

An Evaluation of Assistive Technology Outcomes for Home and Community Care (HACC) Clients of the Independent Living Centre (ILC) Assistive Technology Service

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Home and Community Care (HACC)
Independent Living Centre of Western Australia (ILCWA)

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Terms of Reference

HACC Clients. The Home and Community Care (HACC) Program is a joint Australian, State and Territory Government Initiative. The HACC Program provides services such as domestic assistance, personal care, as well as professional allied health care and nursing services, in order to support older Australians, younger people with a disability and their carers to be more independent at home and in the community and to reduce the potential or inappropriate need for admission to residential care. The funding for this project was provided by the WA HACC Program and therefore the target population was HACC clients of the ILCWA.

ILCWA. The Independent Living Centre of Western Australia is an Assistive Technology Service that provides free information, advice and training on specialised assistive technology devices for individuals experiencing reduced mobility or independence resulting from disability, ageing or health-related conditions. More information on this service can be obtained from <http://ILCWA.com.au/>.

Executive Summary

Assistive Technologies (AT) are proving to be increasingly useful to increase, maintain, or improve the functional capabilities of individuals with mobility, cognitive, social, communicative and/or accessibility problems. Despite their utility, a high proportion of assistive technology users abandon their device for reasons relating to unmet expectations of the device, difficulty of use, lack of social support or inappropriate instruction. Adopting an assistive technology device that meets the needs of the individual requires collaboration between the assessors, the client and their family/carer, and the service provider. The Independent Living Centre in Western Australia (ILCWA) is one service that provides information and advice on a range of assistive technologies. Subjective evidence suggests that this service is helpful and valued, but until now there has been no formal evaluation of the service provided. As such, the aim of the independent evaluation was to assess the role of the ILCWA; patterns of assistive technology use; functional gains for the clients from the use of the assistive technologies; and mode and barriers of access to the assistive technologies, as recommended by clients of the ILCWA. In 2012, 180 Home and Community Care (HACC) clients of the ILCWA service participated in a telephone questionnaire. Three months later, 158 clients participated in a second questionnaire to explore their status regarding procurement and use of their recommended assistive technology(s). Descriptive and inferential statistics were conducted using the Statistical Package for the Social Sciences (SPSS-21). Qualitative data were coded and interpreted to support the quantitative analysis.

Key Findings of the Research

1. The majority of participants in the evaluation had procured a device by questionnaire two. Use of the device showed significant positive impact on independence, safety and general wellbeing. Compared with past research, this study highlighted a very low level of device abandonment.
2. Participants reported that the device was meeting their functional and independence needs, was important in their everyday lives, and that they had little difficulty in adjusting to the use of their device.
3. The majority of devices were obtained through purchase with comparatively fewer hired. The most influential barriers to obtaining and using assistive technology was being unable to afford the device or not having procured the device, changing needs and wants, and the unavailability and long waiting times for purchasing some of the devices.
4. The ILCWA service was consistently rated as helpful or very helpful in providing participants with information that then assisted them to choose and obtain their device. The majority of participants stated that a follow-up after their initial consultation with the ILCWA would not be helpful or necessary, implying that participants feel confident in their use of the assistive technology and received sufficient information and advice.

Recommendations

1. Given the reported usefulness of the ILCWA service, more attention should be given to increasing awareness of the service through websites, advertising and other non-

primary health-related agencies in order to target less supported and ill-informed people within the population.

2. A minority of participants felt that that a follow-up service would be valuable in assessing progress and providing assistance with further equipment needs. Further investigation is needed to determine the value of such a service, with particular focus on one that addresses knowledge about the availability of funding
3. Just less than one-half of participants reported that the mode of access for purchasing their device was not discussed in their consultation with the ILCWA. This information should be better incorporated into the initial consultation to support clients towards obtaining their chosen device.
4. Less than one-quarter of participants received funding to purchase their device. Further investigation is needed to determine whether all clients are aware of funding, if they are eligible for it, and if not, what other options are offered to them.

Chapter 1 Introduction

1.0 Background

Due to healthcare and medical advancements, people in general, including those with disabilities, are now living longer (Wilson, Mitchell, Kemp, Adkins & Mann, 2009). In response, there is a growing demand for healthcare and government systems to provide practical and economically sustainable solutions to ensure people with disabilities manage their daily activities as safely and independently as possible. Assistive technology (AT) is rapidly proving to be one of the most successful ways of tackling this evolving issue (Wilson, et al., 2009).

The Assistive Technology Act of 1998 defines assistive technology as: “any item, piece of equipment, or product system, whether acquired commercially off the shelf, modified, or customised, that is used to increase, maintain, or improve functional capabilities of individuals with disabilities” (Falk & Deutsch, 2008, p.5). These devices usually assist with mobility, cognitive, social, communication and/or accessibility problems as a result of a disability, health-related condition or ageing (Wilson, et al., 2009). Assistive technology devices can range from low tech such as bathing and dressing equipment, to high tech such as hardware and software which improve access to computers and other information technologies. The use of assistive technology is reported to enable the person to feel more included in their home and community through reducing dependence and facilitating activities of daily living (Freedman, Agree, Martin & Cornman, 2005). People with disabilities using assistive technology effectively report increased self-esteem and confidence as they are able to achieve their goals in areas of personal care, home care, education, vocation, communication and mobility; thereby improving their overall quality of life (Wielandt & Strong, 2000).

Despite their utility, in the literature there is compelling evidence that a high proportion of assistive technology users abandon their device. Reasons for abandonment can be understood in one of three ways: (1) personal factors, such as expectations of the device and changes in physical ability; (2) factors relating to the device, such as quality and ease of use; (3) factors relating to the user’s environment, such as social support and availability of funding for the device; and finally, (4) intervention-related factors, such as client involvement during selection, appropriate instruction and ongoing follow-up (Wessels, Dijcks, Soede, Gelderblom & De Witte, 2003). It is evident that device abandonment can often occur if assessments do not encompass a person’s functional ability, medical status, diagnosis, psychosocial needs, home environment, daily route, goals or values (Falk & Deutsch, 2008). The importance of assessing the client within the context of the environment in which they will be using the assistive device is important, alongside initial training in use of the device, regular communication and monitoring of changing client needs (Hoffmann & McKenna, 2004). Adopting an assistive device that meets the needs of the individual requires collaboration between the assessors, the client, their families/carers and the service provider (Alper & Raharinirina, 2006).

In Western Australia, the Independent Living Centre (ILCWA) provides an assistive technology service that delivers free information, advice and training on specialised assistive

technology devices. The service is available to West Australians of all ages experiencing reduced mobility or independence resulting from disability, ageing or health-related conditions. The function of this service is to provide information and advice on a vast range of devices in areas of augmentative and alternative communication, computer access, assistive learning technology, environmental control units, daily living aids, mobility aids and equipment. The ILCWA assistive technology service is an information-only service and no client assessments are undertaken. After obtaining information, the client can choose to purchase the device from an external supplier or trial the equipment on short-term hire from the ILCWA.

The ILCWA has provided an information service to support the choice of assistive technology and equipment for over 30 years. There is much anecdotal evidence that the ILCWA service is helpful and valued, however there has been no formal evaluation of the outcomes of the service provided, or the changes in independence and/or functional gains attributed to the access and use of the device. To date, the ILCWA Customer Satisfaction Surveys have focused mainly on evaluating the information delivery and client experience of service, rather than post-service outcomes. Having a clearer understanding of the post-service impact of clients' assistive technology use, and how the ILCWA service assisted in clients accessing and using assistive technology, will provide valuable information to the ILCWA for future service improvement and development.

1.1 Aims and Objectives

This study aimed to evaluate Assistive Technology outcomes for HACC clients of the ILCWA Assistive Technology Service. Specifically, the study sought to:

- a. Identify HACC clients' perception of independence and/or functional gains attributed to the access and use of assistive technology.
- b. Explore the extent to which the ILCWA service informs and assists HACC clients' choice to access and use assistive technology.
- c. Identify HACC clients' mode of access to assistive technology following ILCWA service intervention.
- d. Identify HACC clients' duration of use of recommended Assistive Technology.
- e. Understand barriers for HACC clients to access and use recommended assistive technology.

1.2 Significance of the Research

Although there are some studies exploring the benefits of assistive technology and the barriers to use, there are very few studies that have assessed the quality of assistive technology delivery from the client's perspective. Given the emphasis placed on employing a client-centred approach, identifying unique client needs and incorporating all stakeholders in the provision of assistive technology services, the importance of evaluating the perceived effectiveness of this service and the products that it endorses is clear.

This research is the first ILCWA outcome evaluation to focus on the post-service use of assistive technology. It was expected that this research would identify both positive and negative perceptions of the ILCWA service and the subsequent practicality and utility of the assistive technology devices obtained following use of this service.

The present study findings will provide feedback to the ILCWA and the WA HACC Program, allowing the opportunity for recommendations to further develop the ILCWA service and benefit all future users of the ILCWA assistive technology service. This research will also contribute to the limited literature on the quality of assistive technology delivery from the client's perspective, highlighting further barriers to assistive technology use and offering suggestions for improvements to existing services.

1.3 Structure of the Report

Chapter 2 of this report outlines the research methodology for this study and describes the research design, study sample, methods of data collection and data analysis techniques. Chapter 3 presents the study findings, describing both the qualitative and quantitative results and key demographic characteristics of the sample. Chapter 4 of the report outlines the conclusions drawn from the collated findings and provides recommendations for the ILCWA to further develop their assistive technology service and benefit present and future clients of the service.

Chapter 2 Research Methodology

2.0 Overview

This chapter outlines the research design, participants and data collection methods used to measure HACC clients' perceptions of the ILCWA service and data analysis techniques used to evaluate these perceptions.

2.1 Study Design

The present study used a pretest/post-test design to obtain data on HACC clients' perceptions of the ILCWA assistive technology service. The study involved the evaluation of the client's experience of assistive technology over a three month period, without any intervention. Ethical approval for this study was obtained from the Curtin University Human Research Ethics Committee (approval number: OTSW-04-2012; Appendices B and C).

2.2 Participants

The sample comprised HACC clients of the ILCWA service. HACC clients were considered eligible to participate in the study if they had either been a client of the ILCWA service, or had utilised the ILCWA services on behalf of a client they were a guardian or carer for at the time. Participants were recruited non-randomly by current ILCWA staff and the project officer. The objectives of the study (Section 1.1) were to estimate prevalence (of clients' perceptions of independence, assistance received from the ILCWA, mode of access, etc). With a sample size of 150, the estimates would be accurate to within +/- 8%, and with a sample of 200, this would improve to +/- 7%. For this study, we aimed to recruit a sample size of 200, as this was manageable within the time frame of the study, and would lead to results which could be expected to be adequately reliable. A total of 180 agreed to participate in the first questionnaire and 158 in the second.

2.3 Measurement Tools

A review of the literature indicated that there were very few well validated instruments or measurement tools available to assess the quality of assistive technology delivery from a client's perspective. Other studies have used instruments such as the Functional Independence Measure (FIM) or the Canadian Occupational Performance Measure (COPM), however neither of these measures are technology specific. To accurately explore the experiences of HACC clients, within the context of the service that the ILCWA provides, two self-report instruments were developed for the purpose of this study. Questionnaire items were devised based on past literature and in consultation with the project reference group. Both questionnaires comprised a combination of fixed-choice items using likert-type scales and open-ended questions for items which sought further explanation.

The first questionnaire consisted of 15 questions which assessed basic demographics, information about the enquiry area, how the client rated the service that was provided to them by the ILCWA, and the client's use and perceived gains from the assistive technology. The second questionnaire followed on from the first and was structured in such a way that if the client had already obtained the device and discussed it in questionnaire one then they would commence at question two; if they had obtained the device since questionnaire one then they would commence at question three; and if they had still not obtained the device

then they would commence at question four. Depending on which section the client was directed to, they would then answer between 3 and 17 questions on their use of the device, their attitudes towards the device and their perception of how ILCWA may be able to further assist them now, or in the future. Refer to Appendix E for full list of questions.

2.4 Procedure

Ethical approval was obtained prior to commencement of the study (full details in Appendices B and C). During normal ILCWA service provision, HACC clients considered eligible for participation were invited to be involved in the research project. For those who were interested, client contact details were obtained in addition to a brief summary of the service the client undertook. A letter was then sent from the project officer to the potential participant who provided information on the research project, as well as the participant's involvement, confidentiality and right to withdraw (refer to Appendix D for further details). Participation was requested through completion of a consent form which participants then returned in a self-addressed stamped envelope. If a participant's consent form was not received within 14 days, the project officer contacted the potential participant to ensure that the information letter was received. If participation was declined then no further contact was made.

Individual telephone appointments were made with participants who returned their signed consent form. Telephone calls were made to schedule an interview time and administer the first questionnaire. All interviews were conducted by the project officer with each question read aloud and participant responses recorded on a paper questionnaire. Three months later, the second interview was scheduled by telephone and this was conducted in the same manner. At the end of both questionnaires, participants were given the opportunity to add any additional comments which were also recorded verbatim on the questionnaire form.

2.5 Data Analysis Techniques

All quantitative statistical analyses were conducted using SPSS (Statistical Package for the Social Sciences) software version 21.0 for Windows. Both questionnaires were entered into SPSS and descriptive and inferential statistical analyses were undertaken. Qualitative data in the form of participant comments were transcribed, coded manually and interpreted to provide greater detail towards the quantitative analysis.

Chapter 3 Results

3.0 Overview

This chapter outlines the demographic characteristics of the study participants, their experience of the ILCWA service, details of the device that the service assisted them to choose, their duration of use and perceived gains during this time, any barriers reported to using or obtaining the assistive technology device and finally, information regarding follow-up by the ILCWA.

3.1 Demographics

3.1.1 Sample

One-hundred and eighty HACC clients participated in the study. Fifty-eight per cent ($n = 103$) of participants were female and 42% ($n = 76$) were male. Participants were all aged over 60 years and reported a range of health conditions (Table 1).

Table 1

Participant Conditions at Time of ILCWA Service Utilisation

	Frequency	Proportion (%) of sample with this condition
Arthritis and other related	38	21.8
Orthopaedic	36	20.7
Frail elderly	32	18.4
Parkinson's disease	17	9.8
Back, neck pain or other	15	8.6
CVA/Stroke	13	7.5
Neurological	13	7.5
Deaf/Hearing impaired	11	6.3
General medical condition	10	5.7
Heart disease	10	5.7
Other	8	4.6
Dementia	6	3.4
Respiratory	6	3.4
Diabetes	4	2.3
Oncology/Palliative care	4	2.3
Amputation	3	1.7
Spinal injury	3	1.7
Vision impaired	3	1.7
Mixed/Multiple diagnosis	2	1.1
Acquired brain injury	1	0.6

Note. $N = 174$ (condition data for six participants missing), but some participants reported multiple conditions (up to three)

3.1.2 Socioeconomic Status (SES)

Table 2 compares the distribution of advantage/disadvantage deciles (ADISDEC) between the present sample and the entire Western Australia population. Descriptive statistics indicated that the present sample was over-represented in the higher socioeconomic status (SES) deciles with the majority of participants in the 7th to 10th percentile rankings. However, analysis indicated that this trend was consistent with the total WA population. There was a statistically significant difference between the present sample and the WA population, although all participants in this study were aged over 60 years compared to the WA data which included all age groups.

Table 2
Percentages and Frequencies of SES Percentiles for Current Sample and WA Population

SES percentile	Current sample	SEIFA data for WA
1-6	20.69% (36)	26.46% (382718)
7-8	21.84% (38)	29.63% (428527)
9	33.33% (58)	23.64% (341938)
10	24.14% (42)	20.27% (293264)
Total	174	1446447

3.1.3 Appointment Type

The majority of participants (58.0%) utilised the ILCWA's face to face service, 33.0% received services by phone, and 8.6% utilised both services. There was a trend towards a greater proportion of participants with low SES accessing the ILCWA by phone, compared with greater numbers in the higher SES groups accessing the service face to face, which may in part be due to the physical location of the ILCWA. Of the participants in the survey, 60.0% of participants used the ILCWA to enquire about devices for themselves, while the remaining enquired as a guardian or carer on behalf of the client. Whether the ILCWA was accessed via the participant themselves or a guardian/carers the rate of procurement of devices was similar.

3.2 ILCWA Services

3.2.1 ILCWA Referral Sources

Participants were aware of the ILCWA service through a range of sources (Table 3). The majority of participants were made aware via health professional/hospital advice. A high proportion also discovered the service through friends and relatives. Eleven participants responded to the service through ILCWA advertising, Outreach and website; while the remainder gained awareness through other agencies and suppliers.

Table 3
Sources of Referral to the ILCWA service

	Frequency	Percentage (%)
Health practitioner	62	34.4
Friend/relative/carer/work	41	22.8
Hospital	24	13.3
Unknown	20	11.1
Other / Other agencies	13	7.2
Supplier	6	3.3
Website	6	3.3
Outreach	3	1.7
Advertising	2	1.1
Country ILC service	2	1.1
Nursing home	1	0.6
Total	180	100.0

3.2.2 Ratings of the ILCWA Service

Many participants (41.1%) reported that they had already decided they required assistive technology prior to accessing the ILCWA service. This indicates that they were seeking information for a particular device, rather than expecting the ILCWA to assist them in deciding whether they needed a device or not.

The majority (98.1%) of participants reported that the information received from the ILCWA was helpful or very helpful overall, and very helpful in assisting them to choose their device (68.4%) as reflected in these statements:

“ILC was absolutely fantastic. 100% service, nothing was too much trouble, so pleased with the service. They gave me all the information on all components and all information on grants. It is the most fantastic place, it has most things people with disabilities are looking for. There is so much available....In three months I will have everything in place and will tell you how wonderful everything is.”

“I already had one and decided we needed a lighter [wheelchair] for car transfers. I wouldn't have had anywhere else to go or known what to do as each manufacturer would say theirs was better. The ILC makes it so much easier.”

“I am so grateful it's there, I know I can come in and try out various products and there is a good range for people with all disabilities and problems, and I'm not going to get the hard sell, we just come in and experience what we can use to help our life. If you go into a shop they want to sell you a product. The advice you get is not as objective like advice from ILC. I am grateful I can come back anytime.”

Many participants also reported that the service was helpful or very helpful when deciding on their mode of access (35.0%; Tables 4-6). Forty-seven per cent of participants reported that they did not discuss options with the ILCWA on how they could access the recommended device.

Table 4

The Perceived Helpfulness of the Information Received by the Client

	Frequency	Percentage (%)
Very helpful	117	74.1
Helpful	38	24.1
Not helpful	3	1.9
Total	158	100.0

Table 5

The Perceived Helpfulness of the Information in Choosing a Device

	Frequency	Percentage (%)
Very helpful	108	68.4
Helpful	48	30.4
Not helpful	2	1.3
Total	158	100.0

Table 6

The Perceived Helpfulness of the Information in Helping to Decide Mode of Access

	Frequency	Percentage (%)
Very helpful	41	35.0
Helpful	14	12.0
Unhelpful	6	5.0
Not discussed with ILC	55	47.0
Neutral	1	1.0
Total	117	100.0

Further analysis indicated that appointment type was not related to whether information on how to access the device was discussed at the appointment. Similar proportions of participants for both face to face and telephone appointments reported not discussing mode of access with the ILCWA.

3.3 Assistive Technology Obtained

3.3.1 Number of Participants Obtaining Assistive Technology

Eighty per cent of participants surveyed at questionnaire two (three months post initial access to ILCWA service) had obtained one or more devices within the survey timeframes. Forty-six per cent ($n = 83$) of participants had obtained their device at the time of questionnaire one. At questionnaire two, of the 160 participants re-surveyed, a further 24.4% ($n = 39$) had obtained their device, with 3.8% ($n = 6$) of participants still awaiting their device, and 24.4% ($n = 39$) of participants with no device.

3.3.2 Types of Assistive Technology

The types of assistive technology (devices) came under five key categories: activities of daily living devices, communication devices, mobility devices, rails, and seating. In total, 185 devices were obtained (some clients obtained more than one device). As demonstrated in Table 7, the majority of devices obtained were mobility devices (37%), followed by activities of daily living (36%), communication (12%), seating (12%), and rails (3%).

Table 7

Types of Assistive Technology (Devices) Accessed by Participants (n = 185)

Device type	Frequency count (n)
Activities of daily living devices (n = 66)	
Toileting	18
Meal preparation	15
Dressing	12
Showering	8
Sleeping (bed/pillows)	8
Calendar/Time	2
Leisure (TV remote/magnify)	2
Cleaning	1
Communication devices (n = 23)	
Alarm	14
Phone	6
General	3
Mobility devices (n = 68)	
Walker (including shopping)	25
Wheelchair	23
Lift	5
Scooter	5
Ramp	2
Transfer aid	2
Walking aids (crutches)	2
Vehicle modifications	2
Hoist	1
Flooring	1
Rails	
Rails	6
Seating (n = 22)	
Chair (lounge/reclining/raiser)	18
Cushions	4

Further analysis demonstrated a relationship between the device type and when the device was obtained ($\chi^2_{(15)} = 27.53, p = .025$). Rails and some mobility devices were more likely to be obtained quickly, seating and other mobility devices were obtained within three months, whereas communication devices were not always obtained within the study timeframes. Additionally, there was an association between the type of appointment and device type, with clients requiring communication devices more likely to undertake phone

appointments, and those with mobility and seating requirements to engage in face to face appointments ($\chi^2_{(15)} = 18.30, p = .050$).

Participants' medical conditions were related to the type of device obtained through their ILCWA service ($\chi^2_{(35)} = 79.84, p < .001$). Participants with sensory impairment were more likely to obtain communication devices; frail elderly participants and those with Parkinson's disease were more likely to obtain mobility devices; participants with neurological conditions were more likely to obtain personal care and mobility devices; those with general medical conditions were more likely to obtain mobility and seating devices and lastly, those participants with musculoskeletal conditions were more likely to obtain rails, mobility devices, personal care and meal preparation devices.

3.3.3 Mode of Access to Assistive Technology

For the 185 devices obtained, the majority of participants bought their own device (81.0%), with the remainder hiring or obtaining the device through other means (see Table 8) and this was found to not be related to participant's SES background. Further analysis identified that the type of appointment with the ILCWA (face to face, telephone; $\chi^2_{(2)} = .51, p = .777$); the timeframe to obtain the device ($\chi^2_{(2)} = .38, p = .827$); and the device type required ($\chi^2_{(2)} = 6.40, p = .781$) were not associated with the mode of access.

Table 8
Participants' Mode of Access for their AT Device

	Frequency	Percentage
Buy	98	81.0
Hire	16	13.2
Hire with intent to buy	3	2.5
Made own device	1	0.8
Gift/ borrow	2	1.6
Hire from ILC	1	0.8
Total	121	100.0

3.3.4 Funding for Devices

Twenty-one per cent ($n = 22$) of participants buying their device received funding. Of those participants receiving funding, 73% ($n = 16$) obtained their device after questionnaire one. The remaining participants did not receive funding for their device and there was a trend towards these people coming from lower SES backgrounds. Qualitative comments indicated that for some people the device was inexpensive and so they did not seek funding and bought the device outright:

"It was not expensive enough, but still a good one. We didn't ask for funding, we would have paid more."

Other participants reported that they only needed the device for a short duration and therefore hired the device:

"No point buying it. She only needed it for 7 to 10 days. It is for back pain that is periodical, she uses it for 7 to 10 days, then her back is fine, we will get it again when

her back is bad again.”

Other participants stated that funding was not discussed with ILCWA at the appointment time and they did not think to apply for a grant or ask about funding:

“I don’t remember being given an option”

Of those participants still without a device in questionnaire two ($n = 39$), 26% ($n = 10$) reported that they could not afford the device, were waiting on funding, or were ineligible for funding.

3.4 Duration of Use of Assistive Technology

Once obtained, 87.5% of participants reported using the device straight away, 7.5% within a few weeks and 5.0% had not used the device at the time of survey. Reasons reported for delays included waiting for modifications, medical procedures, recovery, approval or funding, and confidence to use the device. Participants’ frequency of use of their device at questionnaire two is summarised in Table 9. A total of 78.9% of participants who had obtained the device at questionnaire one were still using the device three months post initial survey. These participants also reported their intention to use the device into the future.

Table 9
Frequency of AT use at Questionnaire Two

	Frequency	Percentage (%)
Daily	68	69.4
Weekly	13	13.3
3-4 times weekly	9	9.2
As required	7	7.1
Monthly	1	1.0
Total	98	100.0

3.5 Independence and/or Functional Gains

3.5.1 Independence and Wellbeing

a. Once Obtaining the Device (Questionnaires One and Two)

Participants were asked “When using the device do you need others to assist you for the task?” 29.2% ($n = 31$) of participants reported that they required assistance, and 70.1% reported they did not require assistance. When using the device in daily tasks, 76.8% ($n = 83$) of participants reported feeling a greater sense of wellbeing, 19.4% ($n = 21$) reported feeling the same as before using the device, and 3.0% reported they were unsure of their wellbeing with the device as they had not used the device enough to consider that at this stage. These participants reported a range of functional and independence gains with their use of the device once it had been obtained (Table 10).

Table 10

Functional/Independence Gains Once Obtaining the Device (n = 99)

	% of participants who Agree (n)	% of participants who Disagree (n)
Safer for you or caregiver	81.8 (81)	18.2 (18)
Quicker to complete the task	83.7 (77)	16.3 (15)
Requires less energy for you or caregiver	79.2 (76)	20.8 (20)
Requires less assistance from others	51.0 (47)	49.0 (45)
Can perform task yourself	91.6 (87)	8.4 (8)

b. Participants with Access to Device in Questionnaires One and Two

These participants reported a range of functional and independence gains with their use of the device three months post initial survey. As seen in Table 11, the most prevalent gains were the ability to perform tasks independently and safety for the client and their carer as highlighted in this statement:

"I can't even step in to the bath. I'd have to hang on for grim death...it's safer for my husband too."

Table 11

Functional/Independence Gains for Participants with Access to Device in Questionnaires One and Two (n = 61)

	% of participants who Agree (n)	% of participants who Disagree (n)
Safer for you or caregiver	92.3 (48)	7.7 (4)
Quicker to complete the task	77.2 (44)	22.8 (13)
Requires less energy for you or caregiver	73.7 (42)	26.3 (15)
Requires less assistance from others	39.3 (24)	60.7 (37)
Perform task yourself	83.1 (49)	16.9 (10)

c. Three Months Post Initial Survey

Three months post initial survey participants were again asked "When using the device do you need others to assist you for the task?" Over twenty-eight per cent (n = 17) of participants reported that they required assistance and 71.7% (n = 43) reported that they did not require assistance with the device as reflected in this statement:

"I can do it by myself, my independence is much better. Sometimes I need my husband to help me turn around."

Again, three months post initial survey participants reported that when using the device in daily tasks, 73.0% ($n = 46$) participants reported feeling a greater sense of wellbeing, 25.4% ($n = 16$) reported feeling the same as before using the device, and 1.6% ($n = 1$) reported less wellbeing as a result of using the device. This greater sense of wellbeing was highlighted in the following statement:

“By far, I have confidence that I was starting to lose. With the alarm I’m not worried about going outside and whether or not something goes wrong. And I have confidence in other areas of my life. I feel safe. I know I will get help one way or the other.”

Participants reported on how important the device was in their everyday life, how satisfied they were with the device, and how much difficulty they experienced in adjusting to the device (Tables 12-14).

Table 12
Importance of Device in Everyday Life

	Frequency	Percentage (%)
Very important	42	60.9
Important	22	31.9
Not important	5	7.2
Total	69	100.0

Table 13
Rating of Satisfaction with Device

	Frequency	Percentage
Very satisfied	45	65.2
Satisfied	19	27.5
Dissatisfied	5	7.2
Total	69	100.0

Table 14
Difficulty with Adjusting to the Device

	Frequency	Percentage
Very difficult	3	4.3
Difficult	11	15.9
Not difficult at all	55	79.9
Total	69	100.0

Further analysis was undertaken to look for relationships between the type of device and participants satisfaction with their device. There were no associations between type of

device and importance of the device ($\chi^2_{(10)} = 14.33, p = .158$), satisfaction with the device ($\chi^2_{(10)} = 9.61, p = .476$), and difficulty with adjusting to the device ($\chi^2_{(10)} = 7.52, p = .675$). Additionally, analysis was also undertaken to look for relationships between the participants' medical condition and participants' satisfaction with their device. There were no associations between participant's medical condition and importance of the device ($\chi^2_{(14)} = 8.65, p = .853$) and satisfaction with the device ($\chi^2_{(14)} = 15.06, p = .374$). Taking into consideration small sample sizes for some medical conditions, there was however indication of an association with participants' medical condition and difficulty with adjusting to the device ($\chi^2_{(14)} = 24.96, p = .035$), with participants with neurological and sensory impairment indicating greater difficulty with adjusting to their devices.

3.6 Barriers to Access and Use of Assistive Technology

3.6.1 Barriers to Not Obtaining the Device at Questionnaire One

Following questionnaire one, participants who had not obtained the device (59.3%) reported a number of barriers as to why they had not obtained the device at that time (Table 15). The majority reported not having pursued the device, being unable to afford it, or still awaiting funding.

Table 15

Barriers to Obtaining an AT Device at Questionnaire One (n = 74)

Barrier	Number of responses
Have not pursued / "getting around to it"	19
Unable to afford	12
Waiting on funding	11
Ordered / awaiting delivery	9
Future need/ not needed now	6
No longer wants / requires	5
Not suitable	3
Waiting on more information	2
Not available / unable to locate	3
Medical status / functional needs have changed	2
Device is unattractive	2

3.6.2 Barriers to Not Obtaining the Device at Questionnaire Two

Following questionnaire two, those participants who still had not obtained the device ($n = 16, 24.5\%$) or had abandoned their device ($n = 16, 21\%$) also reported barriers (see Table 16). Similarly, the two main reported reasons were not having pursued the device and being unable to afford it.

Table 16

Barriers to Obtaining an AT Device at Questionnaire Two (n = 25)

Barrier	Number of responses
Haven't pursued / "getting around to it"	7
Unable to afford	5
Future need/ not needed now	4
Not suitable	4
Waiting on funding	2
Medical status / functional needs have changed	2
No longer wants / requires	1
Waiting on more information	0
Ordered / awaiting delivery	0
Device is unattractive	0
Not available / unable to locate	0

Reasons for not obtaining or abandoning a recommended device were further dependent on the type of assistive technology. Tables 17-21 examine barriers to access and use by device category (communication, mobility, self-care, meal preparation and seating) and each section describes specific devices affected by affordability issues.

3.6.3 Barriers by Assistive Technology Type

In terms of affordability, the items specified by the respondents were two personal alarms, one calendar clock and one phone.

Table 17

Reasons for Not Obtaining Communication Devices

	Questionnaire One	Questionnaire Two
Unable to afford	4	2
Haven't pursued/'getting around to it'	5	2
Waiting on more information	2	0
No longer wants/requires	1	1
Future need/not needed now	2	2
Ordered/waiting on delivery	1	0
Medical status/functional needs have changed	0	3
Not suitable	0	1
Not available/unable to locate	0	0
Waiting on funding	0	0
Device is unattractive	0	0
Total	15	11

3.6.4 Barriers to Mobility Devices

The mobility items specified as being 'unable to afford' were a manual wheelchair and a walker. Funding was sought for one powered wheelchair, a manual wheelchair and a mobility scooter. Funding was still being sought at the three month interview for a manual wheelchair.

Table 18
Reasons for Not Obtaining Mobility Devices

	Questionnaire One	Questionnaire Two
Unable to afford	2	0
Haven't pursued/'getting around to it'	5	1
Waiting on more information	0	0
No longer wants/requires	2	0
Future need/not needed now	2	0
Ordered/waiting on delivery	2	0
Medical status/functional needs have changed	1	1
Not suitable	2	2
Not available/unable to locate	2	0
Waiting on funding	4	1
Device is unattractive	0	0
Total	22	5

3.6.5 Barriers to Self-Care Devices

Affordability criteria at the one month questionnaire were for a shower/bath seat, a pick-up stick and a small dressing aid e.g. a button hook. Funding was being sought for an air mattress, a toilet frame/toilet seat and two electric beds.

Table 19
Reasons for Not Obtaining Self-Care Devices

	Questionnaire One	Questionnaire Two
Unable to afford	3	1
Haven't pursued/'getting around to it'	2	1
Waiting on more information	0	0
No longer wants/requires	0	0
Future need/not needed now	2	2
Ordered/waiting on delivery	1	1
Medical status/functional needs have changed	1	1
Not suitable	1	1
Not available/unable to locate	1	0
Waiting on funding	4	0
Device is unattractive	0	0
Total	15	7

3.6.6 Barriers to Meal Preparation Devices

No unattained or abandoned meal preparation devices were reported as unaffordable, but rather specific reasons related to the client not following up on the device, changing needs or wants, and waiting times for funding.

Table 20
Reasons for Not Obtaining Meal Preparation Devices

	Questionnaire One	Questionnaire Two
Unable to afford	0	0
Haven't pursued/'getting around to it'	4	2
Waiting on more information	0	0
No longer wants/requires	1	0
Future need/not needed now	0	0
Ordered/waiting on delivery	0	0
Medical status/functional needs have changed	0	0
Not suitable	0	0
Not available/unable to locate	0	0
Waiting on funding	1	0
Device is unattractive	0	0
Total	6	2

3.6.7 Barriers to Seating Devices

The seating items specified by respondents as being 'unable to afford' were one lift chair, one lounge chair and one Roho cushion. At one month post ILCWA visit, funding was obtained for one recliner and one lift chair.

Table 21
Reasons for Not Obtaining Seating Devices

	Questionnaire One	Questionnaire Two
Unable to afford	3	2
Haven't pursued/'getting around to it'	3	1
Waiting on more information	0	0
No longer wants/requires	1	0
Future need/not needed now	0	0
Ordered/waiting on delivery	5	0
Medical status/functional needs have changed	0	0
Not suitable	0	0
Not available/unable to locate	0	0
Waiting on funding	2	1
Device is unattractive	2	0
Total	16	4

3.6.8 Reasons for Not Obtaining the Device Three Months Post Initial Survey

Three months post initial survey, 21.0% ($n = 16$) of participants were not using their device. Reasons reported included a change of function (50% of comments) and unsuitability/difficulty to use the device (50% of comments). Specific comments included participant passed away or condition worsened; participant recovered/improved their condition; participant could not operate the device due to other medical conditions; participant had identified a better suited solution/device.

Three months post initial survey 3.8% ($n = 6$) of participants were still waiting on their device. Comments relating to the reasons for the wait included: waiting on assessments through community hospitals; waiting on completion of home modifications prior to device; and waiting on supply of device.

3.7 Further Support or Assistance Needed

3.7.1 Follow up Services

Participants were asked questions regarding the need for follow up services following their initial consultation with ILCWA. Ninety-two per cent ($n = 69$) of participants reported that a follow up telephone call, and 91.0% ($n = 67$) reported that a follow up appointment, with the ILCWA would not be helpful for access or use of the stated device. Following a review of the qualitative data, most participants felt that they would contact the ILCWA in future should they require additional services and therefore did not require a follow up service. Just over 16.0% ($n = 12$) of participants agreed that over the last few months (the time between Questionnaire One and Two) other assistance from the ILCWA would have been helpful. Furthermore, there was a trend where participants with higher SES were more likely to rate a follow-up service as helpful than those in lower percentiles. Those participants reporting that a follow up service would be useful were concerned with gaining assistance with further equipment needs, or felt that it could have been useful for the ILCWA to follow up with how they were progressing with the equipment in a general sense.

Chapter 4 Conclusions, Limitations and Recommendations

4.1 Conclusions and Limitations

This report presents the results of research evaluating the experience of HACC clients of the ILCWA assistive technology service. Although other research has explored the benefits of assistive technology on increasing, maintaining or improving functional capabilities; this project offers additional insight into the value of assistive technology services and the experience of clients of this service. Surveying a sample of ILCWA clients enabled us to examine demographics of typical users, identify perceived independence and functional gains attributed to device use, measure the utility and perceived helpfulness of this service, and outline key barriers to obtaining and using assistive technologies.

Slightly over half of the total sample was female and the remainder were male, indicating a relative gender balance in this client group. The sample represented quite a specific demographic with all participants aged over 60 years and with a trend towards higher SES backgrounds; however, this was also reflected in the WA population as a whole. Due to small sample sizes across SES groupings, a full statistical analysis of the relationship between SES and other variables was not possible. However, there were trends to indicate that participants from higher SES groups were more likely to utilise the service face to face, and less likely to access funding or express interest in follow-up services. These findings may be due in part to participants from higher SES backgrounds being better informed about funding opportunities and having greater access to services through transport and family/friend/carer supports. This finding indicates potential for inequity with clients accessing assistive devices.

The greatest frequency of health conditions were reported as arthritis, orthopaedic and being frail. As expected, the type of device chosen and the ease of adjustment to the device were dependent on the participants' medical conditions. In order of most utilised, the types of devices obtained included mobility devices, activities of daily living (devices for household tasks), communication devices, seating, and rails.

The majority of participants had obtained a device four months post their ILCWA service, and use of the device showed significant positive impact on independence and general wellbeing across the sample. Participants reported their assistive technology device resulted in improved safety for themselves and/or their carers, and decreased the time and energy required to complete a task. Furthermore, the majority of those who had obtained their device at questionnaire one (most post-ILCWA service) were still using their device and intended to continue doing so. Compared with past research, this study highlighted a very low level of device abandonment. This was reflected by the majority of participants who reported that the device was meeting their functional needs; was important in their everyday lives (with over half reporting daily use); and that they had little difficulty adjusting to their device, commencing use immediately.

The majority of devices were obtained through purchase, with only a small proportion hired; choices related to the mode of access were not influenced by the type of appointment,

timeframe to obtain the device, or the device type. The small proportions of participants who did not obtain a device or abandoned use of the device within the study timeframe were reflective of current literature for reasons of non-use. Participants identified a number of barriers to access and use of assistive technology and these were specific to the type of device sought. Personal factors, including being unable to afford the device or not having yet pursued the device, had the greatest negative impact on obtaining all types of device at questionnaires one and two. Significant barriers to self-care devices also included changing medical status and needs, and barriers to mobility and seating devices included the availability of the device or waiting times for funding or delivery.

Participants accessed the ILCWA service via both face to face and telephone appointments. The ILCWA service was consistently rated as helpful or very helpful in providing participants with information that then assisted them to choose and obtain their device. Almost half of the participants reported that they had decided that they required assistive technology prior to accessing the ILCWA service. This highlights the importance of initial assessment in differentiating clients who need assistance in deciding if they require a device, and clients who are ready for information on the use and modes of access for a specific device. As the majority of participants obtained the device within four months of service and started using the device straight away, the ILCWA service could be deemed as providing timely and efficient information to meet the needs of the client in an informative and collaborative manner with family, carers and suppliers. The majority of participants stated that a follow-up after their initial consultation with the ILCWA would not be helpful or necessary, implying that participants feel confident in their use of the device and received sufficient information and advice at the initial consult. These findings support that this service is comprehensive in meeting individual needs from the point of first contact.

4.1.1 Limitations

The project had a number of limitations. The sample for this project was limited to HACC clients of the ILCWA service. These clients were all aged over 60 years and were mostly affected by ageing-related conditions such as arthritis, orthopaedic conditions or being frail. Although HACC clients comprise over half of the ILCWA clientele, it is not possible to generalise these findings to all ILCWA clients who may be younger and accessing the service, independent of HACC, because of disability or other health-related conditions. The sample also had an over-representation of people in higher SES groupings which may have an impact on access to services; however, the WA population also paralleled this trend. The majority of the current sample was referred to the ILCWA through the healthcare system, other agencies and friends or relatives, with comparatively fewer accessing the service through independent searches of websites or advertising. It is, therefore, possible that this sample was already somewhat informed about assistive technologies and, as reflected in the frequencies, had already decided that they required a device of some kind, thus requiring only specific device-related assistance from the ILCWA.

4.2 Recommendations

The present sample comprised participants with a broad range of disabilities and health conditions and therefore provides valuable insight into the types of assistive technology devices used by people with these conditions. Attending to these findings may contribute to future service development through highlighting both the facilitators and barriers to assistive technology use, as well as requirements of clients with specific conditions when selecting and obtaining such devices.

Participants in this study had a range of health conditions, and many presented with more than one. Consequently, many clients were provided information for a vast array of assistive technologies and obtained more than one device. Participants' medical conditions were also found to be related to the type of device obtained through the ILCWA service. This provides an opportunity for the ILCWA to better explore client needs and narrow down device options based somewhat on their medical condition. These findings highlight the importance of prioritising client needs at the initial consultation and offering ongoing assistance for further equipment to address all barriers to function and independence. Similarly, participants' medical conditions were also related to their level of difficulty in adjusting to the device. Based on this finding, **it is recommended that ILCWA staff spend additional time with clients with neurological and sensory impairment talking to them about device adjustment and addressing issues relating to this as they arise.**

HACC clients in this study were predominately made aware of the ILCWA through health practitioners or hospitals, highlighting the important role of these institutions in referring clients who need further or ongoing assistance in their personal environment. Qualitative comments indicated little awareness of the ILCWA service prior to referral and clients recommended that the ILCWA advertise in newspapers and through other avenues to increase public awareness. **Given the usefulness of the ILCWA service as observed in this study, more attention should be given to informal sources such as this in order to target a less supported and less well informed population.**

The majority of participants felt that a follow-up by the ILCWA after the initial consultation would not be helpful; however, **further investigation is needed to determine the value of an optional follow-up service for the 16.4% of participants who did express interest.** These participants indicated that a follow-up phone call or appointment would be valuable in assessing general progress with their device and may assist them with further equipment needs. These kinds of follow-ups have been highlighted by past research as important in further reducing device abandonment through monitoring changing client needs and goals (Falk & Deutsch, 2008; Hoffman & McKenna, 2004). An important area for follow-up should centre on addressing issues relating to the availability of funding, given that cost was a major barrier to the procurement of devices.

Although a fair proportion of participants felt that the ILCWA assisted them in deciding their mode of access for their chosen device, just under half reported that mode of access was not discussed in their consultation with the ILCWA (consistent across telephone and face to face appointments). **Information on modes of access should be better incorporated into the initial consultation to ensure that all clients who are eligible for funding are made**

aware of this, and clients are better supported towards obtaining their chosen device. Less than one-quarter of participants received funding to purchase their device and those who did not reported that they did not think to apply for a grant or ask about funding. It is important to note that 'unable to afford' and 'waiting on funding' were listed in the top five barriers to obtaining a device following both questionnaire one and two. These findings indicate a need for further support in this area and warrant investigation into whether all clients are aware of funding and the impact of waiting times on the functional capabilities of those who are awaiting funding or who are ineligible for funding. An awareness of this is particularly important for clients from lower SES backgrounds who might require additional support to access funding, as well as the ILC service in general.

Qualitative comments indicated that some information provided by the ILCWA was outdated when it came to procuring the device from the supplier. Clients reported that at times devices were no longer in stock, installations were unavailable and some suppliers had closed down completely. **It is recommended that ILCWA systems be regularly updated to ensure that clients are given the most accurate, up-to-date information to best inform their choice of assistive technologies and assist them in procuring their device.**

Participants showed significant improvement in wellbeing and independence and rated their devices as very important and manageable, reflected in the low levels of abandonment. The research findings demonstrate that the ILCWA enables clients to actively choose and obtain the assistive technology which best meets their individual needs; enabling them to increase, maintain or improve their functional capabilities. This evidence supports the provision of services such as this and offers valuable insight for future service development.

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Appendix A: Reference Group Membership

A reference group comprising eight members met throughout the project providing guidance and input on various aspects of the project including the development of questionnaires one and two. This group included Professor Lorna Rosenwax and Dr Courtenay Harris from Curtin University; Sally Hunter, Alex Andrews, Kelly Moore, Gerri Clay and Fraser Clarke from the ILCWA; and Lauren Melling from the Aged and Continuing Care Directorate, Department of Health WA.

Appendix B: Questionnaires One and Two

Questionnaire 1: Telephone survey

A. Demographics (*information to be gained from the ILC statistics form prior to telephone contact*)

Reference number:

Gender:

Disability:

Enquiry areas:

Enquiry area	Type of Information received (<i>if information available</i>)

Type of ILC appointment: Phone / Face to face

Client type: Client / Guardian or carer on behalf of client

A. CONFIRMATION of Service / enquiry area:

1. *Introduction* (hello I am From the ILC, acknowledge consent form received)

2. *Thinking about when you attended / contacted the ILC, what piece of equipment you did you require assistance for?*

_____ (confirm one area / device to discuss
– ask which one they would like to talk about)

3. a. *You were showed / discussed a range of different equipment (.....)options. Did the information you received from the ILC help you to decide whether you needed the equipment (.....) or not? Yes No
n/a*

b. *Now, can you tell me how helpful the information you received was by rating this-*

Was the information very helpful / helpful / OR unhelpful when trying to make the decision to get the device (.....) or not?

4. *Now, thinking about the range of different devices (.....) you were shown / told about, can you rate how helpful the information was to help you choose which one of the devices (.....) best suited you*

Was the information very helpful / helpful / unhelpful in choosing which particular device (.....) best suited your needs?

Comments: _____

5. *Have you obtained the device (.....) yet?*

YES / NO

IF NO – GO TO question 11

6. *When did you start using the device (.....) – straight away / within a few weeks or not yet?*

7. *If delayed use with device – Are there any reasons for why you have not been unable to start using the device (.....) sooner?*

8. *Now can you tell me how you got the device (.....) did you buy – hire – or borrow it from family and friends?*

9. *If you have bought the device (.....) did you get any funding for this?*

Yes / No comments: _____

10. *Now, can you rate how helpful the information was to help you decide whether you should buy/ hire/ borrow the device (.....)*

Was the information very helpful / helpful / unhelpful in helping you choose whether to buy, hire or borrow the device (.....)?

11. *What are some of the possible reasons for why you have not obtained the device (.....)?*

- Not required at this stage of the disability
- Unable to use device due to difficulties associated with disability / functional needs of person have changed
- Medical intervention made device unusable
- Use of device increased medical or safety risk
- Waiting for another OT service / government program to supply the device
- Device not available
- Unable to afford device
- Other financial reasons
- Cultural reasons
- Device was not appropriate for the intended purpose – why? _____
- Device is not convenient or impractical to use -how? _____

- Device inhibited some other important function
 - Training on the use of the device was not provided
 - Technical support was not readily available
 - Device unable to be modified or upgraded to meet changing needs
 - The device is cumbersome and unattractive / do not like look of device
 - Unwilling to use device at this stage
 - Choosing to have others/ other services to perform the required task
 - Do not want to be seen with the device
 - Afraid of other people's opinions
- Additional comments
-

B. USE and Perceived gains from Assistive technology

12. *Now thinking about how you are using the device (.....)*

What daily tasks are you using the device (.....) for?

13. *Now that you are using the device (.....)*

Would you say that when doing these daily tasks (.....) :

- | | | |
|---|-----|----|
| - <i>It is safer for you or your caregiver</i> | YES | NO |
| - <i>Quicker to complete the (.....)</i> | YES | NO |
| - <i>Require less energy from you / caregiver</i> | YES | NO |
| - <i>Requires less assistance from others</i> | YES | NO |
| - <i>You can now do (.....) yourself</i> | YES | NO |
| - <i>Other.....</i> | YES | NO |

14. *When using the device (.....) do you now need others to assist you for activities (.....)?*

Yes / NO Comments:

15. *Overall, when thinking about how the use of the device (.....) has helped in your daily tasks - would you say that in general you are feeling a greater sense of wellbeing / the same level of wellbeing as before / less sense of wellbeing*

16. Additional comments:

Questionnaire 2: Telephone survey

Reference number:

1. Demographics: *(information to be gained from the ILC statistics form prior to telephone Q2)*

Q1 date:

DATE to be contacted for Q2:

Q2 date:

Confirm device:

Confirm device status from participant:

O – device obtained in Q1

OA- device obtained after Q1 – date: _____

W- still waiting on device

N – device will not be obtained

Client type: Client / Guardian or carer on behalf of client

GO TO question 2, 3 or 4 depending on participant's ACCESS to device

Question 2- Device obtained and discussed in Q1 (O)

Question 3- Device NOW obtained (after Q1) (OA)

Question 4- Device STILL NOT obtained by Q2 (W/N)

2. ACCESS to Assistive technology – IF THIS IS FOLLOW UP OF DEVICE USE ALREADY OBTAINED AT Q1:

a. *Are you still using the device/s? Y / N (if NO clarify if it has been abandoned or just not using at the moment)*

If yes, go to 'b', if no, go to 'h'

b. *How often are you using your device?*

daily / weekly / monthly

c. *What tasks are you using the device in?*

d. *Are you intending to keep using your device for these tasks / other tasks? Y / N*

Comments:

Thinking about your daily tasks and NOW you are using the device

e. Would you say that when doing these daily tasks (.....) :

- *It is safer for you or your caregiver* YES NO
- *Quicker to complete the (.....)* YES NO
- *Require less energy from you / caregiver* YES NO
- *Requires less assistance from others* YES NO
- *You can now do (.....) yourself* YES NO
- *Other.....* YES NO

f. When using the device (.....) do you now need others to assist you for activities (.....)?

Yes / NO Comments:

g. Overall, when thinking about how the use of the device (.....) has helped in your daily tasks - would you say that in general you are feeling a greater sense of wellbeing / the same level of wellbeing as before / less sense of wellbeing

h. Can you tell me how important you feel the device is in your life

Very important / important / not important

i. How would you rate your satisfaction with your device

Very satisfied / satisfied / dissatisfied

j. How much difficulty did you have adjusting to the device

Very difficult / difficult / not difficult at all

COMMENTS:

k. Over the last few months would any of the following services from the ILC be of help to you with access and use of the device?

- Follow up appointment Yes / no
- Follow up call Yes / no

l. Over the last few months was there any other assistance from the ILC that would have been helpful to you?

Yes / No Comments:

m. Over the last few months, was there any other services or assistance that would have helped you to use your device for it's intended purpose?

Yes / No Comments:

n. If device has been abandoned please go to Appendix A for reasons why abandoned.

FINISH Q2 here.

Question 3. Obtained the device after Q1

a. *When did you start using the device (.....) – straight away / within a few weeks or not yet (go to c, d, e and then r)?*

b. *If delayed use with device – Are there any reasons for why you have not been unable to start using the device (.....) sooner?*

c. *Now can you tell me how you got the device (.....) did you buy – hire – or borrow it from family and friends?*

d. *If you have bought the device (.....) did you get any funding for this?*

Yes / No comments: _____

e. *Now, can you rate how helpful the information from the ILC was to help you decide whether you should buy/ hire/ borrow the device (.....)*

Was the information very helpful / helpful / unhelpful in helping you choose whether to buy, hire or borrow the device (.....)?

f. How often are you using your device?

daily / weekly / monthly

g. What tasks are you using the device in?

h. Are you intending to keep using your device for these tasks / other tasks? Y / N

Comments:

Thinking about your daily tasks and NOW you are using the device

i. Would you say that when doing these daily tasks (.....) :

- | | | |
|--|-----|----|
| - It is safer for you or your caregiver | YES | NO |
| - Quicker to complete the (.....) | YES | NO |
| - Require less energy from you / caregiver | YES | NO |
| - Requires less assistance from others | YES | NO |
| - You can now do (.....) yourself | YES | NO |
| - Other..... | YES | NO |

j. When using the device (.....) do you now need others to assist you for activities (.....)?

Yes / NO Comments:

k. Overall, when thinking about how the use of the device (.....) has helped in your daily tasks - would you say that in general you are feeling a greater sense of wellbeing / the same level of wellbeing as before / less sense of wellbeing

l. Can you tell me how important you feel the device is in your life

Very important / important / not important

m. How would you rate your satisfaction with your device

Very satisfied / satisfied / dissatisfied

n. How much difficulty did you have adjusting to the device

Very difficult / difficult / not difficult at all

COMMENTS:

o. Over the last few months would any of the following services from the ILC be of help to you with access and use of the device?

- Follow up appointment Yes / no
- Follow up call Yes / no

p. Over the last few months was there any other assistance from the ILC that would have been helpful to you?

Yes / No Comments:

q. Over the last few months, was there any other services or assistance that would have helped you to use your device for it's intended purpose?

Yes / No Comments:

FINISH Q2 here.

r. **IF NOT yet using the DEVICE – refer to last page for list of reasons**

s. Over the last few months would any of the following services from the ILC be of help to you with access and use of the device?

- Follow up appointment Yes / no
- Follow up call Yes / no

- t. Over the last few months was there any other assistance from the ILC that would have been helpful to you?

Yes / No Comments:

- u. Over the last few months, was there any other services or assistance that would have helped you to use your device for it's intended purpose?

Yes / No Comments:

FINISH Q2 here.

Question 4. ACCESS to Assistive technology – IF DEVICE IS NOT OBTAINED AT Q2

- a. What are some possible reasons for not obtaining the device?

Refer to last page for list

- b. If still waiting on device / not decided / device not appropriate / change medical status / not obtained

- c. Over the last few months would any of the following services from the ILC be of help to you with access and use of the device?

- | | |
|-------------------------|----------|
| - Follow up appointment | Yes / no |
| - Follow up call | Yes / no |

- d. Over the last few months was there any other assistance from the ILC that would have been helpful to you?

Yes / No Comments:

END of QUESTIONNAIRE

LIST OF REASONS for abandoning or not obtaining the device

Abandonment OR Not obtained (please circle which one)

What are some possible reasons for not using the device? (*circle any of the following barriers that apply*)

- Not required at this stage of the disability
- Unable to use device due to difficulties associated with disability / functional needs of person have changed
- Medical intervention made device unusable
- Use of device increased medical or safety risk

- Device now not available
- Unable to afford device
- Other financial reasons
- Cultural reasons

- Device was not appropriate for the intended purpose – why? _____
- Device is not convenient or impractical to use – how? _____
- Device inhibited some other important function
- Training on the use of the device was not provided
- Technical support was not readily available
- Device unable to be modified or upgraded to meet changing needs
- The device is cumbersome and unattractive / do not like look of device

- Unwilling to use device at this stage
- Choosing to have others/ other services to perform the required task
- Do not want to be seen with the device
- Afraid of other people's opinions

Additional comments
