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Home Modification Information Clearinghouse Website Usability Survey

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Introduction

The Home Modification and Maintenance Information clearinghouse project agreed to initiate the relocation of the website to the NSW Health Service Network in August of 2005. Parts of the parameters of the relocation were to upgrade the website to enhance usability and longer term sustainability. Consequently to ensure that the new website specifications and outcomes best reflected current and future user's information needs a website survey was commissioned. The survey set out to ask users about their modification and adaptation information needs as relevant to improving housing outcomes for older persons, carers and/or people with disabilities.

This survey was available both online and was also conducted over the telephone by a trained and experienced research assistant.

Methodology

The final survey was first trialled and refined in two draft pilot surveys prior to being administered to a range of stakeholders using a stratified sampling technique based on professional groupings. Details about the two pilots and the preliminary findings are set out below.

First pilot run (24th-29th September)

The first pilot run of the survey was with three members of the HMM Information research team.

Aims of first pilot run:

- 1) To ascertain if the survey could work as a phone interview. For instance, did the interviewee have any difficulties following the survey and answering the questions?
- 2) To gain a rough gauge of how long the survey would run.

While these results are obviously too small to extrapolate in terms of statistical data. The three individuals surveyed are also an atypical sample because their work involves using the HMinfo website and thus their knowledge of the service was far more detailed and comprehensive than any other sample could hope to yield.

The HMinfo team used the website several times a week and for close to ten hours a week. The staff possessed a detailed knowledge of all the website services. The staff, were consistently able to find the information they were looking for. This could be attributed to training, opportunities to practice and relative ease of use.

Nevertheless team members still made some key suggestion for changes to the website which included:

- Addition of an online feedback form
- More case studies
- The upgrading of the annotated bibliography feature so that a user can save the list of preferences and be able to print their search lists.

Second pilot run (26th Sept – 10th Dec)

The second pilot run was conducted with seven members of the advisory committee. Some of the committees and associations interviewed included the Local Government and Shires Association of NSW, the Independent Living Centre of NSW the Department of Veteran Affairs NSW States Office and the Aged and Community Services Association and NSW and ACT.

Aims of second pilot run:

1. To ascertain if the survey is currently yielding the information the Clearing House needs to make the most of the transfer of the website from ADHC to HS-NET.
2. To discover if the website was being used in a wide variety of work places and professions.
3. Gather criticisms and thoughts about the website from outside of the Clearinghouse research team.

The seven individuals surveyed were also an atypical sample because most of the subjects surveyed also reviewed the website prior to carrying out the survey. The wide range of services and professions from which the subjects came, meant the results from the seven surveys were more varied than the first pilot. Because all of the subjects were member of the advisory committee no information was gathered on how potential users were finding out about the HMinfo Clearing House website and this was seen as a critical gap.

Despite the small size of the sample the second pilot survey was able to illustrate how the website was used by many different services and professions. This however, requires the website to fulfill a variety of different functions. The range of ideas and criticisms expressed on the website as it currently functions is a reflection of this reality.

Suggestions and criticisms

- That evidence based resource reviews are an important professional tool
- The HMinfo website would benefit from possessing more case studies
- The Website needs to be more promotion orientated, people within the industry are not aware of and do not use the service
- The HMinfo website should maintain contact and generate new customers via email services
- The website seems to be exclusively directed towards Occupational Therapists and their theoretical approach, this could be a problem in terms of shutting out prospective users, especially since the Clearing House intends to be a service not just for occupational therapists
- The academic nature of all the research on the website will lock out builders, the website needs to provide a service that offers summaries of key research papers These need to be clear, simple bullet point summaries.
- The website would benefit from being more visually orientated in order to engage the user
- The website caters for too narrow a market in Home Modification
- The professional areas that don't currently use the service need to be found and targeted.

The criticism that turned up most frequently was that the HMinfo website needed to broaden its customer base and be applicable to a wider range of professionals involved in Home Modification services.

The initial surveys revealed that the final usability survey should focus on the fact that many of the subjects who will participate in the survey will never have used, or have heard of the HMinfo Clearinghouse. This was illustrated by the fact that many of the advisory committee members who participated in trialling the survey, required time to look over the website before doing the survey in order to pass on their thoughts and criticisms about the website. In addition, this draft survey illustrated that users were often unable to recall details from their last visit and thus were limited in their ability to answer questions in great detail. For example, they may have visited the Resource Library quite recently but did not remember what they were looking for.

The penultimate and final survey sampling was commenced in November 2005 (see appendix 1 for the survey tool used). The final survey was designed to provide more qualitative feedback and suggestions from the interviewees. As such it allowed for the collation of more objective statistical data as well as more opinion based qualitative research with the particular aim of extracting and providing exactly the sort of

information that would make the best of the transfer of the existing website from its current location in the Faculty of Architecture to HS-NET. Additionally, the final survey was intended to discover what Home Modification and Maintenance service coordinators, occupational therapists, builders, subcontractors and their consumers who may not already be users might want or value from the HMinfo clearinghouse website.

After ethics approval from the Human Research Ethics Committee was granted the Advisory Committee was contacted to supply three contacts within their workplace that could assist by completing the survey. Additionally, the Home Modification Service providers listed on the HMinfo website were contacted to assist with completing the survey. Lastly, the survey went live online on the 21st of November. In addition to the snowball sampling list generated from Advisory Committee contacts professional associations such as the Master Builders Association (MBA), Royal Australian Institute of Architects (RAIA), Occupational Therapy NSW, etc. were also contacted with a request to provide member contact lists from which we randomly sampled potential respondents. The snowballing and stratified sampling approach chosen for implementation was designed to yield the fullest range of stakeholder perspectives. The respondent information sheet (see appendix 2) was read to all potential respondents and the interview commenced when the respondent gave their informed consent.

Results

Survey respondent's professional background

By February 2006 there were 53 responses to the website usability survey. Responses included: Architects (8); Builders (14); Home Modification and Maintenance Service (HMMS) providers (14); Occupational Therapists (18); and Other (2). The other category included local government and a structural engineer doing building work. Not all categories were mutually exclusive with HMMS providers also being either Occupational Therapists (1) or Builders (2) in some instances. The breakdown of survey respondents by professional discipline as percentages can be seen in Figure 1.

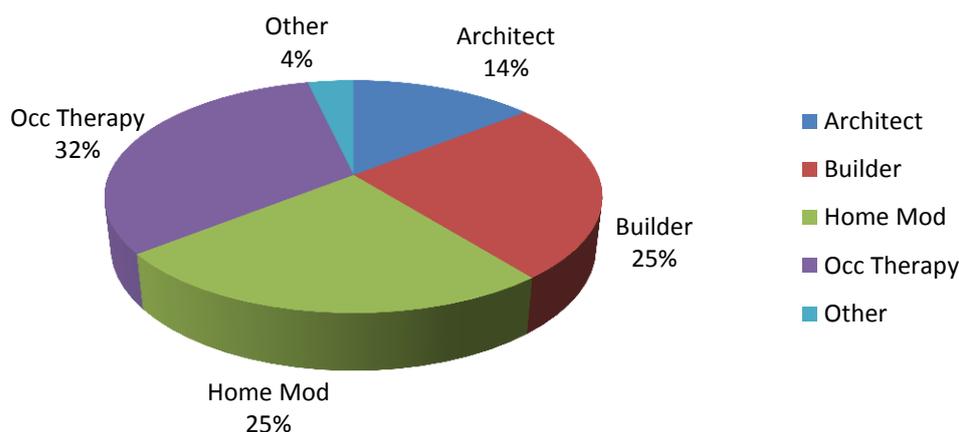


Figure 1. Breakdown of survey respondents by professional grouping

Survey respondent's geographical location

At the end of the telephone survey all survey participants were asked about their postcode. On the basis of the postcodes provided regional geographical information was derived. Responses included: Hunter (7); Metro-north (13); Metro-southeast (7); Metro-southwest (4); Metro-west (4); Northern (3); Southern (3); Western (10); and unknown (2). The breakdown of survey respondents by geographical region as percentages can be seen in Figure 2. It is pleasing to see that respondents were spread across the whole of NSW and that no region was left out, this is important as sampling was random within professional areas and not by geography.

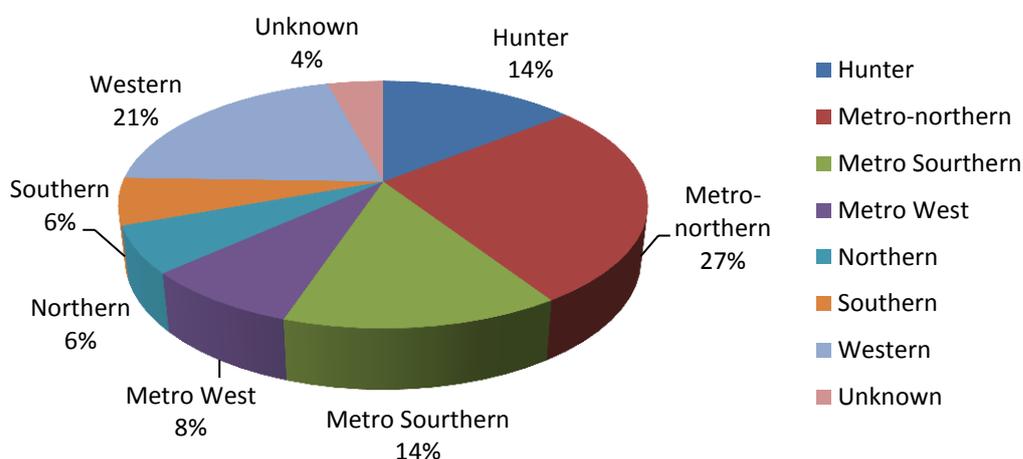


Figure 2. Breakdown of survey respondents by geographical location

Locating the website in the first instance

Of the 53 survey respondents only 14 (26%) indicated that they had previously visited the website. Of the respondents who had used the website by far the most common method of hearing about the website as illustrated in Figure 3, was friend or business associate (6); Training (4); Newspaper/magazine article (3); HMMS regional forums (2);

and the HMMS State Council (1). Additionally, a number were unable to accurately recall where they had first heard of the website (3). This implies that the most effective form of marketing is by trusted sources (peers, forums and newspapers) or by having the opportunity to overview the website functionality by web specific training.

Three respondents indicated that while they had heard of the website they had not yet visited it as the following qualitative excerpts indicate “I have heard of you, but I have never used you, I think I may have once gotten emails from [the clearinghouse] once before”; “the occupational therapists in my workplace use the website, research papers as far as I’m aware”; and “I heard about it at a Veteran Affairs meeting, someone spoke about you, I have never used the website, as I don’t have easy access to a computer and don’t have time to look at the internet”.

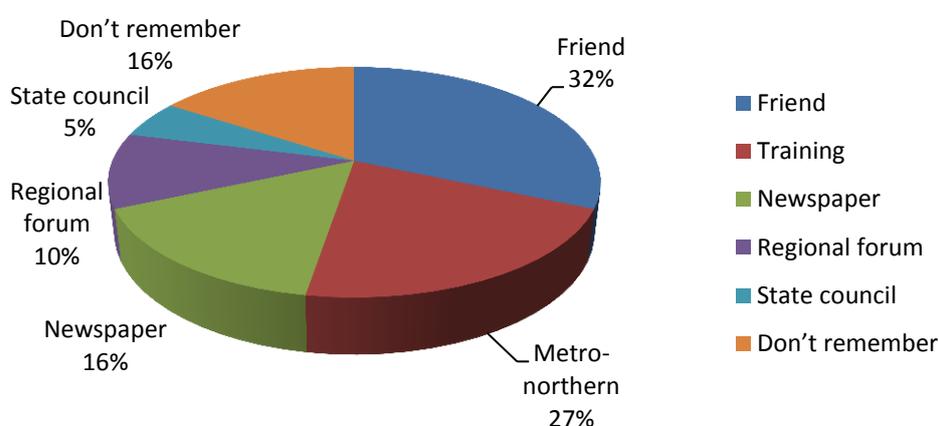


Figure 3. How respondents first heard about the website

Prior experience of using the website

The majority of respondents (35 or 74%) had never used the website. Most stated that they did not use it because they had “never heard of it” this is despite the fact that many stated as in this excerpt “I find it hard to get hold of [relevant] information”.

Nevertheless, of the 14 respondents who had previously visited the website, the time of their last visit varied from within the last 24 hours (day) to six months ago. A typical qualitative explanation is as follows: “we use the website occasionally we mainly use it at the moment when we go away for training groups, for example I go away with other builders in the home mods area and we will refer to the website at those meetings”.

Reasons given for visiting the website

The qualitative data provided by respondents in relation to their reason for last visiting the website were varied. Some respondents were interested in specifics e.g. location of home modification services, updated information on standards, hand held showers and “concept rails”. While the majority were interested in more general browsing for products and evidence based practice e.g. “anything new”. Typically meaning the latest research and networking with other Home Modification providers. One respondent stated that their visits to the website had decreased recently as they now relied on

receiving information directly from the clearinghouse team as the following excerpt illustrates “I don't use the site that much because [the clearinghouse team] sends us the latest information, so in that sense I am still informed, I supposed I would use the website more often if I didn't get that info, but not a lot more, just sporadically”.

Frequency of return visitation

Figure 4 below, illustrates the range, with the majority visiting within the last month. When asked on average to quantify their rate of visiting their responses varied from about once a month (29%) to less than once a month (71%). On average the respondents estimated that the amount of time they spent on the website was less than an hour.

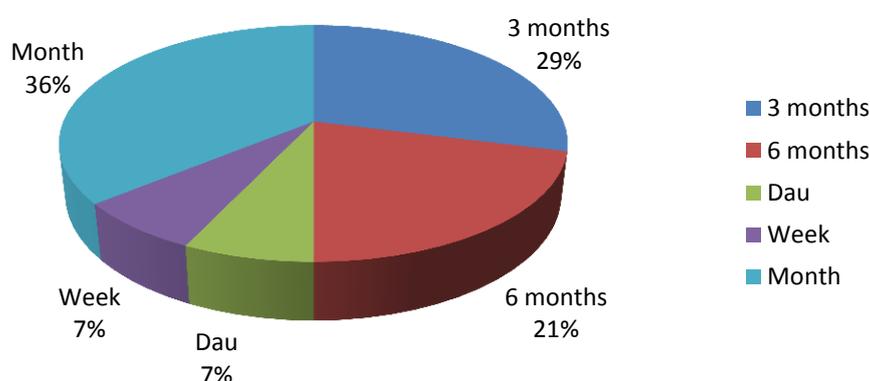


Figure 4. Breakdown of survey respondents by time of last website visit

Willingness to recommend the website to others

It is pleasing to note that the majority of respondents (16 or 84%) were likely to recommend the website to others with only 3 respondents (16%) saying that they were unlikely to recommend the website to their friends or colleagues. Of the respondents who said they were unlikely to recommend the website typical qualitative comments were “mainly seem to be academic type papers often too involved for tradespeople to understand – hence [tradespeople] often close their eyes to anything that comes from the clearinghouse thinking it will be too ‘involved for them’”.

Areas of the website that are most valued

The areas of the website most valued by respondents are the Home Modification Services, library and events WebPages. It is interesting to note that the homepage, admin pages, submit pages and the about us pages were not mentioned by any respondents. Figure 5 illustrates the respondents perceived level of satisfaction with the existing areas within the clearinghouse website.

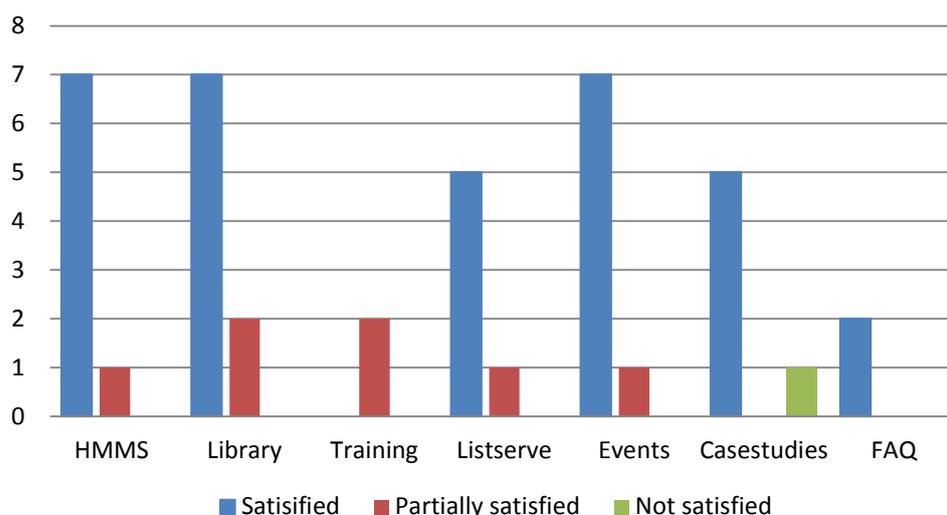


Figure 5. Breakdown of respondent's usage of the resource page area

Specific Feedback about areas within the website

The majority of respondents indicated that they had visited the **Home Page (news/tour) area** either to check news stories or take the online tour, however no further information about this page was provided. Of the other WebPage areas most information was provided in regard to the **Resource library** where the majority of respondents indicated that they were either just having a “general look” or were just looking for the latest evidence (5). However other respondents wanted specific information on modular grabrails (2), hand held showers (1) and instantaneous hot water systems (1). There were only two qualitative comments in relation to the resources area; one indicated that products such as “mobile hand grips” were not evident, while another stated “that most things are there”. Figure 6 illustrates respondent's usage of the resource page area. Of those respondents (3) who didn't find what they were looking for, a number of different strategies were evident including: asking work colleagues (2) and trying the Occupational Therapy home modification listserve in Queensland (1). Unfortunately, while these strategies may be effective they have some inherent problems as both rely on personal expertise and professional competence.

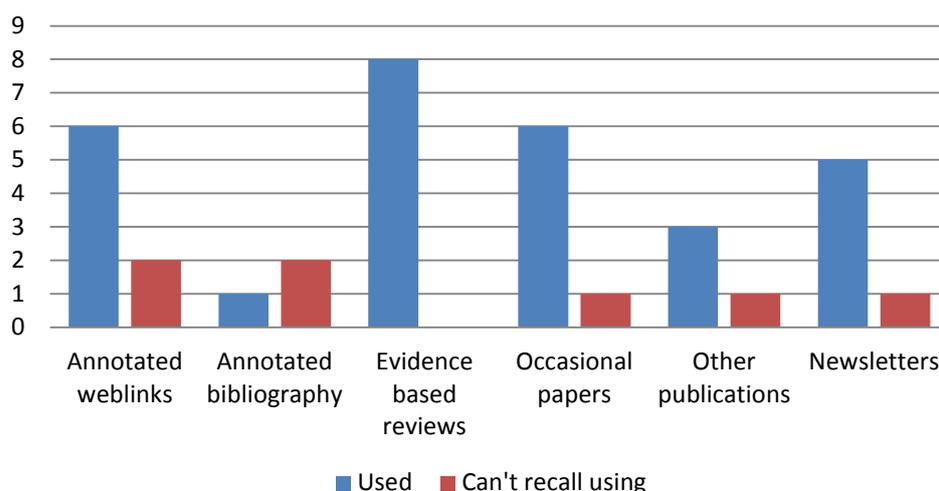


Figure 6. Breakdown of respondent’s usage of the resource page area

Unlike the resources area, while a number of respondents (8) stated that they had visited the Home Modification and Maintenance Services information area, no qualitative feedback about this area was provided.

The main reason cited for visiting the **training area** was “keeping an eye out for any home modification training courses or information sessions”. Two respondents stated that training sessions that met participants needs were not always evident. This may indicate that there is currently still a perceived lack of appropriate and or timely training available within NSW.

While a number of respondents (7) visiting the **listserve area** cited a number of reasons for usage. Qualitative feedback from respondents varied from just various ideas about home mods (5) e.g. “Just looking at what sorts of information had been recently posted. I find it interesting to keep up to date with what other difficulties and problems others encounter”. However another respondent stated it was important for “extra info” as the usage of this listserve was in addition to the Occupational Therapy specific listserve run by the University of Queensland. At least one respondent found the listserve area very frustrating as the following excerpt demonstrates “I found it a very difficult process, sometimes the page can't be found or I have to keep on resubscribing again and again and it is very annoying and it happens very frequently”. Another respondent stated that they also utilised alternative methods for locating relevant information such as “other building industry websites”

Slightly more respondents (9) provided qualitative information about their reasons for visiting the **events area**. The majority (8) stated it was just a “general look, to see find any available educational opportunities”. However one respondent stated that “Most of the time you get informed but sometimes it is necessary to have a look around yourself”. Those respondents who did not find what they were looking for also used other strategies including getting things sent from local council, occupational therapist association and other personal contacts. One respondent stated that they “ring around

to the other services a lot. People I know. Contacts who have more experience than me, or have dealt with that problem before”.

The reasons cited for visiting the **casestudies area** include “[having a] prompt to what is available in the home mods area”, “new equipment, ideas etc. for solving home mods problems”; “just a general look to see what other people are doing”; and “anything new”. However not all respondents were satisfied and one respondent stated that they “didn't feel it had much to offer, I specialize in spinal cord injuries, I was having a general browse to see if there is any clinical rationalisation for a ceiling hoist, I haven't been vocal about my questions and used the listserve, but I was let down by the case studies, they seemed quite pedestrian, aimed at veteran affairs clients and weren't as detailed, or comprehensive as I would have hoped for and when I saw that I think that stopped me from searching anymore. I also have an older computer which slows me down”. However of the two respondents who provided qualitative feedback neither cited any other means available of getting casestudy information and both perceived this to be a large information gap.

Overall user friendliness

Of those respondents who stated that they were return visitors many stated things such as “I'm the only one here and I use it!” (2) ; “Just me. And I use it”; “Both myself and [a co-worker] use it. I don't know about the occupational therapist” and “I use it but fairly irregularly”.

One of the reasons cited for use was “I find it very easy to navigate”, However it seems that usage by some groups is greater than others as the following two excerpts demonstrate; “I am the only Occupational Therapist here so it is only used by me” and “Yes [it is used] - but not by trade staff. I print articles for them from the site, but they do not have access to computers only when they are in the office, and are usually too busy to check the site when they are there”.

Page errors

One respondent reported having trouble with login to the homepage e.g. “I have on numerous occasions had a problem on getting the [website] up... but a lot of those problems over time have been solved”. However several more of the respondents reported noting more minor page errors some of these were very specific e.g. “I used to try and use the listserve, it happened all the time and on the submit page.” and “A long time ago the link to the post graduate education did not take you to the architecture courses”. Unfortunately, page errors of any type are frustrating for website users and need to be designed out if at all possible. Additionally failure to respond quickly also acts as a deterrent to greater website usage for many users.

Barriers to use

The two biggest barriers to website usage cited by respondents were lack of simple directives and lack of time as the following two excerpts demonstrate “It's too academic [and impractical]. For example a builder here was looking for specific home mods

information for a specific client, He put out a question into listserve and he waited a few days and all he was told was to go to the Independent Living Centre, we have our own contacts with them! It was a waste of our time, and the builder thought what is your point?” and “Many builders etc. are not from an academic background, they don't have time to wade through the sort of material you publish”; or “ I'm here eight hours a day, so I get this stuff while I am at work because at home with a 17 year old son, no way”.

In addition, professionals like all human beings are creatures of habit and as the following excerpts from respondents demonstrate, changing information seeking practice is hindered by a number of factors including: time constraints e.g. “we have very little funding, so we generally just follow what the occupational therapist says, also, the sort of home mods we're involved in are very simple. I trust our occupational therapist to be informed and up to date on all the latest info”; and expectations derived from familiarity e.g. “I stay in the spinal listserve which was somewhere where I got more valuable information in the past”.

Another significant barrier is computer literacy and online access. For instance one respondent stated; “we are a small HAAC service running on a shoestring budget. We try to stay off the Internet because we don't have the manpower to have someone on the Internet for a couple of hours every day, especially since we have only one computer with a dial-up connection that is a nightmare”.

Value of website training

The majority of respondents (12) who has visited the website had participated in website training and as illustrated in Figure 6, 70% of them were satisfied with the training provided. Respondent's opinions were more divided about the value of online training with six respondents opting for incorporation of an online training facility and five respondents against this idea.

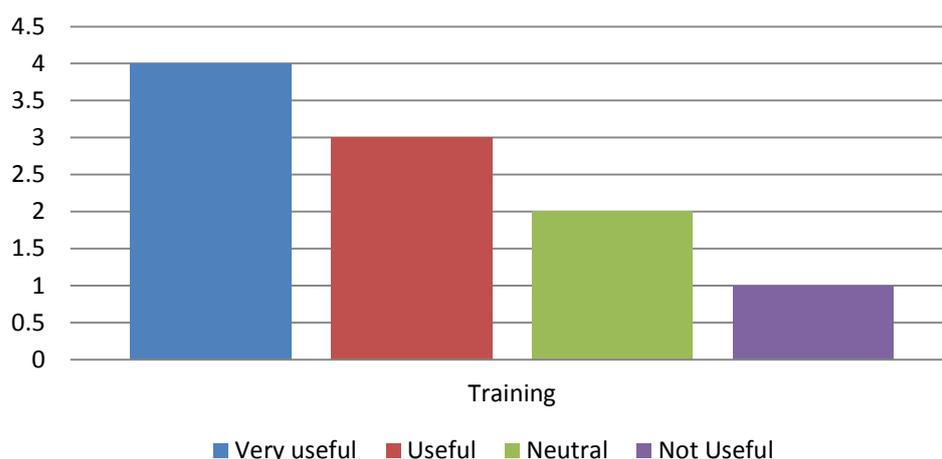


Figure 7. Breakdown of respondent's perception of the value of website training

Information of most value to users

Features requested

Access to Australian standards and or summaries of critical information is high on builders, architects and tradesperson's wish lists, i.e. one respondent stated "something like an access to the standards would be fantastic", while another respondent stated that they had visited the website looking for this standard related information but as these were unavailable they "contacted NSW State Council Executive Office and got information from another website arranged by State Council".

Another feature desired by several respondents was more integration with other websites particularly supplier websites and product databases like the one managed by the Independent Living Centre e.g. "I think it would be great to have some of the suppliers info on the website so we could access it all from one area".

Website features that would increase value

In response to the question seeking information about changes that would add value to the website the majority of respondents stated that they "couldn't think of anything" (6) presumably this is because the majority of respondents were unfamiliar with the website so were hesitant to recommend features that may already exist.

However of those respondents who were familiar with the website, there were a variety of requests for enhancement. These ranged from stating that "we need something focused on what is happening [locally], we need more of that, because a lot of the research is very hard to apply here and that criticism applies across the board to the website" to requests for more research e.g. "there needs to more research" and in the same vein "perhaps [more] summaries of your research in bullet point form".

Two respondents requested that we "change the web address" presumably they were unaware that this was implemented in November of 2005, which implies that further promotion and/or means of updating users about website changes needs to occur. For instance, while this information was circulated via our newsletter it was not in the news or highlighted in any manner on the homepage of the website.

There were several requests for "more plain language" and that clearinghouse publication become "less academic". While this objective is desirable it has resource implications and needs to be costed for and built into the ongoing business plan especially as it is clear that many users value the more detailed and more academic materials. Another innovation suggested was to make it easier "to search for *recent* research, publications or evidence on the website" and the same respondent said "It would be good to have some [more] links on the home page".

Reasons for recommending the website to others

Respondents cited many reasons for recommending the website to colleagues and peers. For instance staying up to date i.e. “It’s great to have a place that gathers information for you and can guide you to further research or help with the early stages of that research”; “to keep updated on common issues and best practice application of service provision”; “it’s useful to gather home mods info from across NSW, to find out the latest ideas and products to solve home mods problems” and “Just to use it as a place that gathers general information”.

It also appears that these types of comments are more likely now than when the project commenced as the value of the website in stakeholder’s eyes has increased over time. One respondent stated just this as the following excerpt shows “[originally] there wasn’t a huge amount of info on the website, and now there is a lot more on the website, Now there’s a lot more useful info that makes the website more useful”.

Of the website features listed as part of the rationale for recommendation, the listserv, casestudies area and evidence and summary bulletins were all critical, as the following qualitative comments from respondents illustrate i.e. “listserv, in terms of giving you evidence for new home mods info” and “I always find the Listserv very useful. And always interesting to have look through.”; “case studies is what we looked at the most it gave us a broad [overview] of what people are doing” and “I have recommended the case studies to a few people. I tell people to just go and have a general look around”; “specifications about railings, ramps, legislation for builders... all that sort of stuff; “the summaries are really useful and the evidence based practice reviews, I think my occupational therapist colleagues would find that sort of information most useful”; “Latest research, evidence based practice and occasional research papers”; “Evidence based practice” and “Reviews”

Perceived information gathering success

When respondents were asked about their need for information on housing, their responses varied as can be seen in Figure 7, with the majority clearly identifying a need for information on adaptation and modification. The following excerpts from respondent’s qualitative responses illustrate this “I need domestic housing information and information on home modifications, the latest information in that area” and “modification for bathrooms for older people, redesigning them and so forth is becoming increasingly important” and “anything that relates to helping older people stay in their homes”.

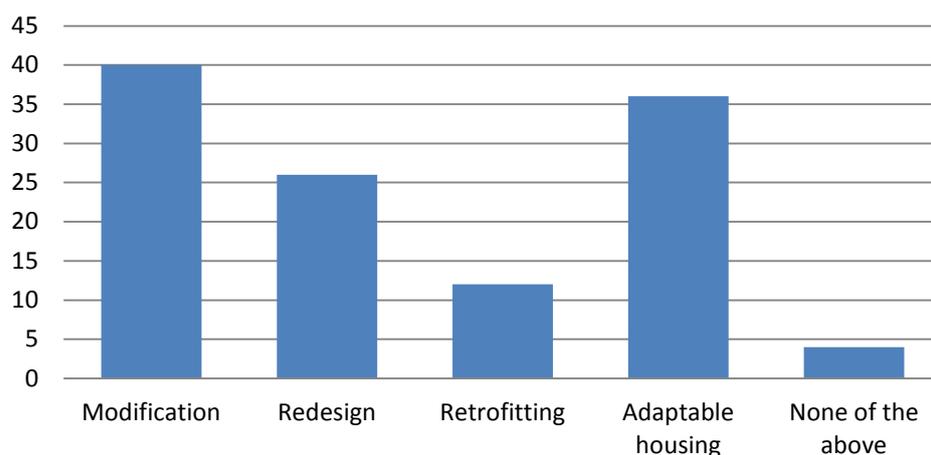


Figure 8. Breakdown of survey respondents overall need for housing related information
Unfortunately as can be seen in Table 1 there are a number of words in common use often used synonymously.

Table 1. Overview of domestic housing terminology

Terms	Definition
adaptable	The act or process of making something adaptable. The state of being adaptable. Something, such as a device or mechanism, that can be changed so as to become suitable to a new or special application or situation. A composition that can be recast into a new form.
modification	The act of modifying or the condition of being modified. A result of modifying. A small alteration, adjustment, or limitation. The process or result of making or becoming different: alteration, change, mutation, permutation, and variation.
retrofitting	To construct again; rebuild. To assemble or build again mentally; re-create: reconstructed the sequence of events from the evidence. To cause to adopt a new attitude or outlook: a diehard traditionalist who could not be reconstructed.
redesign	To make a revision in the appearance or function of.
renovate	To restore to an earlier condition, as by repairing or maintaining. To impart new vigour to revive.

Note: All definitions were sourced from the American Heritage Dictionary, 2000.

While each of the terms outlined may be said to have nuances of semantic difference, all key terms from the table concern change either to a design process or to an artefact or design product. The terms adaptation, redesign, and modification have in common

that they are functionally driven. However redesign is very much broader than modification, which is the term most commonly associated with specific corrections associated with redesign of living spaces for persons with disability. Adaptation, like modification, implies reuse of some parts, but adaptation is broader because it encompasses change not just to function but sometimes also concerns change to design process or reasoning.

The fact that the terms modification or adaptation are the words most commonly referred to by respondents fits with their common usage which typically refers to change made to a home in order to accommodate a particular set of human abilities. The domain of home modification practice specifically addresses health, disability and safety problems. However because requirements that maximise the full range of human abilities are poorly understood they are not easily generalisable. Consequently, current housing design models simplify design knowledge by standardising human ability based on notions of 'normal' ability; this is the standards based focus and if applied uncritically may unintentionally exclude persons whose abilities are exceeded.

Retrofitting more commonly refers to changes made to housing for purposes other than disability. Retrofitting is typically more lifestyle or activity driven, i.e. adding on a rumpus room for growing children. Usage of the term modification implicitly de-emphasises fashion, aesthetic or stylistic concerns that are inherent in the notion of remodelling.

Respondents also indicated that very specific information on a range of problem areas most commonly encountered in practice was also needed. As can be seen on Figure 9 which illustrates the specific information wanted by topic area the majority of respondents were actively seeking information on ramps and non-slip finishes. Another area of high priority, was disabled children, presumably because this information is difficult to find and children are generally believed to be more difficult to design for as their anthropometric requirements change over time in relation to human development and growth cycles.

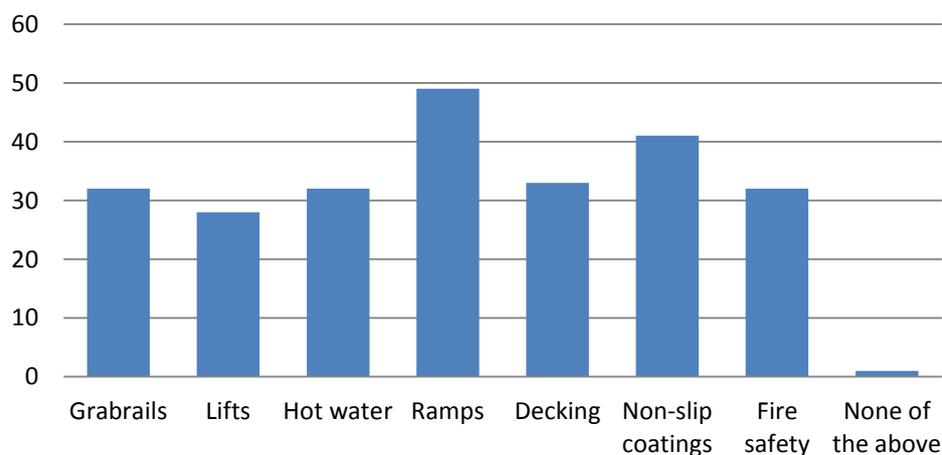


Figure 9. Breakdown of survey respondents need for specific topic related information

More generally respondents supplied a wealth of qualitative responses such as “disabilities is very important, non slip stuff is really important internal and external, we have been looking around new home mods innovations in terms of platform lifts, it’s always changing”; and “handrails is the most important thing, followed by ramps”.

Another area commented on by several respondents, as this was perceived to be problematic by those involved, was electrical standards and their interpretation in construction. As the following excerpts illustrate “the latest legislation about electrical switchboards, because that information can be very hard to find” and “in my job legislation is the most important, the latest standards, wiring electrical... etc.” and “Information on power points. Also a lot of respondents wanted very practical problem based information. For instance respondents made comments like “A lot of the time we look for information that relates to particular clients i.e. what options and ideas are available”; “practical solutions are really helpful (6)” and “some situations in home mods where there is no actual solution, how to adapt the products out there, when you modify a bathroom, there is a lot of drainage problems, adapting solutions to fix a new problem. The practical, tangible aspect of this work as opposed to all the theoretical information on the website”.

Nevertheless, relevant and timely research is highly valued by a significant number of respondents (7). This is illustrated in the following excerpts “with what would be most useful to us would be research papers”; “Research is really important”; and “we’re interested in the more academic information, evidence based practice reviews”. Further contrary to the stated desire for more simple materials e.g. “Easy bullet-point summaries” at least one respondent stated that they wanted “Detailed, comprehensive information research papers, because it can be very hard to find the relevant information”.

There was also a lot of comment about the role of and access to legislative materials. This most commonly concerned required legislation such as the Building Code of Australia books and the Australian Standards on Accessibility and Safety. Respondents described these as being “quite unwieldy and expensive” and difficult to keep up with “because it keeps changing” (12); and “legislative summaries because we don’t always have time to use the Australian standards... I’m sure you can appreciate why”.

The desire for simplification of the standard is contrasted with the desire for individual case solutions as the following excerpt demonstrates “providing innovative ideas, suggestions, information on how to solve problems with individual clients, the Australian standards are useful but it’s not able to provide solutions for those individual cases”; “I would be interested in case studies, ramps to cater for people who are mobility impaired. I would be really interested in case studies that test the regulations and make sure they work. Because as an architect it’s not something you learn a lot about and a lot of the time I don’t understand how this product or legislation will solve the problem” and “we’re very interested in information relating to legislation, and more specific information like solutions for individual clients, case studies”.

Another area of tension evident in examination of qualitative responses is desire for specific housing information versus information that can be universally applied to public buildings. For instance, in terms of information that can be applied to specific populations the areas mentioned by respondents specifically include “children”, “spinal injuries”, “older people” and “blind”. However this need for specificity is contrasted with the need for more general building information i.e. “accessibility for public buildings”.

Last a couple of respondents stated that they perceived policy issues to be gap area as the following excerpt illustrates “I think it would mostly be policy issues because we're a gap filling service that does not get any specific funding for home modifications. So policy is of concern, for example we install ramps for people who move or rent a lot, the question is, who is responsible for the ramps and their upkeep? Us? The owner of the building? The people who require them? It's a complicated issue”. And “guidelines set down by the government, maybe a place where that information is gathered in one place and is easy to work through.”

Alternative sources of information

As is clearly illustrated in Figure 10 respondents currently employ a wide range of strategies for finding the home modification information that they need although as illustrated in the qualitative feedback these strategies varied between professionals and had varying degrees of success. For instance, the most commonly cited place to source information was the Australian Standards for Access or the AS1428 suite of standards, unfortunately these are not intended for domestic housing or for application to individuals and as stated by several respondents were perceived them to be: “bulky documents, and like a lot of people we have found it quite a cumbersome document”, and “its bullshit, I find it pretty useless”. Also it appears that the copies of standards that some respondents refer to may be out dated e.g. “I own a copy of the 1992 standards which I use just as a general guide”.

Another common strategy was use of ‘google’ and the internet i.e. “Housing Industry Association and other building sites” and “other list serves”; “The website favourites are disability organisation, deafness forum, ParaQuad, local governments etc.” however even these strategies were limited as the following except states “I actually tried to get onto the occupational therapy school in Brisbane and the link wasn't working”.

Reliance on personal knowledge was implicit for most but is evident in the following excerpt, “a lot of the time I use the knowledge and information I have acquired over time from working in this industry”. Personal contacts and the Independent Living Centre were also very commonly cited e.g. “Personal contacts in the building profession”; “A lot of information comes through Occupational Therapists, personal contacts, that sort of thing” and “personal contacts and our suppliers are very important, different services in our local area we help each other so for example if we have a special situation we may ask other home mods services if they have encountered similar problems and if they have any ideas or suggestions”.

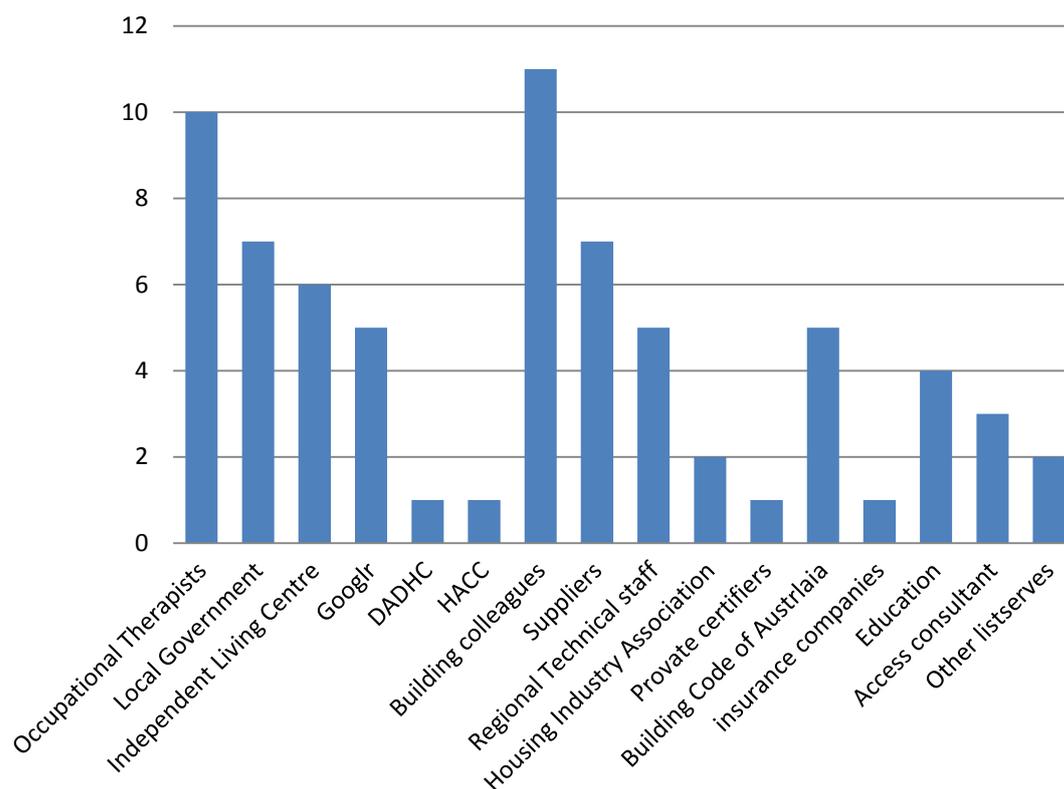


Figure 10. Breakdown of where survey respondents currently source relevant information

Access specialists and building consultants were another relatively commonly cited source of information e.g. “we have a staff member that specialises in the area of accessibility legislation. We may also look abroad for a specialist to be sub-contracted to help with a specific project. Depending on what the project is we may get a hospital occupational therapist. We're currently building a hospital and we have several specialists on board ensuring we do everything correctly”.

As can be seen a smaller number of respondents mentioned getting information from courses and professional training as the following two excerpts illustrate i.e. “a while back I did a home mods course” and “I attend Department of Veterans Affairs workshops, which keep me up to date”.

Also mentioned as information resources were “the local HACC services, [and] occupational therapist association publications”. Several respondents stated that they also relied on local councils for help but the success of this strategy was mixed with at least one respondent stating, “I have never found them to be useful”.

Large Architectural firms also stated that they had access to digital product catalogues that were very helpful e.g. “we have two major sources of information, we have an in-house catalogue both digital and hardcopy texts and we subscribe to ArchLib. They're a product index, we can key in a product and we are then able to access the list of several hundred products. It's a web-based library catalogue, we get something like 20 library catalogues and most of the time the articles and information is already

catalogued, this is the shelf location, internal notes, the product is good/bad etc. We pay a subscription and are able to access this huge storehouse of information". Following up provision of access to large product databases for Home modification services in collaboration with their State Council may be one very concrete way of improving their access to product information.

Conclusion

It appears that there is a huge need for home modification information despite many individuals and organisations having a variety of existing strategies in place. Of those using the website its value has increased over time. Nevertheless feedback indicated that the amount of time required to submit and fully explore the website was problematic as it was still perceived as additional to existing job demands. The information needs of different stakeholders differ and need to be better addressed in the opportunity currently being presented in the website review and upgrade currently in progress.

While noting that the research and information is valued by users, it is disappointing to note that the majority of potential users were unaware of the website prior to being contacted to participate in the survey which indicates that considerably more promotion, marketing and training initiatives are required.

Appendix 1: HMinfo Website Usability Survey

Q1 Have you ever visited the HMinfo website?

- Yes
- No (if no go to 17)

Q2 What areas of our website did you visit? (Please select all that apply)

- Home Page
- News
- Tour
- Home Modification and Maintenance Services
- Resource library

Annotated Web Links (An edited collection of international and national websites containing information relevant to home modification and maintenance decisions.)

Annotated Bibliographic Materials (An edited collection of articles, books, CDs etc. The collection can be searched using our indexed lists or by an open search. Our list of key term definitions helps to direct your search.)

Evidence Based Practice Reviews (Research publications by the HMinfo team that are based on a systematic review methodology. Publications include consumer and industry factsheets and checklists)

Occasional Research Papers (Research publications produced by the HMinfo team that are based on methodologies other than systematic reviews.)

General Access: Publications from Our Website Users (Documents submitted to HMinfo Clearinghouse by our website users.)

Private Areas: HMM Service Providers Unpublished Drafts (Draft documents submitted to HMinfo Clearinghouse by HMM Service Providers. This is a password protected area.)

HMinfo Clearinghouse Newsletters (An archive of our newsletters that are published quarterly.)

HMinfo Administration Materials (Documents associated with Administration Matters including minutes of meetings etc.)

- Submit
- Training
- Listserve

- Events
- Casestudies
- Search
- FAQ
- About us (HMinfo)
- Other

Q3 In Q2, you looking at (see checked above). Did you find the information you wanted?

- Yes, I found everything
- Yes, but not all of it
- No, I did not find anything I was looking for (please expand on what you wanted.....)

Q4 How often do you visit our site?

- Several times a week
- About once a week
- Several times a month
- About once a month
- Less than once a month

Q5 How likely are you to return to this Web site?

- Very Likely
- Somewhat Likely
- Somewhat Unlikely
- Not At All Likely

Q8 How likely are you to recommend this Web site?

- Very Likely
- Somewhat Likely
- Somewhat Unlikely

Not At All Likely

Q9 What features had influenced your decision to continue using this website?

Q10 What is it about this site that you would most like to see improved?

Q11 What changes or additional features would you suggest for this website?

Q12 In a typical month, how many hours do you spend on this website?

0 to 1

1 to 2

2 to 4

4 to 10

More than 10

Q13 How did you first hear about this site?

Search engine

Another web site

Newspaper/magazine article

Friend or business associate

Don't know/don't remember

Other

Q14 Have you ever noticed any page errors or flaws; nature of comment (check as many as applicable):

couldn't find what I was looking for please say what

broken link please say where to

missing graphic please say what

out-of-date info please say what

other please give details

further details:

Q15 Overall have you find our website user friendly?

Yes

No

Q16 Are there any comments you would like to make about your most recent visit?

Q17 Have you ever looked for modification/redesign/retrofitting/adaptable.... etc design information?

Yes

No

Q18 Have you ever looked for (children with disabilities; grabrail; lifts; hot water regulation; timber decking; tile coating) modification relevant information?

Yes, (if yes can you explain which of the above and more specifically give some examples of the type of modification information you most value)

No (if no. were you already aware of process and/or products, principles and methods to measure and predict i.e. sample products designed to maximise adjustment during growth and development such as adjustable height drop down rails and change tables)

Q19 Please can you provide your postcode

Thank you for taking the time to give us your feedback.

Appendix 2: Invitation to Participate

Good morning/afternoon.

My Name is... NAME OF INTERVIEWER.

I am calling on behalf of the Home Modification and Maintenance Information Clearinghouse Project at the University of Sydney. We would like to get your feedback about our website. If you have never used the Home Modification and Maintenance Information website we are also more generally seeking information about your need for modification and adaptation information relevant to improving housing outcomes for older persons, carers and/or people with disabilities.

This short 10-12 minute telephone survey is being undertaken to better manage and maintain our website. The Home Modification and Maintenance Information website is jointly funded by the Commonwealth and NSW State Governments under the NSW Home and Community Care Program.

The collation of survey responses will aim to include a full range of perspectives from potential users, including Home Modification and Maintenance providers, Occupational Therapists, Contractors, Architects, Government and Consumer Peak Organisations. The information gained from participation in the survey will solely be used to inform the redesign and future contents of our website.

Please be assured that your responses will remain strictly confidential.

If completion of the survey over the phone now is inconvenient, we can arrange another more convenient time for you. ..."

- I agree. CONTINUE SURVEY
- I agree. SCHEDULE APPOINTMENT
- I disagree TERMINATE SURVEY