

Equipment and adaptations used for self-care activities: suggestions for good practice to maximise successful uptake

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Abstract

It has been five years since the publication of 'Decisions about equipment and adaptations used for bathing and showering' (McLaggan, 2015). That article explored the issues which influence whether people use or abandon the equipment and adaptations for bathing and showering prescribed or recommended to them, usually by a professional, such as an Occupational Therapist (OT). It drew on original research from 2010, and also explored other literature.

The need to better understand the experiences, preferences and needs of users of equipment and adaptations remains important, both for those involved in recommending and prescribing these items, and for commissioners of these services. Since 2015 the Care Act 2014 has been enacted, and its impact on practice is now better known. Alongside this there has been the emergence of new research which adds to knowledge, along with new insights and considerations for practice.

This present paper revisits the findings from the earlier paper (McLaggan, 2015) in the light of new published findings, and the implications for practice and for further research.

Keywords: bathing, showering, equipment, adaptations

Introduction

Equipment and/or adaptations to the home environment are often recommended by professionals, such as occupational therapists [OTs] (Johnston *et al.*, 2014) who work within social care reablement services (Beresford *et al.*, 2019). These enable individuals to perform tasks (activities of daily living [ADLs], such as having a bath or shower) that they would otherwise be unable to complete, or to increase the ease and safety with which the tasks can be performed in the light of illness, frailty or disability (The Voluntary Organisations Disability Group, 2013).

The need for equipment and/or adaptations is known to increase with age (Gitlin *et al.*, 2006) and research suggests that a third of those individuals aged over 85 struggle with five or more ADLs (Marmot *et al.*, 2017). Demand for equipment and adaptations will continue to grow as the UK population ages: the number of people aged 65 or over is expected to increase from 12.2 million in 2018 to 16.7 million in 2033 (Stafford *et al.*, 2018). At the same time, the number of people living with chronic conditions is also increasing; and it is predicted that by 2030 there will be 50 per cent more people living with arthritis, coronary heart disease or stroke, and 80 per cent more people living with dementia (Select Committee on Public Service and Demographic Change, 2013). Increasing life expectancy is associated with increases in numbers of people living with more complex health conditions, and having more complex needs (Kingston *et al.*, 2018).

The use and impact of equipment and/or adaptations varies between individuals, with evidence of physical, psychological and economic benefits being reported. Equipment and adaptations can reduce pain and the level of difficulty, promote energy conservation, comfort and safety and help to prevent falls (Koketsu, 2018; Sainty *et al.*, 2009; Hersh & Johnson, 2008; Petersson *et al.*, 2008). They can reduce the need for personal assistance in the bathroom (De-Rosende-

Celeiro *et al.*, 2019; Allen & Glasby, 2013; Zingmark & Bernspång, 2011). Timely provision has been shown to prevent deterioration in health and promote skin integrity, welfare and independence, leading to long-term cost savings for care providers (Royal College of Occupational Therapists [RCOT], 2019a; Allen & Glasby, 2013).

Those experiencing bathing difficulties have historically been seen as of low priority for attention by local authorities (Whitehead & Golding-Day, 2019; Atwal *et al.*, 2017; Sheehan, 2015; Ahluwalia *et al.*, 2010), though for individuals the impact of such problems is significant. Participants from Whitehead & Golding-Day (2019) reported how being unable to bathe made them feel dirty and unable to leave the house because of fear of smelling. Similarly, participants from McLaggan (2011) reported that equipment provides an easier and safer way to bathe, compared to having an all-over strip wash.

Despite bathing and showering being one of the first and most frequent areas of daily living people struggle with (Gill *et al.*, 2006), there is still a deficiency of high quality research into the effectiveness of equipment and adaptations in relation to these self-care activities (De-Rosende-Celeiro *et al.*, 2019; Whitehead *et al.*, 2016). Recent research continues to echo earlier findings that the factors which affect uptake of equipment and adaptations are multifaceted (Goodwin *et al.*, 2017). Research tends to focus on the positive impacts of equipment and adaptation use upon individuals, and less is known about negative outcomes, and what factors are associated with these kinds of outcome, either through poor uptake or abandonment, as explored in the earlier paper (McLaggan, *op cit.*).

In some areas of practice, discontinuance of equipment or adaptations is not a cause for concern, and instead can be a measure of success, particularly in rehabilitation or post-operative settings (Sugawara *et al.*, 2018). Lauer *et al.* (2001) defined these specific circumstances as '*positive discontinuance*', where an individual's function increases so that they no longer require the equipment/adaptation. Also included within this definition are occasions where equipment is replaced with another similar item or enhanced version, or even a different solution entirely, which could include utilising support from a carer or ceasing to carry out the activity entirely.

The type of discontinuance which is of concern is when individuals abandon the equipment or adaptation after a few days, months, or years, despite the continuing need for its use (Khosravinasr, 2017). Abandonment of equipment or adaptations has financial costs for the health and social care system and for the individual, particularly as equipment and adaptations for bathing have been shown to reduce care needs and disability (Whitehead & Golding-Day, 2019), so as a result individual conditions may worsen (Federici & Borsci, 2016). Other costs include reduced independence and safety, potentially leading to accidents that result in injury and admission to hospital (Goodwin *et al.*, 2017), or unused equipment and adaptations not being returned to the equipment provider and recycled (Sugawara *et al.*, 2018; Federici & Borsci, 2016).

The true extent of the problem relating to this type of abandonment is not fully known, although a commonly reported rate of 30% is often misleadingly referred to, examples being by Federici & Borsci (2016) and Johnston *et al.* (2014). Research specific to this topic area has identified varied abandonment rates for bathing and showering equipment and adaptations.

These rates of abandonment need to be interpreted with caution, due to small sample sizes, and because the clinical setting was not always defined, and the type of equipment or adaptation was not clearly documented. This makes the ability to accurately compare results extremely difficult and potentially misleading (Federici *et al.*, 2016; McLaggan, 2015). There is also a lack of consensus about the definition of a threshold for distinguishing between use and non-use (Wessels *et al.*, 2003), particularly when the participants are self-reporting and unclear about the definitions or importance of accuracy. **Table 1** illustrates some of this ambiguity and examples of abandonment rates.

Table 1. Shower and bathing equipment and adaptation abandonment rates and definitions.

Equipment or adaptation type	Abandonment rate	Definition of abandonment	Study
Mobile shower chairs	13%	Non-use defined by the participants during face to face interview. Participants' open-ended responses categorised into personal factors e.g. health changed, intervention related factors e.g. the user did not know how to use it, product related factors e.g. being broken, and environmental factors e.g. feeling discriminated against.	Sugawara <i>et al.</i> (2018)
Bath boards	0% discontinued usage 7% non-use	Terms used in study: discontinued use (had been used, but no longer being used) and non-use (were never used). Use defined as being used either every day or every few days. Researchers gave pre-defined answers/ options in self-reporting questionnaire. Reasons for items not being used: <ul style="list-style-type: none"> • Needed short term • Never needed • Preferred human help • Did not fit • Did not feel safe • Difficult to use • Broken 	Hoffman & McKenna (2004)
Bath and shower grab rails	2.5% discontinued usage and non-use		
Shower chairs	13% discontinued usage 39% non-use		
All bathing equipment	10%	Term used in study: non-use. Self-reported definition by participants in questionnaire, examples participants gave: <ul style="list-style-type: none"> • No longer needed it • Felt unsafe/ frightened to use it • Did not help • Too difficult to use • Equipment was broken/ damaged • Not comfortable • Did not like it • Replaced by better equipment • Lack of space 	Sainty <i>et al.</i> (2009)

It is imperative to better understand users' experiences, preferences and needs regarding successful uptake of equipment and/or adaptations for bathing and showering, so that evidence-based strategies can be developed to promote their safe and effective use (De-Rosende-Celeiro *et al.*, 2019; Boland, 2015). If we can increase uptake and achieve a better user fit, supporting individuals within their home environment, this will in turn reduce pressures on our already stretched health and social care systems (Spiliotopoulou & Atwal, 2014).

Local authorities are required to make £700m in cost-savings during 2019-2020 (Association of Directors of Adult Social Services, 2019), so they need to streamline services and invest in areas where there is capacity to contribute towards these savings. Prescriptions for equipment and adaptations should be considered in relation to this, as they have a proven capacity to produce cost savings (Heywood *et al.*, 2005; Mann *et al.*, 1999).

This paper examines the available evidence about how services can boost the successful uptake of equipment and adaptations for those with eligible needs, and discusses the considerations, especially for OT practice. The organising themes are *self-assessment for equipment and adaptations*, *joint decision making* and *user perspective* and are ordered consecutively, as they have emerged from the recent literature in this area of practice.

Evidence on how services can boost uptake, with considerations for practice

Self-assessment for equipment and adaptations

The general concept of self-assessment was first introduced by personalisation policy, and the Care Act 2014 stipulates that local authorities must offer options for self-assessment of needs. Equipment and adaptations need to be included as a part of this (RCOT, 2017). For equipment and adaptation self-assessment many local authorities use online tools based on AskSARA (Disabled Living Foundation, 2019), or will offer assessments over the phone with trained call handlers. Phone assessments provide those with the simplest needs assessments by working through a decision-tree to identify the solution. In both cases, the quality of the outcome is based on the quality of the information (which includes measurements of the individual and environment) that the individual provides or inputs into the online or telephone assessment.

There are several benefits of self-assessment. It enables people to be empowered to choose equipment and adaptations that fit their own individual needs, thus offering the potential to reduce equipment abandonment (Spiliotopoulou & Atwal, 2014). It also achieves cost savings, as OTs' time is set free from involvement with these individuals, especially as the process of equipment and adaptation prescription by OTs is time consuming (Federici & Borsci, 2016; Boland, 2015). This is especially important as OTs in adult social services only make up 1.9% of the social care workforce (Local Authority Workforce Intelligence Group, 2007). Self-assessment puts individuals at the centre of the decision-making process, and evidence suggests that if they have some involvement and engagement then adherence increases, so the outcomes are likely to be more successful (The Health Foundation, 2012).

The main disadvantages of self-assessment are two-fold.

Firstly, the interactions and relationships between the individual, their environment and the proposed equipment or adaptation may not be fully considered in a holistic way, comparable to the processes that an OT uses, where the professional guides decisions within the context of a professional theoretical underpinning. Recommendations may be made in the absence of a conversational dialogue and co-production of solutions, based instead on responses to a scripted and fixed set of questions, reaching a decision simply based upon the answers provided. This could result in a recommendation for equipment or an adaptation which may not be as suitable as the user originally believed it would be, leading to a failure to take up the equipment or adaptation, or to abandonment after a short period of time.

Secondly, measurements taken by individuals or their carers to inform the assessment may not be correct; and OTs often do not trust the reliability of such information (Spiliotopoulou & Atwal, 2014). Atwal *et al.* (2017) and Hamm *et al.* (2017) found no national validated guidance to assist individuals or professionals in how to correctly measure the bath for equipment during the self-assessment or prescription process. As a result, Atwal *et al.* (2017) developed a tool, the '*Brunel University home furniture measurement*' (Brunel University, 2016), to support more accurate and standardised measurement for use by those professionals involved with the prescription of equipment and adaptations, which could also be used by individuals, their family and carers. The reliability and accuracy of the measurement tool has been tested (Spiliotopoulou *et al.*, 2018) and it was found that 80.55% of the measurements taken were within acceptable margins of variation, so would not compromise safety and functionality. The study found that '*bath height*' was one of the more difficult measurements to record accurately, as this was one of the measurements that exceeded acceptable margins of variation. This is a

key measurement to help ascertain whether an individual may be able to lift their legs up high enough to step over the side of the bath, or whether they could sit or stand from a bath or shower board fixed across their bath. Without use of the tool only 80% of participants were able to take the 'bath height' measurement: however, this increased to 100% when using the measurement tool.

Joint decision making

Person-centred practice is a core skill which has traditionally underpinned OT, alongside enabling users to make informed decisions (RCOT, 2019a) and following this approach has been shown to reduce abandonment rates (Federici & Borsci, 2016). As clinicians, OTs recognise that individuals are experts in their own experience, and they should try to treat them as equal partners in the planning of their care and support (Social Care Institute for Excellence, 2019).

The importance of the therapeutic relationship in determining the best approach for equipment and adaptation use is well documented (Squires *et al.*, 2019), as is equipment and adaptation engagement being influenced by this relationship (Boland, 2015). However, it is commonplace that how the individual perceives their needs can be different from the professional's viewpoint (Johnston *et al.*, 2014), and this still results in individuals being sent unwanted equipment, rather than their preferred option (Squires *et al.*, 2019). Obviously, local equipment suppliers have eligibility criteria and guidelines which govern what can be prescribed. OTs would normally start by considering provision of simpler and less costly items first: for example, bath boards, bath seats or shower stools, before the more costly and disruptive option of removal of the bath and replacement with an accessible shower. Adapting to equipment and adaptation use by the individual is often entangled in the broader experience of responding to illness or impairment, including a decline in physical and/or cognitive functioning, alterations in self-concept, changes in body image, emotional distress, disruptions to valued goals, roles and activities, and changes in lifestyle and/or occupation (Desmond *et al.*, 2018). So simply providing equipment or adaptations, to an individual who may be uninterested in trying to use them, will not lead to their use (McLaggan, 2015).

As mentioned above, if users participate in the process outcomes tend to be better. This is true in relation to equipment and adaptations, where users need to be central to the decision-making process (Desmond *et al.*, 2018; Gramstad *et al.*, 2014; Johnston *et al.*, 2014). In particular, it has been demonstrated that satisfaction with long-term use increases when users are properly informed and involved in the issuing process (Borg *et al.*, 2012; Martin *et al.*, 2011), allowing individuals to ensure an appropriate fit based on their own priorities.

Part of working together with individuals to make an informed choice is about giving them the information in a meaningful and useful way. Use of visual aids, such as pictures or videos, within the process of equipment and adaptation prescription, is not widely evidenced (Atwal *et al.*, 2014). Nevertheless, visual aids are used in practice to illustrate what equipment or adaptations look like or how they work. Virtual reality (VR) interior design applications take this a step further, to allow individuals to design or redesign their homes virtually (to include equipment and adaptations) prior to making changes in reality. This allows for improved collaboration, enhanced understanding and communication of design options, as well as facilitating active participation for all involved, along with aiding the process of achieving agreement (Threapleton *et al.*, 2017).

Atwal *et al.* (2012) identified no existing 3D tools designed to support the collaborative process, which should occur between individuals and OTs, to visualise, negotiate and make decisions about how the individual's own environment may be altered or adapted to meet their needs, where equipment or adaptations are required to support ADLs within the home environment. Modifications to existing software (SweetHome 3D) were subsequently made, to include the addition of equipment and adaptations, which include some bathing and showering items. The

software tool was then trialled with OTs to determine its possible usefulness and clinical utility in practice (Atwal *et al.*, 2013; Atwal *et al.*, 2014).

Participants felt the tool would be helpful in aiding joint decision making, and enabling the individual to have more awareness and influence regarding decisions about adaptations, so they could agree what they would look like and understand what to expect (Atwal *et al.*, 2012). This was because ideas were put into a visual context that was personalised and intuitive (Atwal *et al.*, 2014). This may also allow individuals to identify for themselves what equipment or adaptations they may require in order to overcome problems or hazards within the home (Threapleton *et al.*, 2017).

Use of this type of 3D software could reduce the numbers of items of equipment or adaptations that are rejected before use is attempted, as individuals are made aware of what they are receiving and what impact these may have on the home, especially in terms of installation, space requirements and storage (Threapleton *et al.*, 2017). This software may be particularly useful for those with cognitive impairments or learning disabilities, where visually focused communication tools can be more easily understood.

Atwal *et al.* (2014) only tested and gathered feedback from OTs regarding the 3D software, so assumptions were made that the OTs' positive views would mirror those of the prospective equipment or adaptation user. Obviously, there is also clear value in establishing how easy such software is to use, as this can indicate what potential there is to apply it in practice. However, there needs to be a clear benefit for service users. Further research should be conducted to validate these assumptions for this specific client group.

Understanding the user perspective

A relatively new means of data collection in health and social care research is the use of photography (Wilson *et al.*, 2019; Bukhave & Huniche, 2016) to capture information regarding individuals' home environments and the ADLs which are needed. As these activities are often mundane in nature and occur without much conscious thought, data gathering through interviews alone may not elicit the full contextual experience. Combining interviews and photographs allows for reflection on these taken-for-granted behaviours (Wilson *et al.*, 2019) to enhance professional understanding of the user perspective.

Wilson *et al.* (2019) used innovative wearable cameras to explore the lived experiences of six older adults who had received an adaptation in the previous two years. Participants wore cameras situated around the chest area for one day at home, and still images were captured by the camera every 30 seconds. For privacy reasons, participants removed the cameras or paused them whilst carrying out personal activities such as using the toilet or showering. The information gathered from this research in relation to bathing and showering activities is therefore limited, but this research has uncovered the fact that equipment may not be useful all the time. For example, one of the captured images is of a wall-mounted folding shower seat. When asked about its use, the participant mentioned using it only on 'bad' days, but there was reassurance knowing it was there to be used if required. Another image alluded to a bath board not being used frequently, as there was clutter within the bath and it was covered with items, making it inaccessible for use. Upon questioning the participant about this, it was discovered that the equipment was only used when the individual was feeling well enough, so when not in use it provided a space for drying sheets, and for storing towels and toiletry supplies.

It is common for individuals to have to adapt their routines and behaviours when utilising equipment and adaptations (McLaggan, 2011). However, if there is a mismatch between the equipment or adaptation provided and the user's needs, or the environment in which it is used, this may lead to abandoning the equipment / adaptation, or to possible modifications to the way the equipment or adaptation is used, to intermittent use or use in unintended ways (Wilson *et al.*, 2019). When prescribing, OTs need to consider whether users will use equipment or

adaptations in the way that was intended (Boland *et al.*, 2017). Carefully considering the user's needs and opinions holistically and providing choice / options (where possible, in cases where provision is publicly funded) diminishes the possibility that individuals will make their own modifications to the equipment, which in some cases could be potentially dangerous (Wilson *et al.*, 2019). Although discouraged, not all modifications are unfavourable, and physical modifications carried out properly can make some equipment or adaptations more suitable, for instance those made by REMAP (a charity which custom-makes or modifies equipment). In the field of telecare other examples can be found whereby the needs of individuals are met by altering the way in which devices are used or protocols implemented (Procter *et al.*, 2016). Discussion in the even wider field of Assistive Living Technologies (ALTs) has led to the concept of 'bricolage' being proposed: 'pragmatic customisation', combining new with legacy devices, by informal carers, such as family members, in enabling ALTs to be personalised to individual needs. Bricolage allows users and family members to take the initiative in 'co-producing' ALTs, (emphasising) that making assisted living work relies on collaboration, involving not only formal carers, but also informal ones' (Procter *et al.*, 2013).

Virtual reality (VR) technology

As VR technology becomes more readily available a number of possible opportunities exist, although they have not been evaluated in literature to date. Firstly, VR can be used to simulate experiences to show others what it is like to live with a disability, an example being '*A walk through dementia*', developed by Alzheimer's Research UK (2016). Wearable VR headsets offer this opportunity, with the purpose of education, by enabling people to experience what it is like to live with the condition and what difficulties are faced attempting different ADLs in various settings, including the home environment. If this type of VR experience becomes more widely used in training with OTs it could contribute to increasing understanding and appreciation of the user's perspective. If assistive equipment and adaptations were available in these virtual environments, they could lead to a better appreciation of the issues which surround their use for individuals with these challenges.

Secondly, a growing area in VR development is its therapeutic use. Not only can VR enable those with disabilities to simulate normally out of reach activities such as climbing a mountain or skateboarding, there is evidence to suggest that VR devices could be used as effective tools to motivate patients during rehabilitation sessions, to improve spatial orientation and attention in daily life activities to improve pain relief scores and improve depression resulting from a change in a person's functional ability (Massetti *et al.*, 2018). VR apps have already been useful in enabling users to practise new tasks and learn new skills e.g. using powered wheelchairs (Bigras *et al.*, 2019). Could VR apps be developed to offer experiences of other activities, such as self-care activities, where users and their carers could practise virtually with equipment or adaptations prior to their actual use in reality? The development of such a programme could be generally advantageous for people with a wide range of conditions, including those with mild cognitive difficulties, along with carers. The opportunity to practise in a safe environment first could build confidence and improve safety, giving the opportunity to learn how to use the items, how to adapt the tasks and incorporate them into routines prior to these items being supplied or adaptations being made. Subject to full evaluation, something like these VR apps could influence uptake and abandonment levels of equipment and adaptations.

Renewing OT processes

The development of an evidence base is a relatively new concept in OT (Bennett & Townsend, 2006), which has led to an observed dearth of research in the field of equipment and adaptations (McLaggan, 2011). In the past, the absence of research evidence meant that effectiveness and a quality of service was assumed (Mountain, 1997). Anecdotally, therefore, some OTs would observe a problem, provide equipment and then watch the result when the individual completed a task that was previously difficult or impossible to do. The extent to which effectiveness was appraised was to ask the individual if they liked the new equipment or

adaptation and whether they found it helpful (Edyburn & Smith, 2004). As attitudes towards the need for evidence have changed there has been the emergence of some relevant research in this field, focused on outcomes and including what was thought to be the first RCT of major housing adaptations, such as by Whitehead *et al.* (2016), Sainty *et al.* (2009), Häggblom-Kronlöf & Sonn (2007), Pain (2003) and Mann *et al.* (1999).

In ensuring that OT assessments are fit for purpose it is important to incorporate the evidence that the relationship between the individual and their home is multifaceted (Wilson *et al.*, 2019). OTs need to understand the perceptions of equipment and adaptations that may be held and observed, and to provide individuals with opportunities to share their concerns regarding perceived need, and their fears and concerns about stigma or embarrassment. These may all influence usage and possibly abandonment (Squires *et al.*, 2019). In ensuring there is a good evidence-informed understanding of these issues and the interplay between them, OTs must not forget the obvious questions to ask of the individual whether they are going to use each item of equipment or adaptation, understand the potential benefit of it, and intend to use it in the way that it is intended to be used (Boland *et al.*, 2017). Goodwin *et al.* (2017) developed a simple set of questions to act as prompts to aid clinical decision making, and these could apply to many different items of equipment and adaptations:

- Do you think this equipment will be helpful?
- Do you think you will use it?
- Do you understand how to use it?
- Do you have any concerns or anticipate any challenges using this equipment?
- Would you say you like, dislike or neither like nor dislike this equipment?

There are various models (shown in **Table 2**) which may support the OT in the assessment process, to help decision making regarding an individual's responses to questions on use of equipment and adaptations, so a better 'fit' can be achieved.

Models which explain or attempt to predict usage of equipment or adaptations are a new development (Boland, 2015), and despite their iterative development and use in research, theoretical models in this field have not gained traction in clinical practice (Tedesco Triccas *et al.*, 2019).

Table 2. Examples of existing models with relevance to equipment and adaptations.

Model	Author(s)
Assistive Technology Device Predisposition Assessment	Scherer & Cushman (2001)
Factors that influence equipment and/or adaptation use and satisfaction	McLaggan (2011)
Human Activity Assistive Technology Model	Cook & Hussey (2008)
Matching Person and Technology Model	Scherer & Craddock (2002)
Model of clinical reasoning for equipment prescription	Boland (2015)
Technology Acceptance Model	Venkatesh & Bala (2008)

Obviously the ideal would be to always assess people in their own homes; however, due to high demand, time constraints and pressures from hospitals to discharge people, this is not always possible, which could perhaps lead to unsuccessful provision of equipment or adaptations. In the absence of OTs seeing for themselves the home environment, ensuring that OTs use a tool (Brunel University, 2016) which simplifies assessment and the measurement process may contribute towards helping to reduce rates of abandonment, particularly when there is a self-assessment process. This tool on its own is nevertheless unlikely to fully resolve the problem, as a variety of reasons for abandonment have been identified (Lauer *et al.*, 2001). It is a relatively new tool, the only evidence-based one in existence, and would be useful in a variety of settings and of low cost to use. However, despite its apparent usefulness it is unlikely to be incorporated widely into practice within the next few years. Evidence suggests that it takes well over a decade for research to filter into routine practice (Juckett *et al.*, 2019).

Once equipment or adaptations have been prescribed, they should be reviewed by the OT to ensure the service users' outcomes have been achieved, and the items are being used as recommended. As mentioned previously, review needs to go beyond knowing the individual is utilising the equipment or adaptation. Ideally, an evidence-based outcome measure should be considered for this purpose, to supply credible and reliable justification for the interventions (equipment and adaptations) that have been delivered (RCOT, 2019b). Examples of existing outcome measures include the Quebec User Evaluation of Satisfaction with Assistive Technology (Demers *et al.*, 2002) and Psychosocial Impact of Assistive Devices Scale (Jutai & Day, 2002). Use of these in practice requires a commitment of time and resources from staff, so their uptake in practice is limited.

Overwhelming demands on frontline staff in social care often mean that reviewing bathing and showering equipment and adaptations, and completing outcome measures, does not routinely happen. There might typically be only a follow-up visit or phone call just after the equipment or adaptation has been supplied. Ideally, individuals require a period of using the equipment or adaptation, and incorporating it into their daily routines, in order to fully establish if it is suitable. Even if the prescription is initially correct and appropriate, there will continue to be occasions where an individual's condition declines or improves, which may result in the equipment or adaptation no longer being suitable, and subsequent abandonment (Wilson *et al.*, 2019). OTs are relying on service users and carers to be able to recognise if and when the equipment or adaptation is no longer effective, and to feel able to respond to this e.g. by contacting the person or organisation that initially provided them with the equipment or adaptation. OTs therefore need to ensure that they are accessible to such responses, and are open about the alternative options, so that if individuals experience problems, they feel they can make contact again and request alternative solutions.

Conclusions and implications for OT clinical practice

A number of ideas have been discussed within this paper which could have an impact on the quality of clinical practice and improve the uptake of and satisfaction with equipment and adaptations, particularly in relation to bathing and showering.

In summary OTs should consider:

- using clearer clinical guidelines, for measurement and around suitability / prescription of equipment and adaptations,
- using client-centred assessment processes with a sound theoretical underpinning of the issues that are relevant to the user,
- using tools to improve engagement with equipment and adaptations, such as enabling individuals to see and visualise how equipment or adaptations may look and function in their home, and
- using outcome measures to determine ultimate suitability.

Although this article has focused predominantly on current issues within the field of equipment and adaptations used for bathing and showering, many of the points raised extend beyond these, and would be applicable to other types of equipment and adaptations. This paper has attempted to respond to practice challenges by reflecting on opportunities to improve our understanding of service user needs and expectations by using technology, which in turn might lead to reductions in abandonment rates for sometimes expensive adaptations and equipment.

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