

## **Title: What does real-world walking mean to people with stroke? An interpretive descriptive study.**

**Purpose:** Understanding personal experiences of real-world walking for stroke survivors could assist clinicians to tailor interventions to their clients' specific needs. We explored the research questions: "What does real-world walking mean to people after stroke and how do they think it can be better?" **Method:** Using an Interpretive Descriptive methodology, we purposively sampled eight stroke survivors who reported difficulty walking in the real-world. We sought diversity on key participant characteristics. Participants were interviewed using a semi-structured guide. Data were analysed with thematic analysis. **Results:** Many found real-world walking, particularly in the outdoors, created opportunities for freedom from dependence and a visible step by step progress, which generated hope for future recovery. Conversely, when participants did not experience sufficient progress, they expressed negative emotions. Participants strove to overcome challenges to their walking goals using everyday routines, planning skills, and confidence building experiences to motivate themselves. They also drew on, and extended, social resources highlighting the relational aspects of real-world walking. **Conclusions:** Walking in their real-world provided a meaningful, desirable, but challenging goal for participants that required significant emotional effort. Successful progress in real-world walking builds confidence and hope and can contribute to psychological wellbeing by providing opportunities for successful mastery and social connectedness.

Keywords: walking, community ambulation, stroke, confidence, rehabilitation

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## **Introduction:**

Regular physical activity such as walking outdoors can reduce the risk of premature death by 41% following a first stroke [1], as well as improve physical fitness and mobility [2,3]. Similarly, evidence is emerging that physical activity can enhance cognitive functioning after stroke [4–8]. However, despite the benefits of being more physically active most stroke survivors are markedly inactive [9] and find making changes to their lifestyle challenging despite their best intentions [10,11].

Lifestyle changes may be easier to integrate into daily life using familiar activities like walking, rather than adopting new activities such as those required for more structured exercise programmes [12,13]. Walking is an accessible and familiar activity [12,14,15] that is highly valued by people with stroke [16,17]. Developing routines that involve regular walking may be a convenient and potent rehabilitation strategy to improve levels of physical activity for people with chronic conditions like stroke [15].

Real-world walking describes behaviours a person actually does do, rather than has the physical capacity to do [18], and includes walking for exercise, transport and incidental activities. The phrase was developed to overcome the conceptual ambiguities and measurement difficulties of alternate terms (e.g. community ambulation or mobility) [19–21]. However, surprisingly little is understood about what real-world-walking means to people after stroke.

Many post-stroke rehabilitation programmes focus on strengthening the biomechanical and neurological aspects of walking skills [22–24] but don't address other aspects relevant to walking in real-world contexts which can limit the transferability of gains from these programmes into daily life [25]. As a result, rehabilitation interventions (particularly those based in a clinic setting) that focus solely on improving motor skills

for walking appear insufficient to either improve confidence or produce any change in real-world walking habits and routines [26].

This study sought to understand the perspectives of stroke survivors regarding real-world walking, the value ascribed to walking in the real-world by people with stroke and what they perceive to help or hinder their daily walking routines. It was designed to provide insights that could, if warranted, inform the development of a novel intervention to promote sustained change in real-world walking and levels of physical activity after stroke. The research questions examined were: “What does real-world walking mean to people after stroke?” and “How do they think real-world walking can be better?”

## **Methods**

We drew on Interpretive Descriptive methodology to explore the first-hand experience of real-world walking following stroke [27,28]. Qualitative methodologies typically draw on an inductive logic of enquiry to produce knowledge that is “grounded” [29,p.viii] in the interview data, and recognises both the subjective nature of knowledge and the personal context for each individual person being interviewed [29–31]. A defining characteristic of Interpretive Descriptive methodology is its applied nature that is well suited to clinically oriented research questions [27,28]. This approach promotes flexibility around choice of methods with a focus on potential for developing insights for practice relevant to the research focus [32]. This is advantageous when the goal is knowledge building for clinicians rather than theory development aside from the clinical context [28,32–34]. Using Interpretive Descriptive methodology provided a robust way for us to explore the experiences and knowledge of people with stroke regarding real-world walking, including recognising the diverse and multiple realities behind their

experiences.

Ethics approval was obtained from an accredited local institutional ethics committee.

### ***Participants and Sampling***

People with stroke were eligible for inclusion if they reported difficulty walking in the real-world. We recruited participants primarily through a non-governmental community service provider as well as through personal and professional networks. Potential participants were verbally invited by a third party and given a flyer outlining the purpose of the study. Interested parties were invited to contact the primary investigator (CS) directly who then arranged a time at a later date to meet with each person face to face to explain the study in more detail and complete the process of informed consent with them.

We expected that 8-10 participants would be sufficient because the focus of the study (i.e. real-world walking) was relatively narrow and difficulty with walking is widespread after stroke [9,2]. We used purposive sampling to seek a diversity of perspectives of the phenomenon of interest to enhance specificity and improve information power [27,35] including: age (under 65 and over 65); length of time since stroke (less than 6 months, 6-12 months, >12 months); gender; ethnicity (Māori, Pacifica, Asian and NZ European); and physical limitations affecting walking abilities (average walking speed <0.8m/s and >0.8m/s). We used the cut-off point of 0.8m/s to distinguish between people with different levels of physical ability because there is evidence that those who have walking speeds over 0.8m/s are more physically able to walk in real-world settings [36]. The interviewer (CS) had a background in physiotherapy that included significant experience interacting with people with stroke. To enhance the quality of the dialogue, she had additional training in qualitative

interviewing skills prior to data collection. This training was supplemented by ongoing mentoring from a team of experienced qualitative researchers and she also undertook regular critical reflection on how to improve the quality of the interview dialogue. As described by Thorne [27], sampling sufficiency occurs when sufficient data has been collected so that in terms of developing an understanding of the phenomenon of interest that additional data is essentially redundant. This study was designed to provide insights that could inform the next phase of theory building research, so we planned to cease recruitment using this criteria.

### ***Data collection***

CS interviewed all participants using a semi-structured format. Examples of questions included: “What does real-world walking mean to you?” and “Tell me about a time after your stroke when getting out and about was a positive experience for you?” Some questions focused on the actions and/or attitudes of family and health professionals. These questions aimed to help understand how elements of social context could influence perspectives of participants (e.g. “What are some of the things that people have said or done that have affected your walking?”). Other questions sought to focus on strategies that worked well for participants (e.g. “In relation to your walking, if life could be better for you, how would it be?”). Interviews were one on one and took place in the participants’ home. An interview guide was used as a starting point but the interview format remained open enough to explore participant responses in more depth. Interviews were audio recorded and transcribed verbatim. Prior to commencement, participants were invited to select a pseudonym that was subsequently used throughout transcription, analysis and reporting.

### *Data analysis*

Analysis was led by CS with co-authors (PhD supervisors) contributing to discussion of coding decisions, data interpretation and negative case analyses. Immediately following each interview, CS wrote a brief synopsis to provide a summary of the story and made notes about any relevant contextual features. After the first 6 interviews had been completed and analysed, findings were discussed with the supervisory team. Two further participants were sought to a) increase the diversity of the sample (including one older male, and a young Pacific woman) and b) increase geographical variation (additional participants were recruited through different sources from different geographical locations). Analysis of these transcripts provided further illustrations of core findings and minimal additional new understandings.

Interpretive Descriptive methodology supports the use of diverse analytic strategies that are consistent with the direction and theoretical positioning of a project [28]. Patterns of meaning across the data set were proposed using Braun and Clarke's six stage approach to thematic analysis as the primary analytical technique [37] with connecting strategies used in later stages [38,39]. Table 1 summarises how thematic analysis stages were operationalised in the current study. Consistent with thematic analysis, our process of data analysis was recursive and involved returning to earlier transcripts as coding progressed to support theme construction. In the final phase we constructed a thematic map to summarise how the themes appeared to interact (see Figure 1). During development of the thematic map, it was noticed the themes could plausibly be better represented as two different points or experiences on a continuum. To explore this in more depth, we drew on two additional analytic strategies (usually associated with grounded theory) known as connecting strategies [38,39]. These connecting strategies (axial coding and narrative strategies), gave us a deeper understanding of how the data

were connected or contiguous over time for each person [38]. Further, several additional strategies were used to enhance rigour and confidence in the study findings [40–42] and ensure the data collected was credible, sufficient, abundant, trustworthy and reflected the complexity of the phenomenon being explored [41,p.840]. These strategies included: critical reflection on personal and professional prior experiences and assumptions that influenced selection of the research question and interviewing practices [27], extensive immersion in the data, returning to the interview participants to review study findings, analytic memos [43], negative case analysis and discussion of coding decisions

## **Findings**

Eight people with diverse characteristics took part (Table 2). Walking in the real-world was a concept that appeared readily understood by participants and highly valued. Their shared interpretation saw it as something *basic* to being human which could provide opportunities for freedom by allowing them to choose places and times to walk that suited them. However, the act of real-world walking was also inherently challenging and required significant emotional effort. Making progress with walking appeared to increase hope of progress in other areas of their recovery. Conversely, difficulties with walking were linked with negative emotions such as frustration and a sense of helplessness.

Four key themes were identified. Two themes related to the first question “What does real-world walking mean to people after stroke”. The themes were: *Opportunity for freedom from dependence* and *Hope of getting better step by step*. Two further themes were constructed in relation to the second question “How do you think real-world walking can be better?” These were: *Motivating self to overcome* and *Making it social*.

Figure 1 summarises how these themes appeared to interact using an analogy of pushing a boulder uphill to depict the ongoing effort needed. The map aims to capture the interaction between hopes and fears experienced by participants in relation to real-world walking. Walking in their real-world had the potential to promote wellbeing because it could meet basic emotional and psychological needs and provide hope for recovery. Each of the four themes and strategies that participants identified helped them walk more in the real-world are discussed in detail below.

### ***1. Opportunity for freedom from dependence***

Real-world walking could provide a sense of freedom by providing an opportunity to choose when and where a person could walk. It could provide freedom from the constraints of having to depend on others and the freedom to change the physical and emotional space experienced.

*Freely walking, whatever [it] takes, whatever one decides...without the difficulties that I have presently got. (Steve 85 years).*

Many participants described feeling stuck, even imprisoned in their bodies and minds following stroke. Being able to change location could help reduce the negative emotions connected with feeling stuck in one place. Even walking to the local store or outside to look at neighbours' gardens helped overcome this feeling of being stuck in one place. Participants also described feeling constrained by their need to depend on others to manage daily activities that they used to be able to do, which was exacerbated by being unable to drive after the stroke. The opportunity to walk seemed to provide a way to exercise some control over their personal situation, which in turn freed participants from a sense of being dependent on others.

*The walking gives me freedom...I can choose and do my own thing...it has been a means to set me free. (John, 61 years).*

In contrast, participants also voiced fears, such as a sense of apprehension and vulnerability when considering the risks involved in outdoor walking. One aspect of this vulnerability was the need to pay close attention to the act of walking itself.

*I think just doing it automatically and not having to concentrate. Like your legs move but I am still nervous about the falling and all that. (Lottie, 70 years)*

The experience of needing to concentrate carefully and to be on guard was an experience they desired to be free from.

*You have got to look around you. Especially for kids that don't know ...a kid might bump into your crutch or your walking stick or something and you have a fall (Brownie, 45 years)*

In addition to the need to concentrate and exert cognitive energy, real-world walking for some also involved freedom from receiving unwanted attention from others:

*[Real-world walking means] I can walk without thinking that someone is laughing at me, without thinking [about] using my splint or my stick... Walking for free. (Maria, 36 years)*

Real-world walking was viewed by participants as providing an opportunity to exercise choice and control. Participants longed to feel free from internal and external constraints such as their own need to concentrate while walking and from being forced to depend on others.

## ***2. Hope of getting better step by step***

Progress in walking generated confidence that was often linked to hope for further recovery. By seeing progress in their ability to walk successfully in real-world settings, participants gained faith in their abilities and this often gave them hope that they would continue to progress in other areas of their lives. The ultimate hope expressed by many participants was to one day feel *normal* again, including walking normally.

Certain types of experiences were identified as particularly important in promoting confidence and enhancing motivation. For example, successful walking experiences appeared to contribute to a sense of achievement and mastery. This usually generated positive emotions, which seemed to improve confidence.

*... So every step you take, the further I can walk, the more confident I am getting. (Lottie, 70 years)*

This process of incremental progress leading to improved confidence and hope was evident in several stories in a variety of outdoor settings. Participants described different experiences such as walking during rehabilitation, walking in the mall, supermarket or beachfront. Often, they described initial uncertainty in their ability, but successful attempts led to positive emotional experiences and the desire to do more. Steve's physiotherapist took him down to the letterbox and he describes his thinking in response to the experience:

*I felt it was a step in the right direction and if I have done it down there once, I am sure I will be able to do it again and maybe the next time I could do it without [physio]. I would have to go down with my stick myself. Now I go the letterbox and I don't take a stick. (Steve, 85 years)*

However, progress that occurred at a rate slower than desired could also lead to frustration and undermine hope:

*You can see the improvement but there is very slight improvement and that is what frustrates me a lot. (Kay, 69 years)*

### **3. *Motivating self to overcome***

Participants described a variety of strategies they used to help themselves walk more to try to achieve their desired walking-related goals. These included careful advance planning to manage their sense of vulnerability and having everyday routines that involved *going out for a walk*. For example, Lottie was particularly intentional and drew on social support and features of the environment to help her plan her outdoor walking as shown in her account (underlined).

*I am going to go up [to the mall] with one of the ladies from here one day so we both know where the seat is before we cross to go to the mall. So that is all we need. And I will always have my phone on me so that if I collapse or anything, someone can feel my pockets for a phone. (Lottie, 70 years)*

Participants often used the word “motivation” when asked to describe how real-world walking could be better for them. They described different ways they tried to motivate themselves to overcome the challenges they faced, such as being willing to *give things a go* and *having a goal*. Jai Wai was particularly pleased with his strategy of adding an extra house onto his route each day to give him a sense of progress and achievement. He explained the impact this plan had on him:

*The method of managing or self-motivating myself on a long walk was very important because that made it successful or not. (Jai Wai, 67 years)*

A sense of progress in real-world walking as indicated by being able to walk farther or achieving desired goals was felt to be particularly motivating. However, if progress was lost or not attained to a desirable level, it led to discouragement and frustration, impacting the person's mood. For example, one of the participants experienced a second stroke after an operation, which caused emotional barriers when trying to return to his daily walking routines.

All participants worked hard to find ways to motivate themselves to walk more in the real-world despite the difficulties they experienced. They used a range of strategies to overcome the challenges they faced with their motivation such as planning outings in advance, having goals, managing their thinking and having regular daily routines that involved walking.

#### ***4. Make it social***

Throughout the interviews, participants shared stories that revealed the role of different types of social connections in relation to real-world walking. These social connections seemed to meet a variety of needs. Some stories described the practical and emotional support to walk provided by others: spouses, friends, physiotherapists, neighbours and store owners. John, for example, laughed as he described the benefits of his daily walking practice *...my walks can be rather elongated because I get talking to people around the street and the dogs and things over the way so I make it a social event as well as a physical event. (John 61 years)*. Such interactions seemed to provide a motivational resource.

Walking with someone could also help boost confidence: The emotional support provided by others when walking appeared to reduce anxiety and promote confidence.

*...so I did it [the walking] with family members to begin with and the more confidence I got I actually did it on my own. So confidence you know does ...create better health. (Lottie, 70 years)*

Woven into the stories told by participants was the significance of social connections that provided a relational resource that could be used to help achieve their walking related goals. Social support enabled people to walk and motivated them to do so. Walking in the real-world also increased opportunities for social connections and this also worked to motivate them to walk more often.

## **Discussion**

The main finding of this research was that people with stroke viewed real-world walking as a profoundly meaningful activity that could enhance their psychological and emotional wellbeing. The act of deciding when and where to go provided participants with an opportunity to exercise control. Experiencing progress in walking-related goals created a sense of success which furthered optimism and hope for achieving desired gains in the future. Being able to get out and about also led to increased opportunities for social interactions. Feeling in control of one's life, being able to pursue valued goals and having positive social connections are thought to be essential components of wellbeing [44]. Our findings provide support for the significance of real-world walking to enhance wellbeing by providing positive emotional experiences related to mastery and social connectivity.

The process of progressive mastery appeared crucial to building self-confidence in outdoor walking skills and was closely linked to a greater sense of hope and anticipation of future improvements. In our research, participants actively sought ways to rebuild confidence in their ability to walk in the real-world, literally and figuratively, one step

at a time. Horne, Lincoln, Preston & Logan [45] interviewed participants with low levels of confidence at the start of a trial designed to promote outdoor walking after stroke. Their participants described learning to remaster physical and social skills by gradually and incrementally increasing their abilities in both daily tasks and social interactions. Kubina et al.[46] found reengagement in valued activities in the two years following stroke was closely related to a sense of being in charge and a feeling of being socially connected. They argued these two processes to be fundamental to a core process of risk taking and if successful, this risk-taking could also produce a sense of progress and hope. Our findings support and extend these studies in two ways. Firstly, they illuminate the lesser acknowledged emotional journey inherent in the process of progressive mastery. Secondly, success in achievement of walking goals appeared to be motivating to participants because they reevaluated their potential capability to succeed in other activities in a more positive light. Walking in the real-world is a dynamic, complex and context specific experience which could play a decisive role in the larger process of adaptation and coping after stroke.

However, most if not all, participants also expressed a range of negative emotions in response to difficulties walking. As well as lacking confidence, participants often described feelings of frustration and at times feeling hopeless and helpless. Research examining negative emotions after stroke has tended to focus on the prevalence of generalised depressive symptomatology with systematic reviews revealing around a third of stroke survivors will experience depression in the five years following stroke [47]. In our study, all participants expressed some form of negative emotion and usually explained their emotional responses in relation to specific difficult experiences. One possibility is that regardless of clinical depression, people appear to also experience negative emotions as a normal human response to difficulty in achieving personally

important goals (i.e. a type of self-regulatory challenge); experienced emotionally as frustration and anxiety [48–50]. Providing tailored self-management support (e.g. through collaborative goal setting and other forms of social and practical support) to assist with goal striving may be a strategic and constructive approach to help participants manage the difficult emotions they experience when trying to walk more in the real-world [51,52].

The need for effortful attention when walking outdoors after stroke was a relatively novel finding in the physiotherapy literature although there is support for this from both qualitative research in the broader stroke literature [53] and in the field of neurobiology [54,55]. Research exploring multi-tasking demands of real-world settings have focused primarily on the cognitive challenges of walking outdoors [56,57]. Our findings show that individuals who feel compromised regarding their capability to manage outdoor settings respond by devoting more cognitive resources to concentrating, which requires additional use of executive processes which use fronto-cortical reserves [54]. The need to depend on these executive control strategies is a probable explanation of the burden experienced by study participants as concentration is fatiguing and leaves few attentional resources for other cognitive tasks like route navigation or conversing with travel partners [55,56]. However, the findings of our study extend this research by suggesting the emotional challenges are also likely to contribute to the energy and attention needed when walking in the real-world.

### ***Limitations of the study***

There are limitations to this study. First, there was a relatively small number of participants. However, data saturation was evident as no new concepts were identified in the data from the transcripts of the last two participants. The majority of participants

were recruited from a community-based exercise programme so it is possible these participants were more focused on physical activity than most stroke survivors. However, data from the two participants recruited through other avenues and living in different geographical parts of Auckland did not indicate this was the case. All participants did live in an urban setting and study findings may well differ for people with stroke living in rural settings

### ***Clinical implications***

Understanding the challenges of walking in real-world settings may help clinicians tailor their support to help clients re-engage in valued roles and activities. Previous rehabilitation research has demonstrated how little is understood about the impact of environmental settings on walking [19]. Low health literacy is common following stroke [58], and effective exchange of information is likely to be further hampered by the use of jargon words (e.g. community ambulation, or functional mobility). One simple way when planning walking goals to enhance the partnership between clinician and client and connect with what is meaningful to clients may be to introduce the phrase “real-world walking”. Participants in our study easily understood this concept and they were able to voice their hopes and goals for improving real-world walking in the context of their wider journey toward independence and recovery. This could provide a useful starting place for collaborative conversations about how to improve walking in their real-world settings by providing insights into activities and relationships that are significant and elicit new ideas on how clinicians can adapt their support to best meet the needs of their clients in their own real-world

Research exploring fears around walking has often focused on the fear of falling [59,60] but our findings revealed a wider range of fears. One strategy to open this area for

discussion could be to normalise fearfulness with an opening statement that invites clients to share their fears and concerns. For example, “It’s really common after stroke to be frightened about walking outdoors. Some people are afraid of falling, some feel vulnerable and some people have other fears. How are you feeling about walking in the real-world again?” Recognising the fears of survivors in relation to walking and discussing them together is likely to enhance the therapeutic connection necessary for effective partnerships and support personalised goal planning [61,62].

To achieve sustainable change in levels of real-world walking, clinical practice goals must include strategies that can facilitate transfer from walking in the clinic to walking in the real-world [23]. However, walking more in the real-world can be particularly challenging for people following stroke because the environment is often felt to be unpredictable, variable, and uncontrollable. These challenges can make real-world walking both emotionally demanding and cognitively challenging. To achieve this transfer, clients need support to identify and address their fears, planning to establish or extend existing routines and opportunities to build their confidence. Table 3 provides some simple strategies to help promote real-world walking.

## **Conclusions**

The experience of walking in their real-world was highly valued by participants and appeared to provide valuable psychological benefits to people with stroke. However, it was a cognitively and emotionally demanding activity that required careful attention, which meant participants often felt vulnerable. Participants’ negative emotions significantly hindered walking in the real-world, but environmental features such as the presence of seating and the support of others were enabling for some participants. Stroke survivors also used planning skills, confidence building experiences, everyday

routines and drew on social resources to motivate themselves to overcome the significant challenges they face when walking in their real-world.

### **Implications**

- Real-world settings can be unpredictable which makes walking in the real-world after stroke demanding
- Positive experiences of walking in the real-world can provide significant psychological benefits to stroke survivors
- Many survivors need to carefully concentrate on the act of walking in outdoor settings
- Pre-planning routes, confidence-building experiences and developing daily routines may help patients overcome these challenges

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### Declaration of interest:

The authors report no declaration of interest

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Table 1. Overview of analytic strategies

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Categorising strategies using Thematic Analysis [63,37]	
1) Familiarising yourself with the data	Transcripts read several times and ideas noted
2) Generating initial codes	Inductive data driven coding with each item given equal attention; manual coding of data with development of code book. Initial codes generated by reading each transcript through twice. First reading focused on ‘what does real-world walking mean to this person?’ Second reading focused on ‘what helps or hinders real-world walking?’
3) Searching for themes	All relevant extracts for each theme collated in a table. Data was entered into a computer software and codes were categorised into clusters to search for themes. Memoing used to help clarify analytic decisions [43]
4) Reviewing the themes	Themes checked against each other and back to the original data set. Developing themes reviewed on multiple occasions by supervisory team. Feedback provided about the match between data and analysis
5) Defining and naming themes	Iterative thematic map developed (See <b>Error! Reference source not found.</b> ); this revealed linkages between themes (e.g. forced to be dependent vs. freedom; hope of recovery vs. feeling helpless and hopeless)
Connecting strategies [38]	
Axial coding	Third reading of coded transcripts using questions from axial coding to understand how the context and conditions influenced the responses, and what the consequences of these strategies [39,38]; comparison between transcripts to provide insights into similar responses
Narrative stories	Returned to un-coded transcripts; created narrative summary for each participant which included 4-5 stories told e.g. first walk in hospital, positive experience walking etc. Reviewed stories using axial coding questions.
6) Preparing a report	Returned to participants to check for resonance.

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Table 2. Participant characteristics

<b>Self-selected Pseudonym</b>	<b>Lottie</b>	<b>John</b>	<b>Brownie</b>	<b>Jia Wai</b>	<b>Kay</b>	<b>Mary</b>	<b>Maria</b>	<b>Steve</b>
Demographic characteristics								
Age	70	61	45	67	69	84	36	85
Ethnicity	NZ European	NZ European	NZ Māori	NZ European	Indian	Scottish	Tongan	NZ European
Sex	Female	Male	Male	Male	Female	Female	Female	Male
Time since last stroke	>12 months	<6 months	>12 months	<6 months	Between 6-12 months	<6 months	>12 months	>12 months
Physical ability:								
Gait speed	> 0.8m/s;	>0.8m/s	< 0.8m/s	>0.8m/s	< 0.8m/s	< 0.8m/s	< 0.8m/s	>0.8m/s
Aid for walking	Frame	No aid	No aid	Stick	Frame	Frame	No aid	No aid
Living situation	Rest home	Own home with wife	Living with caregiver	Rest home	Own home with husband	Own home	Own home with family	Own home with wife

Table 3. Suggested strategies to promote real-world walking

Support	Plan	Establish daily routine	Build confidence
<ul style="list-style-type: none"> <li>• Talk about real-world walking together: “What does real-world walking mean to you?”</li> <li>• Normalise fear of walking outdoors by exploring their experiences</li> <li>• Arrange to walk outside with them to provide emotional support If they desire it, or help them to identify a walking buddy who can do this</li> </ul>	<ul style="list-style-type: none"> <li>• Set achievable walking related goals</li> <li>• Plan a safe and accessible walking route in advance</li> <li>• Plan strategies to overcome fears (e.g. taking a phone or knowing where safe places to sit are)</li> <li>• Consider how to make it as social as possible</li> </ul>	<ul style="list-style-type: none"> <li>• Help them to identify a route that they can do daily, such as walking around the block, even repeatedly</li> </ul>	<ul style="list-style-type: none"> <li>• Encourage them to progress their walking route by adding more houses, more minutes or more blocks.</li> </ul>

Figure 1. Thematic map

