising and do not associate themselves as someone who may require assistance (Plowman, Prendergast, & Roberts, 2009).

Fall Prevention

Falls

Falling is a major cause of physical harm to older Australians and creates a significant obstacle for independent living (Centre for Health Advancement and Centre for Epidemiology and Research, 2010; NSW Department of Health, 2003). The American Geriatrics Society, British Geriatrics Society and the American Academy of Orthopaedic Surgeons Panel of Falls Prevention state that "falling is associated with considerable mortality, morbidity, reduced functioning, and premature nursing home admissions" (Kenny, Rubenstein, Martin, & Tinetti, 2001, p. 664). Older adults are more likely to suffer from falls as the incidence and injury rate both rise in relation to age (Lord, Ward, Williams, & Anstey, 1993; World Health Organisation, 2007). It can be estimated that nearly 28-35% of those of 65 years and older will experience a fall each year, this probability rises to 32-42% for those older than 70 (World Health Organisation, 2007). Additionally, falls related to older adults 75 and over account for the greatest injury related cost on the Australian healthcare system (NSW Department of Health, 2003).

Interventions

Assistive technology has previously been defined as "any device or system that allows an individual to perform a task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed" (Cowan & Turner-Smith, 1999, p. 325). Unfortunately, a significant proportion of assistive technologies suffer from poor older adult user acceptance and usage (LeRouge, Ma, Sneha & Tolle, 2011). Moreover, health care products within gerontology[1] can be seen as stigmatising for older users, as many do not take into account the aesthetics and functional requirements older people require in order to live day-to-day without being stigmatised as frail or of ill-health (Durick, Robertson, Brereton, Vetere & Nansen, 2013). Older people wish to focus on their abilities not their inabilities, Plowman et al states that "[m]any people choose not to use canes and assistive devices in the home. This is not just because these devices are socially stigmatizing in appearance, but because these devices reinforce a personal identity as someone who is *sick*" (2009, p. 31). This is evident in the installation of grab rails and ramps within and around the home, as these interventions may challenge an older persons' independence and lead to a sense of stigmatisation (Connell, 1996). Clemson, Cusick, and Fozzard (1999) contend the level of control and older person experiences within their home environment will directly affect their uptake and user compliancy with fall prevention recommendations.

It has been argued that in order for older people to benefit from and engage with assistive technologies in a harmonious and safe manner, we as designers are obligated to ensure that these new systems are designed with the abilities, needs and preferences of older users in mind (Rogers & Fisk, 2003). In order for interventions to be acceptable and successful it is imperative that the design is malleable to the emotive needs of the individual user. The importance of this point is magnified when designing for older people, as this group of individuals are much more likely to suffer from debilitating circumstances of cognition and mobility (Rogers & Fisk, 2003).

Design Based on the Goals of Older Adults

LeRouge et al. (2011) assert that in order to design successful health technologies for aged care, the unique psychological needs of the older adults must be respected and represented. LeRouge et al. (2011) deconstruct an information technology design process for aged healthcare into five steps; two of which are directly transferable into the context of designing assistive technologies these steps include: the analysis and full comprehension of many of the challenges and requirements of the older user, as well as the development and incorporation of older user preferences into health technologies. This approach is in alignment with the presented research, as this study focuses on the individual goals of older adults and provides a process to make these goals palpable through representation via user personas.

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[1] The study of older age, the ageing process and the associated issues facing older people.

There are many common assumptions about designing assistive technologies for older adults. Commonly, there is too much focus on the technology within the research and not enough on the needs of the older end user (Durick et al., 2013). One of the fundamental concepts of the person-centered care ideology is designing health care to the needs of the individual. If the person-centered care is to be successful in delivering healthcare solutions that are indeed *person-centered*, each element of that medical construct must adhere to the same ideology. This includes interventions for community based fall prevention for older adults.

> "Needs arise from the ways in which people perceive their everyday world and how they decide and act upon their own self-determined priorities. The ways in which needs arise thus depend upon the individual, but are also driven by the norms shared with other people within their social group … technological solutions must adequately account for the full complexity of human experience if they are to be useful" (Sixsmith & Sixsmith, 2000, p. 192).

According to Buxton (2007), many products are being released promising to make lives simpler, easier and solve a myriad of daily problems that older adults may encounter. However, the reality is that very few of these solutions last, and many fail to deliver on their promises, the reason being that there is an absence of design and an over-reliance on technology alone rather than on the solution (Buxton, 2007). User informed design considerations should shape assistive technologies that serve older users and reflect their values, fitting seamlessly into their already established lifestyles.

Much like the general population, older people are not simply a homogenous group whose diverse needs can be simply categorised with *age* being the driving focus in the design process. Within the older adult demographic there are significant distinctions between what may classify someone as *elderly*, as the ageing process affects each individual differently. The contrast between a spritely 66-year-old female and cognitively impaired 87-year-old male will be notable. A more differentiated and comprehensive understanding of the problems of older adults and goals is required.

Older adults often have many common life goals, some of the most shared include being physically healthy, to uphold their autonomy and independence, to continue to be socially active and to remain living in their homes for as long as possible (Durick et al., 2013). Ageing in place is concerned with the ability of older individuals to continue to live within their existing environments throughout their changing needs and health conditions (Malmgren Fänge, Oswald, & Clemson, 2012). Dorfman (1994) discusses the goals older adults can retain throughout the ageing process, contending that irrespective of the level of dependence an individual may have, older people still have the ability to maintain control over their environments. Furthermore stating that the needs of older adults must be in harmony with the characteristics of their environments.

These goals are often underpinned by a wide variety of circumstances that have evolved from decades of independent life experience. Additionally, Durick et al. (2013) emphasise that in light of the older participants' collective views and opinions on what it means to age well, there are consistent differences in the ways in which their physical bodies change as part of the ageing process. This study focuses on common goals of older adults, but also represents the individual circumstances that are at their foundation.

Designers require methods to explore and represent these goals in order to guide assistive technology design. Personas are promising as they focus on individual context, emotions and most importantly the goals of people (LeRouge et al., 2011; Don & Petrick, 2003; Rogers, Sharp & Preece, 2011). The goals of the older adults build the foundation of the personas produced in this research and function as pertinent design drivers. Furthermore, these personas serve as a sub-segmentation within a large and diverse group of older people at risk of falls.

Older User Personas to Guide Design

Personas provide highly detailed descriptions of archetypal users of the system or design under consideration that designers can make reference to and draw influence from (Cooper, 1999, 2014; Pruitt & Adlin, 2006; Nielson, 2003). A persona does not aim to describe an actual person; commonly personas signify a synthesis of qualitative research data (Cooper, 2014). Personas encompass goals, ambitions and needs of emblematic users that allow for co-creative evaluation throughout the design process (Cooper, 2014). Therefore, they are promising communication tools between care providers and older people to inform assistive design solutions in a co-creative manner.

In addition to goals, personas often contain descriptions of other user attributes, such as skills, life experience, environment, attitudes and other typical characteristic traits of human beings (Cooper, 2014). Commonly, personas are developed and presented with a name, an avatar or photograph and a number of personal details, making a detailed description of the user – which can then be embedded into a characteristic user scenario (Don & Petrick, 2003). This inclusion of dependable and sincere character traits make personas relatable and assist designers in visualising personas as genuinely conceivable users, and consequently, as consumers that can be designed for. Personas are shared artefacts that can be discussed and communicated, this allows for design solutions to be envisioned and reasoned with during the design process (Cooper, 2014). Furthermore, personas instill humanistic traits such as feelings, preferences and emotions. They are communicable beings that can represent the desires of older adults, extending beyond mere aspects of psychical and psychological decline.

Methods

The primary objective of this study is to provide specific persona generation process that provides older adults with a voice by emphasising their care goals. This approach delivers a repeatable method in the design and evaluation of assistive technologies for community fall prevention for older adults. Numerous older user personas are constructed and a selection are showcased as design tools in order to provide a means to assess the suitability of fall prevention interventions. Twenty community aged care documents underwent a qualitative content analysis to demonstrate the development and construction of user personas of community-based older care consumers (Saldaña, 2009; Patton, 2002; Hsieh & Shannon, 2005). All documentation was provided by a private Victorian healthcare provider and de-identified prior to disclosure to the research team.

The twenty community aged care documents contain descriptions of goals, based on answers to the following questions:

1. What are your most important requirements to assist you living at home?
2. What do you think would prevent you from staying at home safely?
3. What can we do to support you living at home?
4. What do you want in your life?
5. What is not working well and what needs to happen to change?

Answers to these questions yield insights into the daily lives of older adults that are often emotional, confrontational and goal-driven. Secondary to this, the documents contain detailed medical health assessments, home environmental risk catalogues as well as service delivery plans. The documents are approximately 20 pages in length each.

Document/Content Analysis – Coding and Persona Design

Content analysis aims to interpret meaning from a body of given data (Patton, 2002; Hsieh & Shannon, 2005). It has been recognised as a malleable method to analyzing text data (Cavanagh, 1997). This methodological process allows an investigator to take an objective stance and apply a pragmatic lens to data, allowing the data to reveal codes and categories in ways that were not originally known at face value to formulate a true depiction of the contents.

The researchers utilise a qualitative approach in the document analysis and subsequent open and axial coding as part of this study. Open coding has been defined as "the transitional process between data collection and more extensive analysis" (Saldaña, 2009, p.4). It allows for tentative labels to summarise the large body of data. Subsidiary to this, axial coding process allows for the emergence of connections among both categories and subcategories and aims to provide a means to allow for a theoretical framework which underpins the analyses (Saldaña, 2009). Within the analysis there are two distinct phases *(A and B),* and a third phase for the construction of the personas *(C)*.
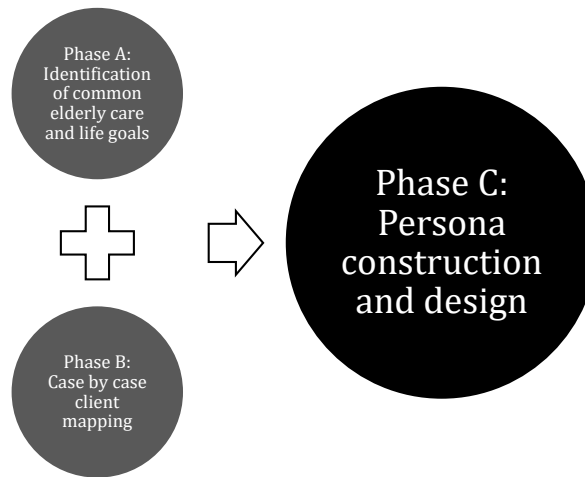
Figure 1: Content analysis procedure

Phase A: Identification of common aged care and life goals commences with a read-through of all care documentation in hard-copy format several times. This is done recurrently until the researcher achieves a sense of immersion with the data. Following this, relevant tentative sections of the data are open coded (Saldaña, 2009) and copied verbatim into a spreadsheet to make for simplified viewing between all documents and data. This initial analysis provides the researcher with common ideas about the care goals of older adults, their distinct lifestyle, medical factors, common environmental home risks as well as service delivery approaches. The resulting data is quantified to identify common trends and notable circumstances.

Phase A includes an open coding of keywords and phrases within the client life and care goal answers as found within the aged care documentation. These codes are sorted into common themes through a card sorting process (Figure 2). Card sorting is a technique that allows for the structuring of information and evaluation of data to validate common categories identified (Martin, 2012). Each card is color coded, allowing the researcher to refer back to the client case if further circumstantial investigation is required. This procedure assists in identifying significant recurring codes that are then catalogued and sub-divided into categories.

Figure 2: Card sorting

Subsequent to this, the codes underpinning these categories undergo axial coding (Saldaña, 2009). Identification and extrapolation of interrelationships between identified codes derived from the initial coding and card sorting exercise are further explored, informing an additional categorical breakdown (Figure 3). This offers the researcher a greater understanding of the interrelationships between the categories and goals. Both codes and categories are colour coded in a manner that allows the researcher to visualise and refer back to individual client cases. Moreover, allowing for the identification of the specific questions and circumstances that produce particular goals/codes.
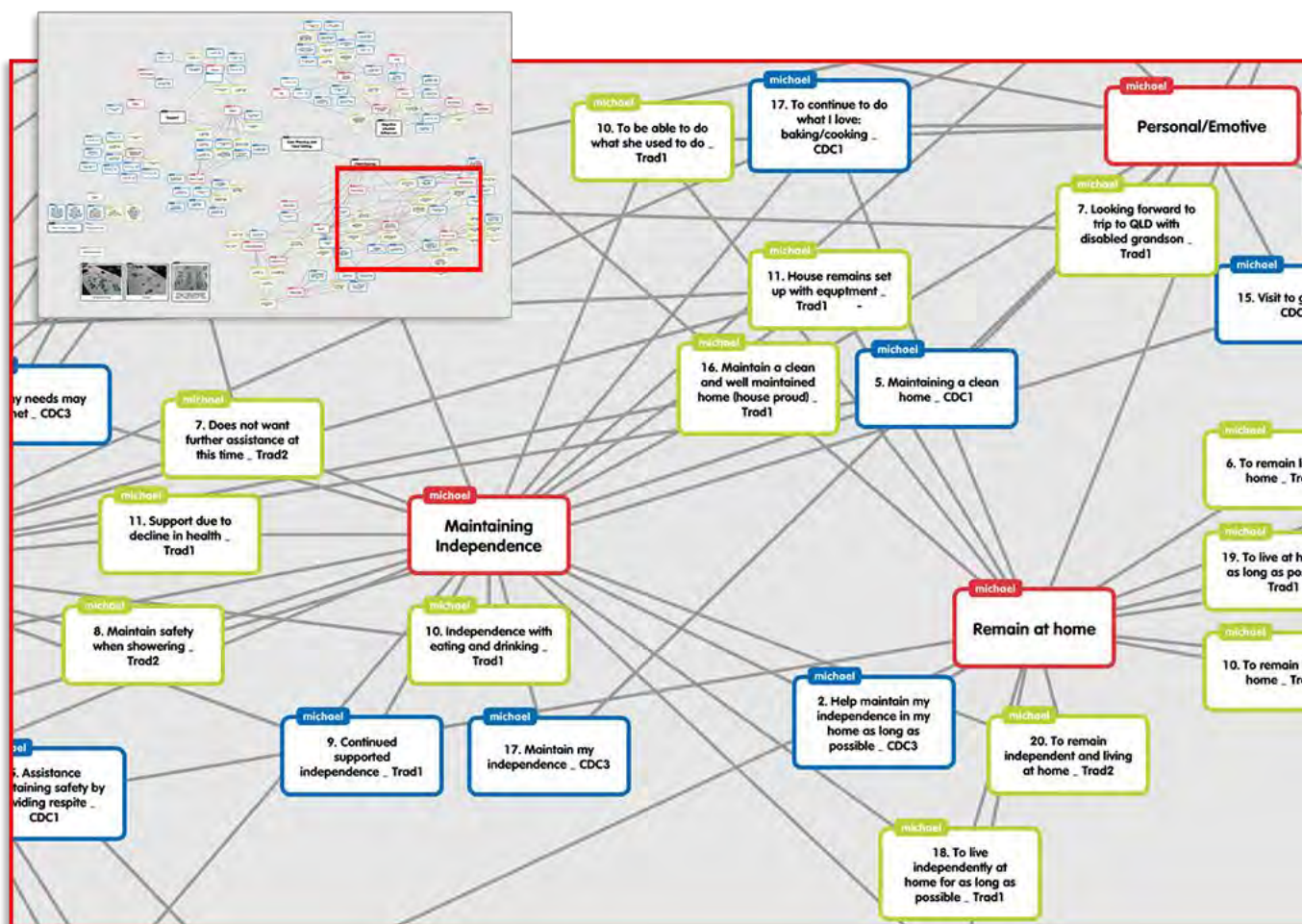

Figure 3: Axial coding

Phase B: Case by case client mapping commences with open coding of each individual client case to identify tentative labels and circumstantial data related to each individual client. This process encompasses all twenty community aged care documents. Following this, a secondary axial coding process permits the researchers to design circumstantial care maps for each client, alike the procedure outlined in Figure 3. This process provides rich and detailed descriptions of each older adult care client's narrative allowing the researchers to fully comprehend and visually explore each client's life and care journey.

Phase C: Persona construction and design is the amalgamation of the results from both *Phases A and B.* The prior analyses reveal common goals and the categorical relationships

supporting them. These results provide sympathetic understandings of community based older people. Applying both a selective and iterative coding process, the researchers are able to conceptualise a number of typical user personas based on similarities throughout the documentation. With a greater appreciation of the various life contexts at the foundation of common goals the researchers produce a number of personas that encapsulate the individuality of care clients in a way that is relatable, humanistic and emotionally accurate.

Results

Inter-Code Relationships

Table 1 demonstrates the frequency of various codes types and the numerous categories that were compiled from the data within *Phase A*. Codes within this table were derived from aged care client answers to questions about their care planning (questions are outlined in Methods). While *Desires and Goals > Support* may have the highest code frequency, this is a broad category that includes many general types of support the older clientele identified as a desire or goal. The codes within this sub-section are included in *Desires and Goals* rather than *Care* as the codes considered are directly dependent on client needs/goals, rather than care outcomes. For example, a code within *Desires and Goals > Support* includes "*To have assistance getting things done*". This code was derivative of Question 4: *What do you want in your life?* Whereas, *Care > Home care / Maintenance* typically includes codes akin to simplistic terms such as *"Home care"*, subsequent to Question 3: *What can we do to support you living at home?*

Table 1: Care planning and goal setting code-type frequency

Care	Codes	Negative Influences	Codes	Desires and Goals	Codes
Respite	1	Falls	2	Social Connectedness	7
Financial support	2	ADL / IADL dysfunction	17	Transport / Access	5
Shopping	3	Lifestyle / Sociability	7	Helping others	6
Transport	13	Support	6	Fall prevention	1
Medical / Health	17	Stresses	6	Support	22
Home care / Maintenance	12	Family	4	Future planning	5
				Maintaining independence	20
				Remaining at home	18
				Personal / Emotive	11

14 of the 20 older care recipients stated explicitly that they wished to *maintain their independence* and/or *remain living within their own homes*. It was not uncommon for these

and similar goals being repeated more than once within individual client cases. This attributed to additional codes being acknowledged within the sub-categories. In turn, providing a greater weight to the sub-categories that were deemed most important.

Further investigation (*Phase B*) uncovered that many older people were classifying their independence in numerous ways. The terminology is transferable and malleable into various life circumstances. For some older clients independence means to simply retain the ability to *"eat and drink unassisted"*. Other older clients projected their independence though outward tasks and contributions, such as desiring *"to continue cooking and baking for my family"*. For others, abstract manifestations of independence and were sought, with one client stating that *"[I] would like to have a garden that is filled with vegetables and flowers so [I] can sit in [my] chair and look out the window at [my] achievements"*. These highly individualised goals were not uncommon within the data gathered, and many of which have been embodied within the constructed personas.

Furthermore, is notable that only 2 of 20 participants reported their own falls risk as a negative influence that would prevent them from living at home safely (codes derived from answers to Question 2). However further analysis of the documentation independent of the Questions *(Phase B)* identifies that 8 of the 20 older clients have a falls history and 14 are living with either mobility issues that affect their daily activities and/or assistive technologies to support their functional independence. This suggests that older adults do not wish to discuss their own mobility concerns and possible falls risk.

In accordance with the objectives of this research, the codes situated within *Desires and Goals* carried greater weight in the design of older user personas. The codes located inside *Negative Influences* and *Care* assisted in the creation and identification of the foundational issues supporting client goals. The two personas presented showcase a number of these common individualistic ideas. When applied further into a design construction and evaluation process as a series they allow for the individuality of many different types of archetypal older community-based used to be represented.

Personas

Rose Wilkins

Retired | 83 years old

Rose Wilkins is an 83-year-old woman; she lives with her husband in a small one-bedroom unit behind her daughter's house in the Southeast suburbs of Melbourne, Australia.

Rose would like to feel useful again. Over the past two-years, her husband and daughter have taken on a number of roles around the home that Rose once enjoyed doing for herself. These include cooking, cleaning, reading and occasionally providing ambulation assistance for Rose when she has issues with her mobility. Rose appreciates assistance, and she would like the support of her immediate family to continue so that she can continue to cook for her family. However, she feels that her role within her family has diminished by not being fully capable to provide for the people that she loves. When she does try to cook, often her husband or daughter have to read recipes to her and provide a watchful eye.

Over the past two years, Rose feels that her independence has been significantly decreased by a number of factors. She suffers from Meniere's disease, which can often make her feel dizzy and affect her walking. This coupled with severe macular degeneration has impacted her ability to perform many Activities of Daily Living successfully and safely. Prior to moving into the unit, Rose suffered four falls within a twelve-month period. Her family were worried about her. Her daughter insisted that she gets herself a personal alarm. Rose was hesitant at first but now leaves it pinned to her undershirt.

The new unit has a levelled floor, and mobility ramps fitted throughout. Rose often uses a four-wheeled walking frame within the house, and a single-point walking stick when going out. Rose's reduced independence within the home has seen her become despondent about her place within the family.

"I want to feel useful again, I want to be able to continue doing what I love."

Life Goals

Rose wants to retain her own independence and remain living within her own home with close and empowering support from her family.

Experience Goals

To feel independent and empowered. Rose appreciates the assistance and understands her own abilities. However, she does not appreciate being seen as requiring constant assistance.

Figure 4: Persona – Rose Wilkins

George Smith

Retired professional artist | 77 years old

George Smith is a 77-year-old man and a retired professional artist. He lives alone in in a large house with a studio connected to the rear of the property. He is a widower with two sons, one of whom had a falling out with the family a number of years ago.

As a professional artist George was nationally acclaimed for his works and had a rich and prosperous career. He painted hundreds of pieces, some of which still sit uncompleted in his home-studio. George would like to finish many of these older pieces as he feels there are many loose ends he needs to tie-up in his life. However, he is having issues with his painting. As an artist George has been very particular about how his home is arranged, an "organised mess" he likes to call it. But recent unforeseen changes in his lifestyles have altered George's typical way of living.

On Christmas Eve several months ago George fell in his studio. His knee collapsed from underneath him. George then spent eighteen hours on the floor; he defecated himself and was unable raise himself due to his incapacitated knee and severe osteoarthritis. He was discovered on Christmas Day morning by his son and taken to hospital.

Since the incident, George's life has undergone radical changes. His home has undergone a number of safety modifications, he wears a personal alarm around his neck, ambulates with a single-point walking stick and has a cleaner maintain the house for him.

George sometimes feels confused, angry and misunderstood within his home now. His son insisted that he "gets the care he needs", but George feel's that these changes to his home, lifestyle and artistic environment are detrimental to his creativity, individuality and well being.

"I just can't seem to get into the right frame of mind. I need control of my creative environment."

Life Goals

George hopes to retain his independence and complete a number of his unfinished paintings.

Experience Goals

George would like to remain independent and have control of the space around him. George also feels as though his health care needs are too imposing on his home and artistic ambitions; these are crucial to his quality of life.

Figure 5: Persona – George Smith

Discussion

Whilst the personas presented in this paper are designed and constructed in a manner that related to this project's own research aims and objectives, they are nevertheless transferable into many other design circumstances beyond home modification for older adults. The personas are an accurate and emotive representation of archetypal older community based people. The researchers contend that their appropriateness extends beyond the realm of design evaluation of assistive technology for fall prevention.

While these user types can be utilised in the evaluation of design systems, personas also provide a voice and a means of discussion. Though these *people* are constructions to represent typical users, there are further lessons to be learned in what they represent for person-centered aged care. Moreover, the reflection and consideration of older adult goals and desires outline yearnings for independence and to remain living at home. This facilitates discussion surrounding the proper ways we should be providing care, and whether or not person-centered approaches for older adults are currently being designed in the most optimal manner. While the people characterised in the personas are fictitious, they represent true internal goals that many may not outwardly be verbalised. They aspire to remain themselves even as their psychological, physical and living circumstances around them depreciate. Moreover, they reveal possibilities and avenues for discussion as to how we can properly design for older adults; creating a means of independent living assessment that we as younger researchers and designers would be happy to accommodate in our own future circumstances.

The exploration each individual's own narrative as part of *Phase C* allowed the researchers to interpret key intrinsic and extrinsic factors and influences that contribute to their understanding of what self-identified independence truly is. This difference in circumstance would often lead to similar goal making decisions. This is reflected by Durick et al. (2013) that while many older people may suffer from similar and debilitative circumstances of cognition and physical health, there are many common goals that are derived from individual circumstances.

In order to communicate the possibilities of utilising the presented personas to bridge person-centered care and co-creational design an example solution scenario is given to discuss these issues in context.

Rose's Christmas Pudding

Rose loves cooking for her family. For Christmas this year Rose's daughter, Julianne has invited the extended family over to her house for lunch. Rose would like to make her family-famous pudding as the centerpiece for the meal. She has discussed this with Paul (her husband) and daughter and they both agree that this would be lovely. Rose is looking forward to contributing the centerpiece to the meal. However, she has recently been having mobility issues even with the assistance of her four-wheeled mobility walker.

In the past, Paul has suggested permanent railings be installed within the unit to allow Rose to use her walking stick instead as her walker as is sometimes hard for her to navigate within the interior environment. Rose refused, as she does not appreciate being seen as constantly requiring assistance. Paul has become frustrated with Rose's resistance to modifications within the unit as it was originally built with a leveled floor and mobility ramps to accommodate Rose's mounting ambulation issues and her walker. Paul has communicated his mounting concerns with Julianne and both agree that now may be the appropriate time to modify the kitchen so that Rose can cook relatively unassisted.

An occupational therapist (OT) recently conducted a home visit at the unit with Rose, Paul and Julianne. She documented Rose's medical history, home environment and paid special attention to her goals, including her desires for independence and love of cooking/baking. The OT discussed with Rose the possibility of installing a railing in the kitchenette allowing her to stand closer to the bench top then her walker would previously allow. This would enable her to cook/bake in a manner that is safer and less interposed on by the presence of her walker. It was communicated to Rose that while she may still require assistance with reading and a watchful eye, she would be more comfortable cooking/baking in this manner. Furthermore, it would allow her continue to do what she loves for her family in safety and reducing her chances of stumbling on her walker.

A few weeks on, Rose's pudding was a great success. She baked it with limited assistance from her husband and felt as though it was her greatest yet. She now stands without the intrusion of her walker as she bakes and cooks. Rose reports that she is feeling more confident within the home environment now and does not feel as restricted as she once did. Following on from this, Paul and Julianne have contacted the OT to inform them of the railing's success and to enquire about the possibility of future modifications, as Rose's new sense on independence has allowed her to become more accepting of assistance.

Conclusion

In this paper we present a goal driven method of designing older user personas that are detailed, humanistic and transferable into the design of assistive technologies for community-based fall prevention in older adults. The conclusions drawn within this study strengthen the importance of the person-centered care ideology by allowing for older people to retain their independence in such a way that allows for them to continue living their habitual lifestyles they have spent decades molding.

However, discrepancies still exist about how we can best incorporate person-centered approaches into design evaluation methods for fall prevention. If a humanistic and goal-driven constituent is not reflected as a primary design-driver to lead, shape and reform what we know fall prevention to be, person-centered approaches are doomed to fall short.

The two personas showcased were created to assist in the evaluation of assistive technologies for community based fall prevention for older adults. The evolving person-

centered aged care landscape requires emotionally informative design and evaluation drivers. While this method requires supplementary assessment within the field in order to authenticate its effectiveness, future outcomes based on these findings will contribute to the evolving practice of occupational therapy and design for disability.

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