



**The University of Sydney**

Faculties of Health Sciences and Architecture

**The Home Modification:  
Information Clearinghouse Project**

# Information needs of Home Modification and Maintenance Services in NSW

**Prepared by:**

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Project Team**

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## Abbreviations

<b>CDSA</b>	Commonwealth State Disability services Act
<b>CSDA</b>	Commonwealth State Disability Agreement
<b>DADHC</b>	Department of Ageing, Disability and Home Care
<b>DDA</b>	Disability Discrimination Act
<b>DSA</b>	Disability Services Act
<b>DSP</b>	Disability Services Program
<b>DVA</b>	Department of Veterans Affairs
<b>HACC</b>	Home and Community Care Program
<b>HIA</b>	Housing Industry Association
<b>HMM</b>	Home Modification and Maintenance
<b>NESB</b>	Non English Speaking Background
<b>NSW</b>	New South Wales
<b>OECD</b>	Organisation for Economic Cooperation and Development
<b>OT</b>	Occupational therapist
<b>OH&amp;S</b>	Occupational Health and Safety
<b>RARA</b>	Rural and Remote Areas Classification
<b>RTO</b>	Regional Technical Officer
<b>SAP</b>	Supported Accommodation Program
<b>WWW</b>	Worldwide web

## Introduction

This paper outlines research undertaken by the Home Modification Information Clearinghouse Project team, that examines the information needs of the Home Modification and Maintenance Services funded by HACC in NSW. The significance of these issues is accentuated by rising demand on services, population ageing and constraints on government expenditure. Service Providers often face high community expectations in the context of relatively low funding, laws and regulations, which are not framed to apply to individuals homes or to include the community service sector.

All of the interviewees were home modification and maintenance service providers in New South Wales and informants participating voluntarily covered all three levels of service provision as defined within the Final Model for Home Modification prepared by HACC and the Ageing Programs Unit of the Department of Ageing, Disability and Home Care (HACC and Ageing Programs Unit, 2000).

## Project Aims

This research directly addresses the information needs of Home Modification and Maintenance services. Information can be defined as “facts told or heard or discovered” (Hawkins, 1988) and need as the discrepancy or gap between current practice and best practice (Witkin & Altschuld, 1995).

This needs analysis aims to derive information and perceptions of values as a guide to making program decisions that will directly benefit the Home Modification and Maintenance services. We specifically aimed to better:

1. understand current Home Modification and Maintenance service practice from an insider perspective
2. understand current Home Modification and Maintenance service practice re information sharing strategies already evident
3. systematically identify strengths, gaps or weakness with a view to building on strengths and minimising weaknesses
4. use findings to set priorities for web-based information clearing activities

## Background

There is a growing body of international evidence that home modification are cost effective (Mann, Ottenbacher, Fraas, Tomita, & Granger, 1999; Trickey, Maltais, Gosselin, & Robitaille, 1990). In addition, appropriate consideration of accommodation can be a critical factor in reduction of institutionalisation and in promoting integration and inclusion (Iwarsson & Isacsson, 1998; Public Health Association of Australia, 1993; Steinfeld & Danford, 1997). In addition, Australia as one of the economically advantaged OECD nations has an unusually high assistive technology uptake amongst the population in general. For instance, the per capita ownership of mobile phones is amongst the highest in the world and home modifications are a form of assistive technology so it is reasonable to expect that once the idea catches on that there will be a steep growth curve.

This is particularly so given that unsupportive home environments can result in accidents, contribute significantly to morbidity and mortality and force moves to institutional settings.

Whereas home modifications, such as ramps or handrails, allow a person to engage in major life activities more easily and help prevent accidents.

In terms of governmental investment, the Home Modification and Maintenance services represent a significant slice of State/Commonwealth investment with the HACC program in NSW expected to spend over \$50 million on its Home Modification and Maintenance Program, and \$1 billion on the Disability Support Program over the next the few years. In addition, the Department of Housing will spend in the order of \$90 million on construction and renovation, and total residential construction in NSW will be in the order of \$10 billion. In addition, demand for accessible accommodation is expected to increase. According to estimates derived from the disability and carers survey, in NSW 257,000 people will experience some physical mobility restriction by 2005.

In terms of the HACC funded Home Modification and Maintenance services within NSW, there have been a number of reviews since their inception in the late 70's (Department of Housing, 1992; Phibbs & Higham, 1999). Whilst all the reviews conducted to date have clearly acknowledged the importance of the services being provided and the high degree of general satisfaction by consumers, they also acknowledge that regional differences, including auspicing and funding differences may have contributed to a situation where services that may seem quite similar demographically may well experience differing information needs. As an illustration, regional services in different parts of NSW are likely to differ quite dramatically as indeed this study proves depending on years in the job, the size of the project and the type and size the of auspice organisation.

Currently the knowledge gained by most allied health workers and builders is learning by doing. This raises particular concern for newcomers. This is particularly so for builders and those in the roles of Home Modification and Maintenance coordinators because currently no specialist training programmes exist for these groups. Meaning that, best practice can only be found out by discussions with others or trial and error learning. However, the bulk of the allied health professionals and building personnel working across many areas of the State have a wealth of knowledge acquired from years of on the job experience.

Since the last review of services in 1999, which saw the Department of Housing relinquish the administration of the Home Modification and Maintenance program there have been a number of additional support structures initiated by the State Council and funded by DADHC. The major of these include appointment of Regional Technical Officers (RTO) and the establishment and management of a central contingency fund. The Home Modification and Maintenance State Council manages both of these programs.

The appointment of the RTO's to most regions of NSW occurred in response to the Home Modification and Maintenance services no longer having access to technical advice from the clerk of works within the Department of Housing following the restructure recommended within the last review. However not all areas are currently covered, for example, the South Eastern Sydney metropolitan area doesn't have an RTO and hasn't had for the last three years. However the existing RTO's are well organised and generally meet quarterly to share resources and information. Additionally, the State Council provides a bi-annual conference and a quarterly newsletter.

Under the current structure, there is one level 3 Statewide budget holder, thirteen Level 2 regional schemes and the rest are level 1 projects. A description of the three levels of service provision detailing the different roles and responsibilities of the three funding levels can be

found in:

Appendix A: Roles and Responsibilities of Home Modification and Maintenance Services at differing levels within NSW. Whilst a description of the managerial and structural differences can be found in

Appendix B: Managerial and structural description of the Home Modification and Maintenance Levels of Service within NSW. Both of these flow charts were developed and provided by the level 3 Statewide service.

The level 3 Statewide service has as a part of its duty statement the fostering of best practice, accreditation and monitoring across all of the Home Modification and Maintenance services within NSW. As of this year, it has also sponsored a conference for the thirteen level 2 service providers. This conference applied educational, consensus building and workshopping tools, to engineer the more coordinated approach, which is required to address some of the current practice issues of concern across the regional level 2 schemes. The Statewide service has also been funded for and has recently appointed an occupational therapist to act as a Statewide occupational therapy mentor, for all high-level modification work across NSW.

Nevertheless, whilst the Home Modification and Maintenance program appears to be working well in its current form both funding bodies and services alike perceive that Home Modification and Maintenance information strategies might be improved on if information strategies and needs were identified. Identification of Home Modification and Maintenance information practices, means that strengths within current practice can be built from whilst any gaps or weakness identified can be systematically prioritised and addressed. No study of this type has been previously conducted either within Australia or indeed overseas.

## Methodology

Qualitative methods were used to explore information need as expressed by informants using a semi-structured interview format. The interviewees were self-selecting with candidates from all three levels of home modifications and maintenance service providers being invited to participate. Following receipt of consent to be interviewed, an interview time was scheduled and the ensuing conversation recorded. Some interviews occurred individually but a number used teleconferencing to link up small groups of up to 2 informants. The audio files were then transcribed verbatim for later content analysis.

The final sample obtained represents insider perspectives gained from the 28 Home Modification and Maintenance Service Coordinators across NSW that we talked with. This represents just under a third of the total number of services within NSW. In addition to the telephone interviews, we received written submissions from four services one of which declined a telephone interview.

The telephone interviews allowed us to gather a broad selection of perspectives from our informants. In this section, we present the means or manner of accomplishing the assessment of information need based on the interviews we conducted. The methodology section details the research assumptions in terms of the systematic decisions concerning sampling, interview process, interview schedule and theoretical sensitivity.

## Sampling frame

Informants were selected to represent a balanced cross-section of geographical and other potentially salient points of variance. The Home Modification and Maintenance services are divided up geographically into seven divisions based on their geographical coverage.

Current divisions and spread are as follows:

Statewide – 1 service

Hunter - 7 services

Metropolitan North - 9 services

Metropolitan South - 11 services

Northern region - 14 services

Southern region - 8 services

Western region 33 services

The sole level 3 Statewide Service is responsible for managing the higher level funding across the whole of NSW, whereas the Level 1 and 2 schemes are divided into six regional areas. However, within the services that are regionally divided, there does not appear to be an even spread or any explicit rationale for numbers within each division. Instead the geographical divisions are the result of a combination of the incremental historical development of HACCC services across the State and funding reallocation following restructure, the most major of which occurred as a result of a review of the Home Modification and Maintenance program in 1999.

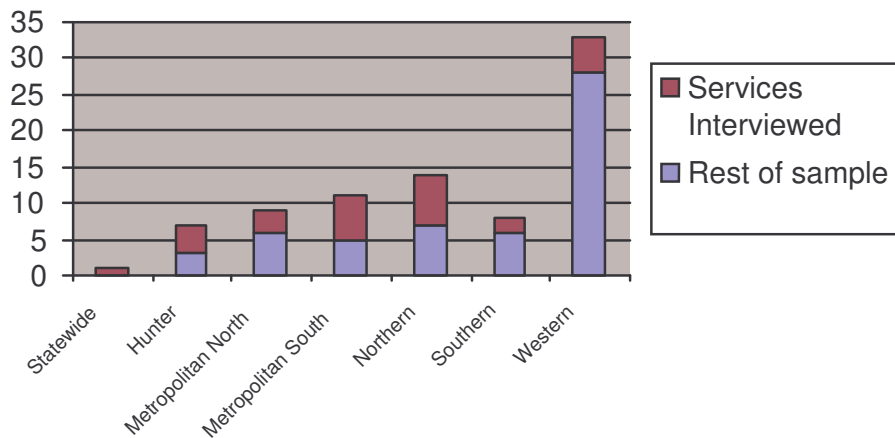
The original intention was to carry out a comparative sampling of metropolitan, rural and regional service provision. For instance, the Rural and Remote Areas (RARA) classification has been used widely and is generally accepted in rural health research (Hodgson & Berry, 1993). The seven groups in the RARA classification are: capital city; other major urban; rural major; rural other; remote major; remote other and other offshore (Department of Human Services and Health, 1994).

However the attempt to classify the Home Modification and Maintenance schemes using the RARA classification system fell apart almost immediately because the boundaries for individual schemes providing the level 1 and level 2 services are geographically quite diverse. Consequently, informants were unable to describe their geographic boundaries as corresponding to any accepted or published conceptual definition regarding distance from metropolitan centres.

When we started we started with a snowballing technique (Berg, 1989; Minchiello, Aroni, Timewell, & Alexander, 1995). Snowballing, occurred in the sense that we started with the sole Level 3 service who acted as a guide by provided us with a list of the Level 2 services and only when we had already started the level 2 interviews did we obtain the most up-to-date listing from the Home Modification and Maintenance State-Council. The State-Council contact list we were provided with covered all the level 1 and 2 Home Modification and Maintenance services within NSW and was last updated by the Home Modification and Maintenance State-Council for their bi-annual State conference held in May 2002. This list then provided us with contact details for the rest of metropolitan and regional Home Modification and Maintenance services in NSW. However, obtaining total numbers of

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 services is imprecise as levels 1, 2 and 3 overlap and coordinators are sometimes responsible for more than one service.

Because an a priori list detailing all the services was unavailable at the time we commenced our sampling an approach known as theoretical saturation (Glaser & Straus, 1967; Strauss & Corbin, 1990) was used. Theoretical saturation in this sense, meaning that our interviewing continued until no new or relevant data regarding a category and the relationships between categories emerged. However to ensure that our sample was adequately representative of the total a coding frame was employed to guide us in ensuring adequate coverage of all the salient variables. Figure 1 below, illustrates the coverage of the sample as finally achieved across all six regional areas used to geographically categorise the services.



**Figure 1: Geographic coverage as a proportion of total number of services**

Whilst Table 1 below, illustrates other variables we identified as being of potential significance. These included things such as difference in perspectives that may have related to either variance between coordinators professional background and or sexual difference. In order to ensure that we had adequate coverage within our total sample these factors were monitored and included in thematic analysis.

Variable type	Number in sample
Builder coordinator	5
Occupational therapist coordinator	1
Admin or general coordinator	22
Male	13
Female	15

**Table 1: Variables of interest in the sample**

A description of the final sample detailing the metropolitan and regional coverage can be found in

Appendix C: Home Modification and Maintenance Service Interviews – Geographical variable sampling frame. As mentioned earlier, sampling was complicated by the overlap between Level 1 and 2 services. Additionally, the voluntary nature of participation for the in depth interviews meant that although we would have wished for the sample to have included more informants from the Western region this was not achievable within the research timeframe. Notwithstanding, the informant sample did reach ‘saturation’ in qualitative research terms, meaning that additional interviews were found not to yield any significantly new or additional material. Consequently, after finalising interviews from our 28 informants our focus became that of data analysis and interpretation.

## **Interview Process**

All potential interviewees received a letter of invitation to participate in the interview, consent form, and subject information statement, explaining the nature of the interview (refer to:

Appendix D: Home Modification and Maintenance Service Interviews - letter of Invitation;

Appendix E: Home Modification Service Interviews - Consent form; and

Appendix F: Home Modification Service Interviews - Subject Information Statement).

## **Interview schedule**

The interviewing approach was developed over May and the fieldwork pilot commenced in June 2002. As advised for qualitative interviewing (Strauss & Corbin, 1990) the semi-structured interview protocol was trialed with four services and the results analysed before the decision was made to continue to utilise this approach with the larger sample. Once we had confirmed that the approach was feasible, we continued with the interview process, with the bulk of the interviews being conducted over the July to October period. Informants were sent in advance an outline of the project and a request to consider their information needs across a range of pre-identified topic areas.

Interviews were exploratory and semi-structured, meaning that they were structured loosely but so that they addressed all of the eleven predefined topic areas. No specific questions were used, rather representatives from the Home Modification and Maintenance services were invited to give their perspectives on their information needs across the following topic areas:

1. Spatial requirements
2. Carer requirements
3. Product requirements
4. Requirements for community inclusion
5. Requirements for meeting standards of care

6. Disability access components
7. Funding policy
8. Building and Land Regulation
9. Natural environment
10. Built environment
11. Other

For many of the informants having the information sheet containing the topic headings were sufficient, in terms of prompting, but some preferred a more structured approach following through the topic headings in a more structured manner. In general, interviews ranged from forty-five minutes to just over an hour in length. Following the transcription and analysis all informants received the first draft of the report and had an opportunity to validate the report contents in terms of ensuring accuracy and authenticity.

### **Theoretical sensitivity**

The use of semi-standardised interview format assumes that the topics and language are familiar to the people being interviewed and that the topics are theoretically sensitive meaning that they adequately reflect the information possibilities based on literature review and previous experience in the field. The research team has considerable experience with home modification and construction services and the directors have had dealings with the Home Modification and Maintenance program since its inception in 1988. This professional experience in conjunction with the knowledge derived from the environmental factor domains that were identified as having significant external influences on functioning and disability (World Health Organisation, 2001) provided the basis for the eleven topic areas used in the interview process.

## **Thematic analysis**

The thematic analysis undertaken, within this project meant that for each of the eleven key topic themes relevant material from the raw data was noted and extracted where relevant for further analysis. Systematic examination was used to reveal any underlying similarities, differences and relational patterns. In addition, every sub-theme, was annotated from each transcript using an indexing system so that an assessment of magnitude and direction could be noted (Berg, 1989).

### **Spatial requirements**

This category of information need can be defined as “of, relating to, involving, or having the nature of spatial data as pertaining to the needs of consumers with disabilities. People with disabilities generally fall outside existing building design models because they generally fail to adequately articulate the full range of human ability, effectively excluding all but the adult healthy male (Imrie & Wells, 1993; Liebig & Sheets, 1998; Van de Voordt, 1999). In Home Modification and Maintenance service provision, the ability to capture and formalise human ability knowledge is vital. This is because building modification for persons with disabilities typically occurs because home construction generally fails to allow for all the variations in spatial requirements needed by persons with disabilities (Iwarsson & Isacsson, 1993; Levine & Gitlin, 1990).

Human ability can be expressed as information concerning health status, body measurements or anthropometrics and skill. Thus human ability when called on as a part of activity performance can be either enabled or impeded by the spatial environment in which the activity is being performed. All informants stated that the primary source for spatial information is the referring occupational therapist, This is not surprising given that the practice of occupational therapy with persons with disabilities builds on the domain knowledge paradigm afforded by knowledge of person-environment fit (Susanne Iwarsson & Isacsson, 1993; Law et al., 1994; Levine & Gitlin, 1990). Thus it is not surprising that the occupational therapist typically has the major task of spatial design as the following excerpt illustrates.

*“the occupational therapists do most of the designing. We don’t do that very often unless the occupational therapist runs into a problem”<sup>(13)</sup>.*

Nevertheless, because there have been problems with communication there have been attempts to standardise the data gathering and reporting process. Consequently, in order to get and manipulate this information a number of services have designed assessment formats as the following excerpt illustrates.

*“we’ve got a fairly detailed application form and occupational therapist report form which is filled in by the occupational therapist at the time of their initial assessment. That then comes to us giving us nearly all of the relevant information”<sup>(04)</sup>.*

The most commonly raised concern given the dependence on the occupational therapist for information about spatial requirements were the major problems associated with not being able to obtain or retain a competent one as the following excerpts demonstrate.

*“but we haven’t got an area occupational therapist and we haven’t had one since the 11<sup>th</sup> of June... I’m actually employing a private occupational therapist”<sup>(12)</sup> and “the shortage of [occupational therapists] is absolutely critical...we’ve had a waiting list of something like six weeks now”<sup>(02)</sup> or “we only have a community occupational therapist for six hours a week out of the local hospital”<sup>(26)</sup>.*

A number of informants commented on the impact of having to purchase private occupational therapists. This was typically in relation to the effect that this was having on their funding as this was an unanticipated budget item that meant that the monies for service provision were reduced.

*“Yes they’re eighty dollars an hour. There are two invoices I’ve just got here to look at two clients and of course they were an hour and a half away and one was \$285 and one was \$210.”<sup>(12)</sup> and “We’re out in the country and we have no occupational therapist at present ..it’s really difficult if you have to call in an occupational therapist three times, you’ve got to look at how much you can afford to spend”<sup>(21)</sup>*

On the other hand, some informants did appear to feel that, they had some responsibility for overseeing outcomes in regard to integration of spatial data. This is illustrated in the following excerpts.

*"We take the occupational therapists recommendations as a guide for our clients and us, we don't actually use it as a prescription for what we do. If we look at a job and think that it needs more than has been recommended, or even less we do that too"<sup>(09)</sup> and "with the aboriginal service...we do a bit more supplying of [assistive devices] .., [maybe] because they don't connect into the occupational therapists or they feel more comfortable talking to us because we have aboriginal staff members"<sup>(26)</sup>.*

Some informants were critical of the information provided by occupational therapists particularly in terms of the applicability of some recommendations as the following excerpts illustrate.

*"But sometimes they lack in knowledge and just say they want it this way but then the builder will say that you can't have it this way it's got to be another way and that."<sup>(15)</sup> and "[things are sometimes in the wrong place] yes, that happens on a pretty regular basis. It's very rare that a job is easy."<sup>(21)</sup> or "I have actually had one occupational therapist who really wasn't perhaps up to scratch"<sup>(21)</sup>.*

A full analysis of all the transcripts also revealed that knowledge about spatial requirements was not traditionally part of building and construction knowledge and so sometimes caused difficulties with builders particularly those who were subcontracted as the following excerpt illustrates.

*"they [builders] don't seem to understand the reason why you are making steps to that design. They don't know about the widths of walkers or wheelchairs in relation to door widths and stuff like that"<sup>(01)</sup> and "You know that I'm not a medical person, in other words we're builders and we shouldn't get into areas we don't know what we're talking about"<sup>(07)</sup>.*

## Carer requirements

In the context of this project 'carer' was intended to signify an individual, providing either formal or informal care. Informal carer's typically include individuals, such as a physician, nurse, or social worker, who assists in the identification, prevention, or treatment of an illness or disability. Whilst, informal carers typically include individuals, such as a parent, foster parent, or head of a household, who attends to the needs of a child or dependent adult.

Adequate consideration of carers needs is significant as studies indicate that there is an increasing trend in injuries related to undertaking the caring role. There is some evidence to suggest that a Home Modification and Maintenance investment has the potential to decrease injuries of this kind. Furthermore, we know that changes in legislation such as the Commonwealth Disability Services Act, which promotes social inclusion, and changes to Workcover legislation, are increasing both the demand for services and thus the information needs of Home Modification service providers. For instance, the installation of ceiling hoists and platform lifts are becoming essential because of changes to occupational health and safety legislation. However, some informants indicated that this had sometimes caused problems as the following excerpt illustrates.

*“home care workers are very quick to say that this client needs X because my workers are unable to do things. How we’ve had a bit of friction in that area simply because the clients have not really felt that they should, because of the home care workers, dismantle their bathroom”<sup>(02)</sup>.*

At least one informant indicated that the consideration of the needs of home care workers as part of the requirement to meet new OH&S requirements was novel as the following excerpt indicates.

*“We’ve always looked at the carers needs but I hadn’t ever actually looked at the needs of home care workers and that’s really what we’ve been directed to do now”<sup>(21)</sup>.*

As in the spatial information category the provision of this information was seen to be the primary or sole responsibility of the occupational therapist. Unfortunately, this places a large responsibility on occupational therapists that are newly graduated or lack professional mentoring or support systems so it was not surprising that consequently informants sometimes mentioned variance in outcomes. An illustration of this type of issue follows.

*“That is between the occupational therapist and the client. I don’t interfere there...I expect the occupational therapist to tell them why and where about the articles and rails that they need. I would presume that they’d done all that but in some cases it depends on the quality of the occupational therapist”<sup>(07)</sup>.*

One informant indicated that Home Modification training amongst regional occupational therapist staff in conjunction with the development of a procedure and protocol manual detailing what is expected during a home visit and in terms of documentation had helped enormously in improving information flow in this area.

Other informants indicated that consideration of carers was beyond the brief of the Home Modification and Maintenance services. A few informants also expressed the belief that occupational therapists don’t always consider other users effectively either.

*“It’s not my worry, I’m looking after the client... I’m not an OH&S officer for every institution from the postman to the nurse”<sup>(07)</sup> and “I would be inclined to say that [occupational therapists] are more specifically recommending for the client, not for other people using the home”<sup>(08)</sup>.*

There certainly seems to be legitimate concern about breadth and scope of the range of information that a Home Modification and Maintenance coordinator needs to consider. However, failure to adequately consider occupational health and safety issues arising from modification work for carers and visitors to the site from a public liability perspective may leave services potentially open to litigation. This point was raised by one informant as the following excerpt illustrates

*“it’s very individual but when the modifications are carried out, for example a ramp, it not only must work for the client, it must work for the general public”<sup>(10)</sup>.*

## Product requirements

This category refers to material related to information need as related to building products or products bought and sold commercially. Most informants rely on their suppliers, builders and building subcontractors to supply information about building products. As the following excerpt illustrates but one informant also mentioned the support of local engineers and fabricators.

*“We have building representatives who call around for handrails”<sup>(05)</sup> and “we tend to remain with the same suppliers all the time and they let us know of new products”<sup>(13)</sup>. and “when you have a builder on staff, he tends to use what he’s found reliable and stay with material that he’s found works and he doesn’t necessarily explore new places for new products”<sup>(08)</sup>.*

In terms of general information strategies in practice, the main ones seem to be reliance on local hardware shops, use of supplier catalogues and industry manuals as the following excerpt illustrates.

*“I have a company representative that visits from one company and I get a lot of information through the mail and I rely on that”<sup>(12)</sup>.*

It appears that, a number of services have put together folders with these brochures and product and supplier catalogues and that they referred to these regularly. However, these must be kept up to date and managing this type resource information can be quite time intensive as the following excerpt indicates.

*“the pamphlets [manufacturers specifications] that come with the materials we keep in a resource folder and you have to check your expiry dates and all that sort of stuff and we’ve got the material safety data sheets on chemicals that we might use”<sup>(12)</sup>.*

A few informants mentioned subscribing to building industry manuals. Additionally a number of informants indicated that they belonged to the Housing Industry Association (HIA) and that this was a useful source of information as the following excerpt illustrates.

*“We are a member of the HIA and if anything comes up we normally just contact them”<sup>(13)</sup>.*

However, a relatively large number of respondents identified this as an area of some concern and commenting on particular difficulties locating new or unusual products. The following excerpts illustrate this perspective.

*“the one area where there is a bit of a gap as far as information goes is products, peripheral things, a lot to do with plumbing and the electrical switches and timers, rocker switches that disabled people use”<sup>(04)</sup> and “It’s a bit ad hoc to be perfectly honest.”<sup>(05)</sup> or “quite often new products are hard to find.”<sup>(22)</sup>*

Most product information required is obtained through regional technical officers (RTO’s), sales reps and at home modification meetings. Some informants had regular quarterly or bi-monthly regional and sub-regional meetings whereas other indicated these were considerably less frequent for whatever reason in their region.

*“Often when these things come out you hear about them on the grapevine, often at quarterly meetings, sometimes if an occupational therapist sees something then they’ll chase it up, but there isn’t any formal way of finding out about those things”<sup>(05)</sup> and “The existing providers of products generally keep us up to date with changes in their range of products. We also speak to two RTO’s.”<sup>(08)</sup>*

A number of informants mentioned how important different expos were and in particular how important the bi-annual conference was for getting ideas about products as the following excerpts illustrate.

*“We had extra information we found very useful at the bi-annual state conference”<sup>(12)</sup> and “we had always used Lenlock grabrails before one of the State Conferences and Canterbury Concepts was there, they were actually presenters, like trade presenters we have that at every conference we’ve had and we get to see a lot of new stuff there”<sup>(18)</sup>*

Meetings with other service providers were universally valued, some informants expressing the desire for more frequent meetings indicating for instance that because the State conference only happens on a two-year basis, that more rather than less product information in a meeting format was wanted.

*“I think there should be more information in that format. In other words what’s the latest on a toilet roll, what’s the latest in pans, what’s the latest in seating for disabled”<sup>(07)</sup> and “and just the contact between services...just getting together around the table...it’s very good”<sup>(12)</sup>.*

However, some informants mentioned that they were unable to attend the conferences or meetings and so information provided in this format because of its transitory nature does not appear to always penetrate the entire sector. A central database if utilised will help overcome some of these concerns, however the level 3 Statewide program also has a support function and this might be benefit from further development and more active promotion.

The sub-themes emerging ranged considerably with the need for innovation in conjunction with lack of training and insufficient experience as the most common themes. Several informants for instance, mentioned the need for creativity and innovation by builders as illustrated in the following excerpts.

*“... some of them are very inventive, you’ve got to create things ... [a builder] made up this beautiful stainless steel system for a toilet roll holder that comes out like a drop down rail and you then pull it out in front”<sup>(07)</sup> and “we asked [product manufacturer] if they could design something slightly different to what we had, some of the products they were providing because we had some better ideas about it and they were quite open to doing that”<sup>(18)</sup> or “it’s a bit of builder nouse because some situations are very specific it takes a little bit of nutting out to come up with something”<sup>(17)</sup>.*

Unfortunately under the current set up, there appears to be no systematic methods for capturing the design, fabrications and outcomes of such one off systems. Nor does there appear to be any methods for cross checking that a similar item can not be found commercially in a prefabricated form at a cheaper price.

One reason that this sort of product searching and cross checking do not appear to be happening is that the resources currently available to the RTO's are insufficient to cover the amount and scope of information required. This sort of belief is illustrated in the following excerpt.

*“more resources, need to be made available to the RTO's so that each areas service, via phone call or fax can actually find someone that can actually find that information”<sup>(04)</sup> and “I feel there is a need there in the building technical help area. There is nowhere really to go to ask for technical help on how to do things that are accessible”<sup>(10)</sup>.*

Given that the majority of knowledge needed by coordinators is accumulated over time and with on the job trial and error experience it is not surprising that some informants highlighted that the product information bottleneck was at it's most acute for newer employees.

*“well what I've found is particularly in the first couple of years that you're doing this sort of work that's when the difficult time is because you're in over your head to a certain extent”<sup>(05)</sup>.*

The fact that newer employees struggle highlights the need for more structured mentoring and supervision arrangements, better on the job induction and training and more continuing education offerings as a part of job packaging.

## Requirements for community inclusion

The category of community inclusion concerns the information strategies used by services for including or considering the needs of consumers with special requirements as a part of something larger. A number of our project informants were aware of Disability Discrimination Legislation but none indicated that they had fully considered access to their services from an anti-discrimination perspective. Meaning, that whilst all services have brochures describing their Home Modification and Maintenance services that they distributed to their consumers. Only a few services indicated that they routinely produced consumer materials or looked at information needs relating to their services in terms of alternative formats or other languages. A typical response in this category was:

*“the ones I have are just in regular print”<sup>(09)</sup> and “we have not dealt with any NESB clients to date, but when the incident arises, where will the funding for special needs come from”<sup>(23)</sup>.*

Of all the informants interviewed, only five had descriptions of their service or information for consumers available on the worldwide web. Additionally, not all these web sites were accessible in terms of the international worldwide web accessibility standards. Of the services who currently provide web pages, web pages were typically made available as a sub section of a much larger website belonging to either their auspicing organisation or as a listing with another local auspice. The primary purpose of the webpage's being provided appeared to be in provision of information to consumers. Consequently, they generally detailed the services on offer and provided contact details with only one site having any downloadable information. In this one case, the downloadable information was a PDF format Home Modification and Maintenance service application form.

One informant indicated that the Translating and Interpreter Service (TIS) was available for use by Home Modification and Maintenance services and was helpful. However, it appears

that interpreter services are infrequently used by most services as the following excerpt illustrates.

*“also a lot of the referrals will come through and say the customer doesn’t speak English, you can use a relative but we went to a training day where they said really it’s best to use the TIS because sometimes the relative might not agree with what the customer wants or so.” (15)*

Only two metropolitan informants indicated that they had produced consumer information brochures in languages other than English as the following excerpts illustrate.

*“we have our brochures in another six languages apart from English...we don’t change what we do there the only thing we change is the phone numbers and address. Well I’ve been able to do that by just a cut and paste but we are in the process of getting new brochures made up within the community services sector.*

*The only thing on our brochures that it doesn’t include at this stage is on the other languages are the customers rights and responsibilities.” (15) and “we have a very high non-English speaking background client group and again working from the community centre we’re able to access some of their people to do the interpreting and also you know for our brochure which is in about ten or twelve languages”(22).*

This is in a context where a few services indicated that doing promotion had been valuable. One informant stating that this had increased the number of self-referrals and this was an increasing trend. This value of promotion is reflected in an excerpt from another informant as follows.

*“[the handymen] takes the brochures with them and just alerts people to the fact...people are becoming much more aware of home modification and will try to do something before they have accidents” (12) and “Actually, yeah at our recent multicultural day a lot of people do come up and take the brochures and yes I think it is helpful for them.” (15)*

Given, that people with disabilities are the primary consumers of Home Modification and Maintenance services, it is also important to consider the needs of the major disability types that require alternative formats. The most significant of these being special requirements for alternative formats for those consumers with visual, hearing and cognitive losses. The following indicates the types of formats that these consumers value;

**Vision disabilities.** These impairments are supported by provision of large print, audio and computer readable text that can be read by commercially available text readers.

**Hearing disabilities.** These impairments may require the use of a sign interpreter or teletext relay service.

**Cognitive disabilities.** These impairments share many of the same characteristics and access issues inherent with low vision and physical disabilities, placing an emphasis on large plain English text, combined with the use of clarifying realistic illustrations as appropriate.

Nevertheless, no informants we interviewed indicated that they had made provisions for communication using alternative formats although one informant indicated that a telephone relay service had been beneficial with a hearing impaired client as the following transcript excerpt indicates.

*"[We have used the] telephone relay service... We have done that with two people and it worked quite well actually, because when we received the referral that is what they said you might find trouble if you have to use this service and we found it OK. We organised the work, the subcontractor even used it and they were quite pleased with the service."* <sup>(15)</sup>

## Requirements for meeting standards of care

This category concerns any established procedure to be followed in carrying out a given home modification operation. All informants were fully aware of and referred to the need to prepare and maintain appropriate HACC Standard of Care Documentation. A few informants expressed the desire for clearer guidelines in terms of definitions such as knowing exactly what a HACC client might be in terms of home modifications. Other informants mentioned

that the current Home Modification and Maintenance guidelines were written in 1998 and only applied to lower level schemes so are wanting further clarification of how they apply to level 2 and 3 services.

Some informants mentioned DADHC themselves as an information resource but several complained that contacting the department was difficult as they were unsure who to discuss particular concerns with as the following excerpt illustrates.

*"I wouldn't have a clue where to go, other than finding a number in the phone book, calling the Department and going from there"* <sup>(22)</sup>.

Additionally, the validation currently being carried out by DADHC was mentioned by a number of informants as this has meant that a lot of time more recently has been committed to ensuring that all policy and procedure manuals are up to date and pass muster. The process of validation was valued by at least one informant as the following excerpt illustrates because this assisted a reflective practice and updating of policy and procure manuals.

*"I must say as far as validation goes, as a newcomer, it really got me thinking about the way that service was running and a lot of areas were changed to include more of the HACC guidelines"* <sup>(12)</sup>.

The major concern expressed by informants regarding policy and procedure development, surrounded the amount of time it took to write and maintain them. A common theme expressed was that sharing these resources would considerably ease individual service administrative load and improve uniformity across services.

*"why don't we just have one available or a couple available so that people can so that people can look at them and change them their purposes rather than re-typing out the whole lot"* <sup>(11)</sup> and *"if we could have somewhere we could source other peoples policies and procedures for home modification it would have been so much easier...so if there was somewhere we could go and look at best practice type documentation it would be excellent"* <sup>(21)</sup>.

Indeed some informants indicated that the policy and procedure manuals that they now have in place had evolved out of a process of building from other information sources as the following excerpt illustrates.

*“ The Department put out many years ago a policy and procedure manual...It was set up more for residential care originally and we’ve used that and modified it to make it more specific to the service that we provide”<sup>(08)</sup> and “I’m part of a very large community based organization. There is a lot of workers there who’ve put their policy and procedures together and a lot of it is taken out of there” <sup>(22)</sup>.*

Another sub-theme concerned having to reinvent the wheel because of poor carry over of information between schemes, but particularly so in relation to the handover of the higher-level jobs from the department of housing as the following excerpts illustrate.

*“ there was no transition...there was no passing on their documentation ... we had to reinvent the wheel gain. They gave us none of their methods or anything else”<sup>(07)</sup> and “I can’t say that I’ve actually read other people’s policies”<sup>(08)</sup>.*

One informant raised concern about poor understanding of warranties and lack of standard and uniform building contracts.

*“We use the fair trading contract.. if you understand all the laws of AS 2124 [Australian Standard on contracts]...and know how to interpret the contract.. it pretty well covers you” <sup>(07)</sup>.*

Yet another sub-theme raised concerned the lack of guidelines, particularly the absence of any handbooks detailing the sorts of information required by subcontractors. A number of informants felt that having a handbook detailing the Home Modification and Maintenance program and HACCC expectations was critical to success with sub-contractor employment. Consequently, the same informants expressed the view that creating such a resource was a high priority as this was essential in accessing and in increasing the pool of contractors available that could be relied on to carry out work according to service guidelines. The following excerpt indicates the belief that packaging some of the standard information on techniques regarding bathroom modification would be particularly helpful as the following excerpt illustrates.

*“these are the basic things that should be in there, like the walls should be tiled to 2.000 mm or 1.800 mm whatever it is, there should be a grabrail , there should be a handheld shower , there should be a hobless area there should be non slip tiles the floor, there should be a shower curtain rail, there should be weighted shower curtains perhaps for clients,” <sup>(18)</sup>*

## **Disability access components**

This category refers to products that are especially fabricated for persons with disability. There are a relatively large number of products that either improve convenience or are solely designed for use by disabled people with particular requirements. These items are generally known as assistive technology. Home Modification and Maintenance services only typically either fabricate or stock items in high demand such as grab-rails. Consequently, most services seek this type of information from their home modification networks and occupational therapist’s. These two sources represent the primary means employed for obtaining specific or unusual information concerning disability specific equipment. Nevertheless, things tend to break down at the private provider or sub contract end as the following excerpt illustrates.

Authored by C. Bridge & K. Martindale for the Home Modification Clearinghouse

*"It's pretty evident that a lot of the private providers don't know where to go for information. That's just pure education. So, they need to be made aware that they can get information from all sorts of services and places, like the independent living centre for just one example"<sup>(11)</sup> and "well in a way everybody's fumbling. The occupational therapists don't really know much either in the products."<sup>(07)</sup>.*

Whilst most of the services were aware of the independent living centre as a potential source of information, almost no services indicated that they used it on a regular basis. Although responses from informants varied somewhat from *"they are a good source of information"*<sup>(09)</sup> to responses indicating that it was not *"a resource that they used as lot"*<sup>(08)</sup>. Whilst it appears that the independent living centre service is highly valued by all informants, there only one informant mention of access to the online product catalogue and a sense of under utilization as the following excerpt illustrates.

*"I think that the independent living centre is a really good information point. I think that it's a bad habit that we haven't accessed it more often."<sup>(10)</sup> and "I do find that the Independent Living Centre and things like that are very hard to find, well I couldn't find a site for them"<sup>(27)</sup>*

Although at least one informant indicated that the *"books, that we have, have come from the Independent Living Centre"*<sup>(09)</sup>. Indeed, the independent living centre has been the major provider of disability related information for consumers in the Australian context and they have produced a number of resources of relevance to Home Modification and Maintenance services including books on kitchen and bathroom design, a product catalogue; a number of consumer information leaflets and a journal that features particular products. It appears that these types of information resources are being accessed and utilized by at least some of the services as the following excerpt illustrates.

*"I [subscribe] to the Independent Living Centre, so I get that magazine, so I find that quite helpful" <sup>(12)</sup> and "We belong to the Independent Living Centre so we get their magazine.. I'm sorry that they haven't got their catalogue and more <sup>(14)</sup>.*

Additionally, some informants referred to the manual produced by the Department of Veterans Affairs (DVA) as being a helpful source of information as the following excerpt illustrates.

*" I have a DVA building document with their guidelines for ramps, shower recesses ...I use that for the ramps" <sup>(15)</sup> and "the DVA actually put out a good manual concerning what is required in relation to disabilities"<sup>(24)</sup>.*

Whilst books on disability specifications were not commonly mentioned at least one informant indicated that they also held and referred to a *"book from an architectural designer [entitled] 'Designing for Disability'"<sup>(09)</sup>.*

Another informant talked of the value of viewing best practice cases as illustrated in the following excerpt.

*" I've seen some good designs though, privately done by architects which wouldn't be generally noted... It was one of the best designs, aesthetically and practical for a disabled person I've ever seen"<sup>(07)</sup>.*

Whilst another mentioned that access to a list serve where coordinators, occupational therapists and builders alike could exchange ideas as a tool that had the potential to be very beneficial as the following excerpt illustrates.

*“ Yes that would be good, we also had a request that a customer would like a pull trolley system or something so her groceries can go on that and I really don't know where to start from that so it would be great to know if someone else had come across a similar situation so I could find out how they handled it. Now that would be interesting.”<sup>(15)</sup>*

Some informants clearly saw consumer information provision about specialty products in high usage such as hand held shower usage and non-slip coating maintenance as a professional responsibility of Home Modification and Maintenance service coordinators as the following excerpts illustrate.

*“[non-slip paint] we provide that sort of thing”<sup>(05)</sup> and “Sometimes some people think that once the hob is removed that they can still splash the water around like they used to or use the handheld shower like they were fighting a fire and they are not and you can't do that because there is no hob or screen to contain it, so they have to be moderate with water pressure.,, [So] we made an information leaflet called managing an open plan shower and we get them to sign it to say that they understand what you are telling me”<sup>(18)</sup>*

The same informant stated that there was a need to standardize and share much more consumer specific product information.

No services interviewed mentioned looking for, or responsibility for provision of, printed special topic information sheets for their consumers about maintenance and care of things such as grab-rails, decking, ramps or of non-slip finishing. The norm appears to be provision of product care information verbally as the following excerpt illustrates.

*“I don't recall writing down information on how to care for...slip resistant surfaces over the tiles and it sort of lasts one or two years perhaps at most and I let clients know verbally about that”<sup>(20)</sup>*

Another sub-theme raised by a number of services related to written warranties and product maintenance and raises concerns regarding responsibility and liability in this area as the following excerpt illustrates.

*“for chair lifters, I've had some quite lengthy discussions with providers ..[regarding their] written warranties and guarantees in relation to maintenance....and what they do is follow up themselves and do maintenance and installation checks”<sup>(08)</sup>*

## Funding policy

The category of funding refers to all decisions, policy and sums of money or other resources set aside for a specific purpose. For instance information relating to management of contingency funds and funding guides and/or reference to any organisations to which consumers might apply to assist in financing modification work.

The responses given regarding the proportional allocation of money for maintenance and modification may be divided into two groups: those that allocate funds specifically for each and those that roll them together. Most of the services interviewed fall into the second category. There does not appear to be any clear guidelines for most services on the use or allocation of funds although most informants were very clear about their fiscal responsibilities.

Whilst there does not appear to be any uniform fees policy to which all services referred, all informants discussed the HACC National guidelines (Commonwealth of Australia, 1989) re not excluding any client who was unable to contribute as the following typical excerpts illustrate.

*“the fees policy doesn't really work in a lot of areas because you get some people who basically take pity on the client and say you'll be all right, don't worry about paying anything and then there other people who are very strict and say you'll pay X percentage, but there is no uniformity”<sup>(01)</sup> and “we start off with the State*

*pensioner prices if they are a pensioner and if they have a problem with paying that then we'll just keep reducing it down until it's no charge”<sup>(05)</sup>.*

On the other hand, some informants obviously had developed a clearer policy for their particular service as illustrated by the following excerpt.

*“ what we are generally required to do is to recoup the costs of materials any subcontractor use and then add \$15 per hour for our guys and labour components for staff”<sup>(08)</sup> and “we actually have a table and judge people accordingly”<sup>(09)</sup> or “at the moment we're giving them a 60% subsidy on the builders rate and at cost for materials”<sup>(12)</sup>*

The fact that no standard guideline in this area was available was raised as a sub-theme of concern by several informants as the following excerpt illustrates.

*“For our funding we should have the same method, you know a standard 20% there. Somewhere a criteria [should be] established about what funding should apply and what their contribution should be”<sup>(07)</sup> and “I think it's a great difficulty and that's one of the reasons ... that we couldn't apply to the Department of Veterans Affairs as a national group, because of the fact that we have so many different pricing structures”<sup>(02)</sup>*

Achieving any uniform fee arrangement appears to presents a challenge given the variety of auspice bodies and the differing ethics and policies adopted within them. Consequently a uniform fees policy is unlikely to be achieved unless specific policy is developed and adoption is made contingent with the signing of funding agreements. In attempting to reduce uncertainty and improve regional equity any standards developed must also preserve a balance in that the outcome achieved must not be so prescriptive that innovation and flexibility are eliminated.

Another source of concern was the desire for additional information to guide decisions about the types of work that are and are not acceptable in terms of funding subsidy as the following excerpt illustrates.

*"Yes there is a fine line between what is beautification and what's not because we all know too that some things if they aren't painted they will rot and then it becomes a maintenance issue. So yeah, it's really hard sometimes to draw that line" (18)*

Another sub-theme mentioned by a few informants was the problem that had adhering to the HACC fee contribution guidelines given that the base funding levels were inadequate for the regional demand. The increasingly tighter operating budgets mean that there is a heavy reliance on recouping client contributions and a number of informants expressed a view that this is also an essential source of funding. Consequently, several informants indicated that they rely on client contribution to manage overheads and operating costs however, this places them in double bind as illustrated in the following excerpt.

*We obviously rely on the client contributions as well, that's a source of funding too. If we didn't.. the money would go nearly as far" (06) and "they call it a client contribution but the government won't sign off on the fees policy, so how do we enforce client contribution? You can't" (24).*

Most of the informants do not actively advise clients of alternative funding sources but all informants stated that they had waived fees according to HACC guidelines in special cases. In general the response to this category varied widely across services but key issues appear to be concern surrounding lack of or unclear policy to assist in determining cut-offs between maintenance and modification; client contributions; job costing; and a general lack of information surrounding sourcing of alternative funds.

Responses to questions about locating supporting funds from other sources may be categorised into three reactions. Firstly, informants expressed the belief that there was no other funding, alternately they stated that other funds were available and finally they expressed the belief that there must be other funds but that they were unaware of the sources or methods of application. Only one informant indicated that they has routinely sought information regarding alternative funding sources as the following excerpt illustrates.

*"I applied to ..the local rotary club, the apex club and the Lions club. We've applied to Rerun association which is the old crippled children's association .. basically to get money from wherever we could"(01) and "with our aboriginal service we get very good at finding other funds for them. We have been able to get additional funds through the Department of Public Works and through the Aboriginal Housing office"(26).*

However, another informant indicated that when a situation arises where considerable maintenance is required in order to bring a home up to scratch so modifications can go ahead that alternative funding sources might then be considered. Knowledge of alternative funding sources is currently shared via the State Council newsletter as the State Council is the holder of a contingency fund plus some services may also be able to access SAP or DSP or DVA monies.

DVA monies, Community Options and Aged Care Package monies because they are full cost recovery appear to be essential in enabling operation of a number of the services as illustrated in the following excerpt.

*“the DVA occupational therapist was not giving us any DVA work...but since then it has really improved and we are getting the full cost recovery and that’s what we rely on to supplement our clients” (12)*

However, reactions to funding from one source, the Department of Veteran Affairs, was mixed with some using the money to fund their main projects and others being unable to disentangle the paperwork necessary to make regular and successful applications to the organisation.

Nevertheless, some services appear to have been quite successful in packaging together funding from a variety of community sources. However, this appears to vary enormously between schemes with some schemes relying solely on basic HACC funding. For instance, Legacy apparently provides funding to some level 1 maintenance services to enable them to improve home security for the elderly within their local community by provision of smoke detectors, locks and grills as the following excerpt illustrates.

*“Now legacy actually supply the smoke alarms and we do them just before winter...and we only charge legacy what we normally charge a client but they supply the materials” (02) and “we have a bit of a deal going with the local Lions Club” (26) or “we get a little bit of extra money from [local government agency] just for projects like putting in smoke alarms and peep holes” (14)*

One informant mentioned the importance of proactive and helpful HACC development officers in locating information about alternative sources of funding as the following excerpt illustrates.

*“our HACC development officer..is particularly proactive. If there is anything in the wind, she puts that on the HACC net. Any sort of funding” (02)*

Another sub-theme mentioned by a few informants was the potential for cost efficiency savings for services if they dealt direct with suppliers and were better organized so as to order product supplies in bulk. The following excerpt illustrates this theme.

*“it would be easier if we dealt with suppliers of the materials rather than the contractors...keeping an eye on costs” (24).*

Unfortunately, at present, each service is dealing with these sorts of issues in isolation. Whereas, a more universally supply policy applied across the state might assist in making services more cost efficient. Indeed one informant also saw this as a major duplication problem which a web based approach might be able to better resolve as the following excerpt indicates.

*“throughout the state you have different projects accessing [company representatives] when in fact they could hop on and access it through the net” (07)*

A number of informants clearly expressed the desire to have more information about funding made available and to share successful funding applications with others as the following excerpt illustrates.

*“if we could somehow get information about what money’s available...there’s actually consultants who that go out finding funding applications, but I can’t see why DADHC can’t supply it for us because they are the ones who give it out” (24).*

## Building and Land Regulation

This category concerns the principles, rules, or laws designed to control or govern construction practice and conduct. It generally refers to any relevant code or set of codes governing action or procedure, for example the Building Code of Australia, Australian Standards and State Planning regulations.

Regarding the Building Code of Australia only a few informants, most of whom were builders mentioned both having and referring to this on a regular basis. A number of informants expressed concern at both the expense and difficulties associated with keeping up to date as the following excerpt illustrates.

*“the building code is a big issue. To keep up with the building code and the relevant things associated with the building code...and then it refers to a whole heap of other standards which I think I’ve had quotes for over \$2,000 a year if you wanted to keep up to date”<sup>(20)</sup>.*

The Australian Standards was significant in discussions with nearly all informants. The Australian Standards for Access and Mobility (AS1428), clearly represents the major source for information concerning spatial requirements and is used by occupational therapist’s, builders and service coordinators alike. It was also clear that whilst the Standards on Access for people with disabilities are not designed for application in the domestic home in the vacuum of other reliable resources they were considered particularly important as the following excerpts highlight.

*“the Australian Standards is our bible so to speak when it comes to trade work...they’re not designed for domestic use. We do follow it as closely as possible but do alter the standards with the occupational therapists input”<sup>(10)</sup> and “the Australian Standards are the only yard arm we have got and it refers to public institutions ... but we use their criteria in a modified form to gain entry to a domestic format”<sup>(07)</sup>*

Some informants raised the issue of legal liability and the potential for negligence action when deviations occur and the consequent responsibility this places on those who make decisions to document the reasoning and rationale involved. Making and enforcing universal guidelines is viewed as difficult if not impossible because the nature of disability varies so widely as does disability relevant information as the following excerpt illustrates.

*“the Australian standards only refer to public buildings...but if it came to a court case... the judge is going to [ask]..why you deviated from an Australian Standard...occupational therapist’s are using the standard, I suppose because that the only guideline anyone’s got and it’s just adapted to each client depending on whether they’re an amputee or quadriplegic or whatever”<sup>(01)</sup>.*

Another sub-theme raised by at least one informant was the lack of feedback to standards concerning issues with application. This appears to be because no one body is gathering information about problems amalgamating it and feeding it back to Standards Australia as the following excerpt illustrates.

*“We don’t actually speak to Standards, it’s one way with us, it comes from them to us”<sup>(24)</sup>.*

Nevertheless, a few informants indicated that spatial requirements for all ramps and shower areas were constructed according to the standard, as this was the only means of ensuring that all equipment could be accommodated as the following excerpt illustrates.

*"I just make sure that we build it to the standards so that it's wide enough for whatever equipment they might get"<sup>(05)</sup> and "they pretty well stick to the standards, the Australian Standards. You know the 1200 by 1200 for the shower recess and that sort of thing"<sup>(07)</sup>.*

The apparent heavy reliance on the standard, which is about minimum spatial dimensions for an average of 80% of wheelchair users may in actual fact not provide sufficient guidance for clients whose requirements do not match or exceed the A80 average (Standards Australia, 1993, 2001). For instance, those who rely on electric scooters or who require a prone trolley or ambulance access may not be well accommodated by strict adherence to the standard as the following excerpt illustrates.

*"the Australian Standards...I stick to them as religiously as I can. An occupational therapist may overrule some of those standards in the disability section of it"<sup>(20)</sup>.*

However, of greater concern given the importance placed on adherence to standards was the fact that a large number of services raised concern about access to Standards

information primarily because of the high cost burden to individual services. At least one informant indicated that some coordinators and occupational therapist did not have access to copies of relevant standards at present as the following excerpt illustrates.

*"[Australian Standards] the occupational therapist s said they would like a copy and it was decided that they were all going to receive a copy .... I'm not sure if each Home Modification service will pay for it or how the cost will be covered but they were looking into that." <sup>(15)</sup>.*

One informant stated that because the information was so highly valued that they had negotiated with their auspicing body to be able to purchase the Australian Standards CDROM. However, this had been both an expensive exercise and one of limited usefulness, as continued access required annual renewal and the project in question had insufficient resources to continue to renew the subscription.

*"You buy [Australian Standards], they're very expensive"<sup>(07)</sup> and "I'd like to see on the website clearinghouse updating on standards as it is very difficult and we can't afford to be paying twelve hundred a year to belong to standards Australia"<sup>(26)</sup> or "it would be nice to have standards on the web site, because when they get updated you don't always find out and you've got to continuously purchase the updates and it gets a bit costly."<sup>(10)</sup>.*

At least one informant seemed to expect that part of the occupational therapists role was to provide information about updates to the standards as the following except illustrates. However other informants suggested that occupational therapists understanding of some standards such as the new electrical standard was limited.

*"normally our occupational therapists provide us with [amendments to Australian Standards] as well"<sup>(13)</sup>.*

Regarding the information needs surrounding planning approvals, the major concern here as expressed by the majority of informants, was the process surrounding making a building applications and the length of time this required. Responses from informants fell into three categories: 1) no knowledge of the area or contact with professional planners or architects, this was particularly so for the small schemes with a maintenance and handyman focus; 2) some knowledge of the area but no applications required; and 3) some knowledge of the area and some applications made.

In most situations, the responsibility of applying for consent was lodged with the builder either on staff or the sub-contractor. However, given that a number of informants expressed concern about the issue of time it is not surprising that a number of service providers have attempted to ease this process by proactively promoting relations with planning personnel. This is illustrated in the following excerpt.

*“we have a local government member on our planning committee, ...[so we can get advice] through members on our management committee”<sup>(08)</sup> and “I had a ramp the other day that was at the front and it was quite large so I got in touch with council myself and asked what are the regulations and what it is they look it up on their database and see whether it’s something that can be done because you have the address. Then the particular one that I phoned up about was OK but then what I needed was a comply and exempt form”<sup>(15)</sup>.*

Nevertheless, a number of informants raised issues regarding lack of information and issues concerning speed of planning approval as of concern as the following excerpt illustrates.

*“we regularly come across problems... They stuffed the system around for months on end, changing things and requiring things in relation to the new environmental requirements of that council. There is no uniformity across any two councils as to when they want a building application”<sup>(11)</sup> and “it’s a chair lift at the front of the house and council wants us to go through the normal building applications which just takes too long and the client needs it now”<sup>(10)</sup>*

Another sub-theme mentioned by one informant were information access issues in relation to obtaining information about home ownership. This is a building and land regulation issue as it is a requirement by law to have the property owner’s permission before modifications commence. This concern is illustrated in the following excerpt.

*“Occasionally there could be an issue of homeowner or renter where you have to get the homeowners permission. I think I’ve had that once where the home was actually rented”<sup>(12)</sup>.*

Whilst another topic of concern that arose from a few informants, concerned the fact that a number of services are run by coordinators who are not builders and who do not have licensed builders on staff. The lack of access to licensed builders has raised concern and highlighted inconsistencies in obtaining information about legal requirements regarding compliance with the Home Building Act of 1989 which applies licensing and insurance requirements to residential building work and specialist work. This impacts on consumer protection guidelines and expectations such as home warranties insurance. Concern about this is evident in the following excerpt.

*“we do not have a builders license...and we do not have a builder who is licensed to cover what we do”<sup>(02)</sup>.*

## Natural environment

This category concerned themes relating to, or concerning nature: and the natural environment surrounding the home for which service was being provided. The responses to this topic varied significantly, with some services having very specialized knowledge regarding particular geographic areas. This knowledge can have large ramifications for success or otherwise of project outcomes as the following excerpts indicate.

*“out at Grafton there is very reactive clay soil in the ground and it expands and contracts about 60% so obviously the person in that area would need to be aware of that and obviously have a fairly extensive input into any designs that an occupational therapist has to ensure that they have allowed for the expansion and contraction in any walls or lifts”<sup>(01)</sup> and “certain areas of the mid-north coast are flood prone and so houses are very, very high and so the ..the more practical alternative is a chair lift rather than a ramp”<sup>(08)</sup> and “Foster has some houses that are built on sand...so you have to look at your footings”<sup>(12)</sup>*

Whilst a number of services mentioned issues and information about extremes of temperature such as frost and rainfall as the following excerpt illustrates.

*“You’ll always consider which way the weathers going to be coming ”<sup>(05)</sup> and “lighting and heating come into it in relation to some areas... you know the heating component is very much part of it because it’s so cold out there”<sup>(08)</sup>.*

Nevertheless, a number of other informants stated that information in this area was not a high priority as most of the modifications they provided were indoor. The percentage and type of variance between indoor and outdoor work appears to vary considerably depending on service level designation and regional demand with some informants indicating that up to 30% or more of their modification work was done outdoors.

A few services mentioned this in terms of the need for follow through and in terms of ongoing maintenance but the main message was that the weather was considered depending on the type of materials if the work was to be done outside.

## Built environment

This category concerns the state of the human habitation or basic soundness of housing structure and concerns the information sought and its impact on service decisions. Informants only mentioned the impact of the built environment in the context of repair and maintenance budgets and the impact this had on the decisions surrounding whether a property could or could not be modified as the following excerpt illustrates.

*“that’s a big issue for a lot of country areas..[because] they haven’t had any work done on their house for 20 years...the home mod service turns up and finds that the house is full of termites does it then become their responsibility”<sup>(01)</sup> and “we have done work on places where there is no power, no running water and that sort of thing in outlying areas”<sup>(26)</sup>.*

## Other

### Rural and remote differences

There are significant differences in the provision of Home Modification and Maintenance services in the rural districts of New South Wales to those provided in the metropolitan areas of Sydney. The key problems experienced by rural service providers are the increased price of products, the increased price and unavailability of subcontractors, the lack of permanent occupational therapists, the cost of private occupational therapists, access to Home Modification and Maintenance conferences and the distances travelled to jobs. These issues are experienced both at Levels 1 and 2 but with far tighter budgets, it was obvious that Level 1 providers are struggling to manage their incremental caseloads.

Apart from the problem and additional costs associated with having to bring in occupational therapist from out of area another major concern in regard to rural and remote services related to issues arising from accounting practices which failed to adequately include additional funding incurred as a result of servicing outlying clients as the following excerpt illustrates.

*“if you are out in the middle of NSW and you have got to travel 2 hours to get there to do a \$10 you know, change washers job it’s still only, you know a fifteen minute job. ... given the travel and buying the washers for the taps cost \$60 and*

*the client only paid \$10 we have assisted them with \$50 of HACCC money that’s a much more realistic measure of what that maintenance job required” (18).*

### Occupational Health and Safety Requirements

Occupational Health and Safety was mentioned by most informants as a responsibility in terms of their sub-contractors and employees. A number of informants raised issues relating to developing, accessing and sharing OH&S information in terms of their duty of care to their builders, subcontractors and handymen.

*“We have monthly meeting and you know the workshop inspections and building assessments...we [put the electrical stuff] in our checklists and then we have the ongoing education about manual handling” (12).*

Whilst most informants did not see the OH&S requirements as problems per se, a few commented on the increased administrative load as the following excerpt illustrates.

*“we have problems keeping it all together from a bookwork point of view, it’s just horrendous...very time consuming and very costly” (13).*

A small number of informants stated that they had recently developed documentation regarding assessment and inspection. However, in a number of cases this information may not be easily generalisable as it is based on local governmental association OH&S guidelines as the following excerpt illustrates.

*“We’ve documented inspections at sites, and set assessment for smaller jobs. We fit in with Council’s OH&S” (09).*

Other sub-themes concerned, variance in legislation regarding occupational health and safety standards between Australian States and the impact of this in terms of outcomes. One informant mentioned the cost of platform lifts in NSW being almost twice as expensive because of conflicting legislative requirements as the following excerpt illustrates.

*“they’re not allowed to install [a water lift] in NSW because it does not meet the work cover requirements”<sup>(11)</sup>.*

### **Modification follow up and maintenance**

Most home modifications coordinators rely on occupational therapists to indicate if, or when there are problems with the modifications after they have been completed. A few, however, indicated that they had taken it upon themselves to follow up on the completed work.

*“[At level one] the ball’s in the OT’s court [if] they want to follow up. With a level two job.. we actually do a post-modification survey”<sup>(26)</sup>.*

There were no indications of any of the informants having any systematic follow up system in place, which is not surprising given the fact that most informants complained of insufficient time. However, the majority of informants indicated that they very rarely if ever received any negative feedback. A few interviewees stated that in the cases where they did return to do further works it was not through complaints regarding earlier modifications but because the client’s needs had changed or they had accepted their needs.

*“Very rarely would we have to go back for something that didn’t work. We often find that the client’s realise that there’s more things they need. We often get clients that deteriorate over a period of time... so every six months you’ll go back and do a little bit more.”<sup>(27)</sup>*

### **Experience with and attitude to electronic data**

In general, it appears that whilst most services have access to a computer and use email the majority do not use the internet as an information gathering tool, So whilst, some informants indicated that they use email extensively as a method for contacting and sharing ideas with other service providers as the following excerpt shows.

*“and in our area we do a lot of contact by emailing”<sup>(12)</sup> and “I do a bit of ordering over the email that what I did with my Tyrex [a step ramp product] stuff”<sup>(02)</sup>.*

Other informants indicated that a number of services had “[no] access to a computer let alone the internet”<sup>(01)</sup>. This situation is probably most true for occupational therapists who are working out of the public health system in regional areas as the HACC program has had a planned roll out of computer infrastructure over the last few years which should cover most Home Modification and Maintenance coordinators.

However, of all the informants we interviewed all appeared to have access to the www, however the majority of informants indicated that they were unfamiliar with online searching, were not ‘computer type people’, had too little time available to search or had very limited knowledge of the www. Whilst a number of services indicated that, they had never used the web to meet their information needs as the following excerpt illustrates:

*“We don’t use the web at all”<sup>(04)</sup> and “[we use the web] very rarely...I’d have to spend hours on there and I’d come up with very little”<sup>(05)</sup> and “I just haven’t had time for searching”<sup>(12)</sup>.*

Consequently, very few informants indicated that they currently use the worldwide web (WWW) for getting information or for provision of information about their services to others. The WWW definition as used within this research refers to the documents of relevance to Home Modification and Maintenance services residing on the Internet (An interconnected system of networks that connects computers around the world via the TCP/IP protocol). The WWW makes accessible information to users via a simple point-and-click system.

Knowledge of available websites of relevance varied enormously. Those identified as being most helpful by service providers included the following:

Centre for Accessible Environments <<http://www.cae.org.uk>>;  
Access Consultants Association of Australia, <<http://www.access.asn.au/>>;  
Australian Building Codes <<http://www.abcb.gov.au/content/products/>>;  
Standards Australia <<http://www.standards.com.au/>>; and  
Independent Living Centre <<http://www.ilcnsw.asn.au>>.

One informant mentioned knowledge of the ANZ Internet site as being helpful for obtaining funding. The only other informant that indicated that the Internet was useful discussed use in the context of product searching. This informant indicated that the Internet version of the yellow pages was the area that they had used most frequently as illustrated in the following excerpt.

*“I use the internet, Yeah, internet yellow pages that’s all...I don’t think I use it enough to answer [about additional web resources needed]”<sup>(10)</sup>.*

However, the use of the internet yellow pages implies that the service coordinator already had sufficient information about the about the particular services being sought within a given regional area in order to be able to look for it by it’s Telstra Internet listing.

Another issue raised by one informant about www development was concern about “going public” with information about HACC policy and Home Modification and Maintenance guides as the belief was that this would make dealing with difficult client more difficult rather than less so.

## Summary of Findings

The perception of informants roles as home modification and maintenance service providers varied and this appeared to be influenced by their introduction to the profession. For example, several level two interviewees who were builders by trade focussed on the technical aspects of the position, whereas many of the level one informant’s, who had come through vocations outside of the construction industry saw themselves primarily as administrators. However, all appreciated that it was a varied and multi-skilled job that provided a useful service to, and link with, the community. Additionally, some clear information gaps became apparent of those considered most critical a short summary follows.

Firstly, the lack of comprehensive and unilateral assessment, design and consumer information guidelines was noted by almost all of the interviewees. Whilst many of the service coordinators that participated in the interviews were managing with the various resources available to them. Having clearer guidelines would permit more efficient operating practices, leaving more time to devote to the operation of the organisation and the like.

Secondly, whilst most of the interviewees stated that they had difficulties locating new or unusual products, it was clear that they were limited in their approach to solving this due mainly to time constraints. As discussed above, most service providers expect that a majority of the product information that they require will be obtained through sales reps and at home mods meetings. Although a majority of the work executed was repetitive and therefore limited product knowledge would suffice, all interviewees indicated that their knowledge had been deficient on occasions. Whilst such occasions were infrequent, when they did occur they appeared to be a problem for less experienced coordinators, although this was alleviated on occasions by an skilled occupational therapist or Regional Technical Officer

Thirdly, whilst most of the service providers were reasonably content with their adaptations of either the Australian Standards or HACCC guidelines, or both, all acknowledged that these methods were flawed and the resulting policies usually required continuous adaptations.

Fourthly, it was noted that the key areas that service providers would appreciate policy advice on included client contribution and payments, operational procedures, contractors and occupational therapists. Regarding funding policies there were four areas which informants felt would benefit from greater standardisation. These included the proportional allocation of money for maintenance and modification; determining a client's ability and willingness to contribute to the scheme; sourcing products and costing the job; and locating supporting

funds from other sources. Unfortunately, leaving each service to create or amend their own policies creates huge differences in their basic operations and the manner in which a job is approached and executed. This is particularly evident in how services determine and recoup client contributions and whilst this can lead to creative problem resolution, the differences are generally not seen as beneficial to the services individually or as a larger organization.

Lastly, the most critically isolated group within the home modifications scheme is the rural services operating at level one. With the tightest budgets, most limited staff resources and long travelling times to client's homes, for which they cannot recover costs, this group exemplifies the difficulties faced and the lack of carry over to the solutions created by larger and wealthier services. Those service providers that formed part of larger HACCC organisations or community association found great support in their position, not only in terms of administrative services, problem resolution, policy and funding advice but also for peer support.

## Implications for the Web-based Clearinghouse

At the beginning of this study, it had been anticipated that web development would be viable and valuable to informants. It is pleasing to find, that the informants we interviewed appeared to confirm this view. Furthermore, it is clear that there is a need for a central place from which information can be cleared and that informants, would value such a centralized one stop shop approach. Unfortunately, expectations are high as the following excerpt illustrates.

*“Instead of 91 odd services over NSW trying to find one thing they just go to the clearinghouse and it has already been sourced, the supplier and the information directly. That would be fantastic as far as these peripheral products go”<sup>(04)</sup>.*

More work needs to go into promoting existing services, especially given the high expectations of service coordinators regarding better targeted and more accessible product sourcing, in combination with the fact that existing product sourcing services appear to be underutilized. For instance, the Independent Living Centre’s on-line product database service may benefit from a more targeted marketing approach and or the development of better on-line training and feedback forms directed toward assisting Home Modification and Maintenance services to more appropriately utilize and contribute to it. Consequently, it will be critically important to work in partnership with the Independent Living Centre to ensure that no duplication of service occurs.

Whilst, access to list serves, best practice cases, guidelines, consumer information and links to other governmental and international resources would be warmly welcomed. It is critical that the users are committed and involved in the process in order for it to be successful. Thus, it appears that the best predictors of project success will be a commitment to usability testing; plain language; usable indexing; and clearing of information that is unique, current and highly valued by Home Modification and Maintenance services.

Nevertheless, the general lack of familiarity with the Internet will mean that actively promoting the web site, provision of on-line training and ease of access to the resources made available on the web site will be critical to overall project success.

There is currently, no central framework for the creation of a coordinated but flexible delivery of information services for Home Modification and Maintenance service providers. The existing divisions of responsibility’s and lack of harmonisation between regional programs, creates difficulties in efficient and equitable information service provision. Networks are still primarily based on regionally based cooperative efforts that vary in their effectiveness. Cost shifting and inefficiency arise because of a lack of attention to cross-policy integration strategies. This lack of integration has served to undermine linkages between various funding agencies. The two most critical of these funders in the context of Home Modification and Maintenance Services are HACC and the Department of Veterans Affairs. Consequently, agreements need to be strategically negotiated to ensure clear articulation of key principles and harmonisation of those principles across programs particularly as it relates to information needs.

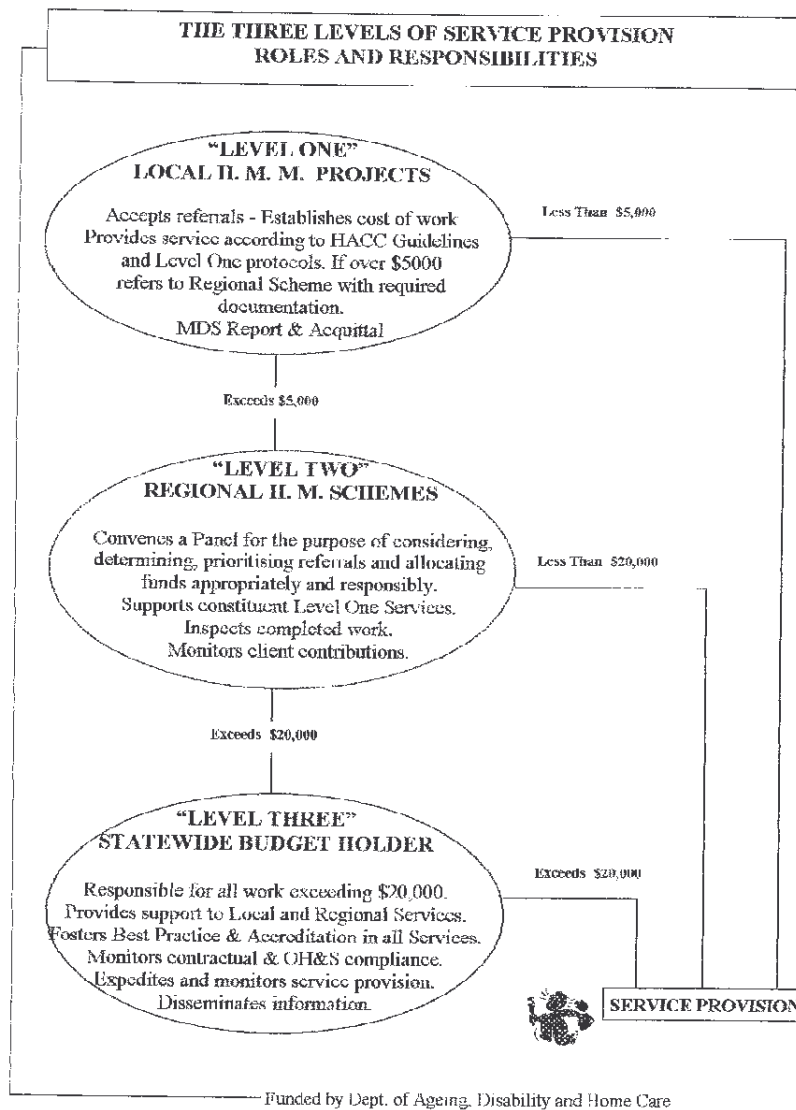
Clearly more work needs to be undertaken within NSW to better understand how bodies such as Standards, Planning NSW, DADHC and Veterans Affairs could be brought together and assisted to undertake a closer examination of how various policy and procedures might be better standardised and harmonised.

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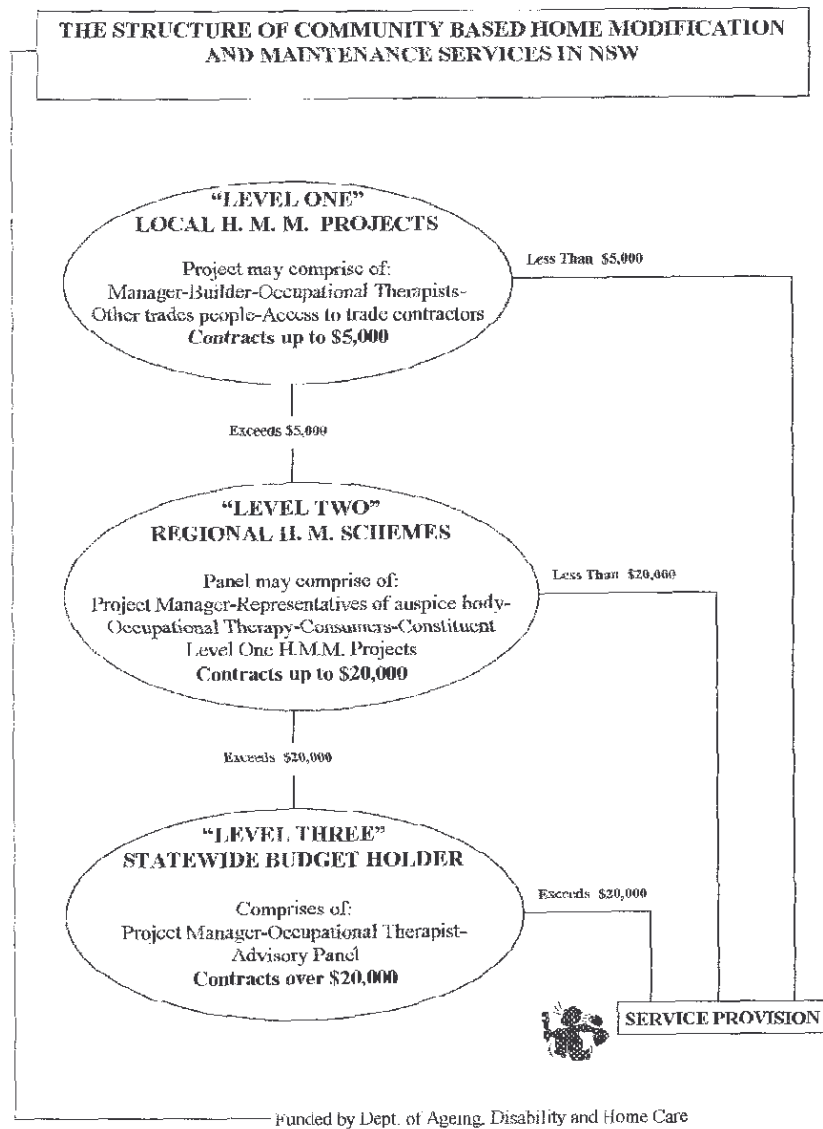
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# Appendix A: Roles and Responsibilities of Home Modification and Maintenance Services at differing levels within NSW



Statewide’s model of the roles and responsibilities of service provision (Meldrum, 2002)

## Appendix B: Managerial and structural description of the Home Modification and Maintenance Levels of Service within NSW



Statewide's description of the managerial structures of service provision (Meldrum, 2002)

## Appendix C: Home Modification and Maintenance Service Interviews - Geographical variable sampling frame

	Metropolitan	Regional
<b>Level 1/2</b>	Fusion HMMS Manly Warringah/Pittwater HMMS Ryde Hunters Hill HMMS Fairfield HMMS Liverpool HMMS Macarthur HMMS St George HMMS Sutherland Shire HMMS Inc Wesley HMMS	Kurri Homework HMMS Home Modifications Lake Macq/Newcastle Port Stephens HMMS Inc Wyong HMS Coffs Harbour HMMS Goori HMMS Great Lakes HMS Lismore HMMS Macleay HMMS Mid Richmond NC HACC Flexi Service Nambucca/Bellingen HMMS Bega Valley HMM Project Queanbeyan HMMS Bathurst HMMS Cowra HMMS Griffith HMMS Narrandera HMMS Orange HMMS
<b>Level 3</b>	N/A	Statewide HMMS

## Appendix D: Home Modification and Maintenance Service Interviews - letter of Invitation



**The University of Sydney**  
Faculties of Health Sciences and Architecture

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### Home Modification: Information Clearing House Project

Dear

The Ageing, Disability and Home Care Department of NSW and the University of Sydney would like to invite you to discuss your information needs and priorities as a part of the preliminary work being undertaken to establish a Home Modification Information Clearing House.

Older people and people with disabilities and their carers are living in homes that are inappropriate for their needs. Not only is this a large problem today, it is also a problem that is increasing as the number of older households and households of people with mobility restrictions increase in NSW.

The collation of interview findings from a range of service providers, industry and consumer advocates will be used to inform the design and contents of an information clearing house. This collaborative action based approach is we believe the best means to ensure that stakeholders needs are appropriately identified and prioritised.

As a key stakeholder you may wish to contribute. Consequently, we want to explore your perspectives on a number of issues concerning Home Modification information needs, policies and services. We can do this in person or by telephone (whichever is more convenient to you) and anticipate that the interview will take no more than 60 minutes of your time. Following notification of your interest in this project we will contact you to confirm your preferences, so that a visit or telephone interview can be arranged at a time most convenient to you. With your written consent, we will audiotape the interview so that you can later verify the key themes and priorities that emerge.

If you are interested in contributing to this important project we would ask that you complete the attached forms, and reply in writing to Ms Catherine Bridge at the address given below. If you have any queries regarding the project, please do not hesitate to contact Ms Catherine Bridge or Dr Peter Phibbs (the Chief Project Investigators)

We look forward to your response and contribution to this exciting project.

Yours faithfully

Catherine Bridge  
Chief Investigator.

For further information about the HMM information clearinghouse project please contact Catherine Bridge (Chief Investigator) on (02) 9351 9376.

Any person with concerns or complaints about the conduct of a research study should contact the Manager for Ethics Administration on (02) 9351 4811

**Email:** [C.Bridge@fhs.usyd.edu.au](mailto:C.Bridge@fhs.usyd.edu.au)  
**Faculty of Health Sciences,**  
**The University of Sydney**  
**Cumberland Campus**  
**PO Box 170, Lidcombe, NSW, 1825**

## Appendix E: Home Modification Service Interviews - Consent form



The University of Sydney  
Faculties of Health Sciences and Architecture

### Home Modification: Information Clearing House Project

#### CONSENT FORM

Please take as much time as you wish to consider participating in this study before you sign.

Feel free to contact the project investigator (details below) to ask any questions on aspects of this study that are not clear.

**In no way should you feel obliged to participate in this study.**

I

\_\_\_\_\_ have read and understood the  
Name (please print)

'Subject Information Statement' and letter inviting me to participate in the above research project, and have chosen to participate in the study.

I am aware of what is involved in the study and understand that I may withdraw at anytime.

I agree/disagree to the interview being audiotaped (Please indicate your preference by crossing out the response that is not applicable).

I also understand that for the purposes of this study my identity will remain confidential.

My signature indicates that I have received a copy and agreed to this consent form.

\_\_\_\_\_  
\_/\_/\_/\_\_\_\_


(Signature of participant)

(Date)

\_\_\_\_\_  
\_/\_/\_/\_\_\_\_

(Signature of witness)

(Date)



Authored by C. Bridge & K. Martindale for the Home Modification Clearinghouse

For further information about the HMM information clearinghouse project please contact Catherine Bridge (Chief Investigator) on (02) 9351 9376.

**Email:** [C.Bridge@fhs.usyd.edu.au](mailto:C.Bridge@fhs.usyd.edu.au)

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# Appendix F: Home Modification Service Interviews - Subject Information Statement



The University of Sydney  
Faculties of Health Sciences and Architecture

## Home Modification: Information Clearing House Project

### Semi-structured Interview Questions

No specific questions will be used, instead you are invited to give your perspectives on key topics including the impact and significance of **perceived need in regard to:**

#### Home Modification information availability within NSW

We are particularly interested in which of the following areas you believe is most significant and your rationale for thinking this. Please consider this in the context of current information availability across NSW, particularly considering geographical variance across urban, metropolitan, rural and remote regions of NSW.

**For instance, how might you find out about or consider the following areas in terms of both assessment and intervention:**

- *Spatial requirements (i.e. walkers, wheelchairs, scooters, ambulance trolleys, canes, traymobiles etc.)*
- *Carer requirements (i.e. carer accommodations, occupational health and safety regulations etc.)*
- *Product requirements (i.e. policy and procedure manuals, independent living centre equipment data base, building supply catalogues etc)*
- *Requirements for community inclusion (translation into accessible formats, strategies and process etc.)*
- *Requirements for meeting standards of care (policy and procedure manuals, how to guidelines etc.)*
- *Disability access components (ramps, lifts, doors, floor treatments, sanitary facilities, thermostatic mixer valves etc.)*
- *Funding policy (assistance for purchasing or loan of equipment etc.)*
- *Building and Land Regulation (access standards, human rights and equal opportunity guidelines, building approval guidelines etc.)*
- *Natural environment (terrain, altitude, weather and air quality, light, sound etc)*
- *Built environment (structural stability, age, health etc.)*
- *Other*

**The data gathered from the 'stakeholder' interviews will provide a basis to consider the implications of web site design initiatives being undertaken as part of the establishment of a Home Modification Clearing House at the University of Sydney.**