

Final Report

The role of home maintenance and modification services in achieving health, community care and housing outcomes in later life

authored by

Andrew Jones, Desleigh de Jonge and Rhonda Phillips

for the

Australian Housing and Urban Research Institute

Queensland Research Centre

November 2008

AHURI Final Report No. 123

ISSN: 1834-7223 ISBN: 1 921201 29 0



ACKNOWLEDGEMENTS

This material was produced with funding from the Australian Government and the Australian States and Territories. AHURI Ltd gratefully acknowledges the financial and other support it has received from the Australian, State and Territory governments, without which this work would not have been possible.

AHURI comprises a network of twelve universities clustered into seven Research Centres across Australia. Research Centre contributions, both financial and in-kind, have made the completion of this report possible.

This research has been a collaborative process with all three authors contributing extensively to the research process and the final report. Desleigh de Jonge took major responsibility for the literature review that is summarised in chapters 2 and 3 and for the consumer study reported in chapter 6. Rhonda Phillips was responsible for the overview of HMM services reported in chapter 4 and the study of the perspectives of service providers reported in chapter 5. Andrew Jones was responsible with the other authors for overall conceptualisation of the study, the integration and editing of the final report, and in the drawing together of research and policy implications.

The authors wish to thanks Magdeline Chung, Natasha Layton and Patrick Page for their assistance with the consumer interviewing, and Danielle Ramsden and Joleen Tirendi for their assistance in organising the focus groups. Danielle Ramsden also provided valuable assistance with the NVivo coding for the focus groups.

The authors wish to thank the many service providers who assisted with this study either through provision of information or participation in focus groups. We also wish to thank the thirty consumers who agreed to be interviewed for this study.

DISCLAIMER

AHURI Ltd is an independent, non-political body which has supported this project as part of its programme of research into housing and urban development, which it hopes will be of value to policy-makers, researchers, industry and communities. The opinions in this publication reflect the views of the authors and do not necessarily reflect those of AHURI Ltd, its Board or its funding organisations. No responsibility is accepted by AHURI Ltd or its Board or its funders for the accuracy or omission of any statement, opinion, advice or information in this publication.

AHURI FINAL REPORT SERIES

AHURI Final Reports is a refereed series presenting the results of original research to a diverse readership of policy makers, researchers and practitioners.

PEER REVIEW STATEMENT

An objective assessment of all reports published in the AHURI Final Report Series by carefully selected experts in the field ensures that material of the highest quality is published. The AHURI Final Report Series employs a double-blind peer review of the full Final Report – where anonymity is strictly observed between authors and referees.

CONTENTS

CO	NTENT	S	II	
LIS	T OF T	ABLES	V	
ACI	RONYN	1S	.VI	
EXE	ECUTIV	E SUMMARY	1	
Res	earch a	aims	1	
Pro	Program contexts			
Res	earch r	nethods	2	
Key	finding	S	3	
Poli	cy impl	ications	5	
Res	earch i	mplications	6	
Cor	clusion	·	7	
1	INTRO	DUCTION	8	
1.1	Aim ar	nd context	8	
1.2	Scope	and methods	9	
1.3	Overvi	ew	10	
2	DEFIN	ING AND CONTEXTUALISING HMM	12	
2.1	Introdu	iction	12	
2.2	Definir	ng HMM	12	
2.3	Contex	tualising HMM		
	2.3.1	The health perspective	14	
	2.3.2	The community care perspective	16	
	2.3.3	The housing perspective	19	
2.4	Conclu	isions	23	
3	AN AN	ALYTICAL FRAMEWORK	25	
3.1	Introdu	iction	25	
3.2	Need a	and demand	25	
3.3	Servic	e organisation and provision	31	
3.4	Client	outcomes	39	
3.5	Societ	al outcomes	42	
3.6	Conclu	isions	45	
4	HMM S	SERVICES IN AUSTRALIA	47	
4.1	Introdu	iction	47	
4.2	The m	ain programs	47	
		Community care		
	4.2.2	Housing	50	
	4.2.3	Health	52	
	4.2.4	DVA	53	
4.3	3 Characteristics of Australian HMM services55			
	Conclusions62			
5	THE S	ERVICE PROVIDER PERSPECTIVE	64	

5.1	Introduction					
5.2	Methodology					
5.3	Consumer access					
5.4	Assessing consumer needs					
5.5	Delivery of services					
5.6	Consu	mer outcomes	77			
5.7	Servic	e organisation issues				
5.8	Summ	ary and conclusions	95			
6	THE C		99			
6.1	Introdu	uction				
6.2	Metho	ds				
6.3	Older	people and their homes	100			
6.4	Reluct	ance to move	102			
6.5	Difficu	Ities experienced in the home	103			
6.6	Manag	ging difficulties	105			
6.7	Acces	sing HMM support and services	108			
6.8	Experi	ence of services	110			
6.9	Consu	mer evaluations of the services	114			
6.10	C	Outcomes of using HMM services	118			
6.1	1	Summary and conclusions	122			
7		ISSION AND IMPLICATIONS				
7.1	Introdu	uction	123			
7.2	Discus	ssion				
	7.2.1	Definition of HMM	124			
	7.2.2	Need and demand	124			
	7.2.3	Service organisation	128			
	7.2.4	Service provision	133			
	7.2.5	Service outcomes	141			
7.3	Implica	ations for policy and research	143			
7.4	Conclu	usion	147			
REI	FEREN	CES	148			
API	PENDI	CES	158			
Арр	Appendix 1: Service provider focus group interview questions					
	Introdu	uction	158			
	Need	and demand	158			
	Service system159					
	Consumer outcomes					
Арр	opendix 2: Focus group participants160					
Арр	opendix 3: Consumer interview questions					
	Experi	ence of home	161			
	Need		161			

Kı	nowledge	161
E	xperience	162
0	utcomes	164
Ba	arriers	165
Appen	ndix 4: Characteristics of consumers interviewed	166

ACRONYMS

AARP	American Association of Retired Persons
ABS	Australian Bureau of Statistics
ACT	Australian Capital Territory
AHS	American Housing Survey
AHURI	Australian Housing and Urban Research Institute
ALSA	Australian Longitudinal Study of Ageing
CACP	Community Aged Care Packages
DACS	Disability, Aging and Carer Survey
DOH	Department of Housing
DOHA	Department of Health and Ageing
DOHAC	Department of Health and Aged Care
DVA	Department of Veterans' Affairs
EACH	Extended Aged Care at Home
HACC	Home and Community Care
HAS	Home Assist Secure
HMM	Home maintenance and modification
ILC	Independent Living Centre
NSW	New South Wales
NT	Northern Territory
RAP	Rehabilitation Appliances Program
QLD	Queensland
SA	South Australia
SHAs	State and territory housing authorities
TAS	Tasmania
UK	United Kingdom
USA	United States of America
VHC	Veterans' Home Care
VIC	Victoria
VHML	Veterans' Home Maintenance Line
WA	Western Australia

EXECUTIVE SUMMARY

Research aims

This research project has two broad aims, one focused on research and the other on policy. The first is to establish the foundations for a more extensive evidence base to underpin policies to provide home maintenance and modification (HMM) services to older Australians. The second is to use current research, including the international research literature and the findings of this study, to critically analyse current policy settings and consider alternatives.

HMM services have not been especially clearly defined or delineated in the Australian context. In this report they are defined precisely as 'services designed to maintain or modify the dwellings of people in later life in order to enhance their safety, independence, identity and lifestyle' (chapter 2). There are four main service types: structural modifications, non-structural modifications, repairs and improvements and ongoing maintenance. The specific interventions encompassed by the term 'HMM' are shown in Table 2, classified by their main goal and service type. A distinguishing feature of HMM services is that they are located at the intersection of health, community care and housing services and policies. HMM services are shaped by perspectives that derive from these policy and professional traditions. Much of the dialogue concerning HMM policies and services can be understood as a conversation among these competing and complementary traditions (chapter 2).

HMM services have been extensively analysed and discussed in the international policy, research and professional literature. There is a large body of academic and policy research, mainly originating in the USA and the UK, concerning the role of HMM services in achieving safety, independence and lifestyle outcomes for older people. This literature addresses three main sets of issues: the nature and extent of the need and demand for HMM services in the older population; the organisation and provision of HMM services; and the outcomes of HMM services for consumers and society. The international literature is reviewed in chapter 3 under these headings. This literature, although somewhat patchy and unsystematic, raises many issues of relevance to HMM policy and practice in Australia and indicates many potentially fruitful lines of research that could be pursued in the Australian context.

The literature on Australian HMM policies and services is extremely sparse, reflecting the overall lack of a public identity of HMM services in Australia. Current service arrangements have a history of some two decades, but no systematic research evidence base to underpin policy development has emerged during this time. The extent of need and demand for HMM services is largely unexplored territory. Prior to the current study there was no systematic description of HMM services in Australia, let alone a critical literature addressing issues of service organisation and provision. Apart from a handful of highly focused studies, there is also no literature on the outcomes or cost-effectiveness of HMM provision in Australia. The first purpose of this study is to begin to address this lack of research. The second is to demonstrate how even a limited evidence base can be used to generate policy analysis and policy alternatives.

Program contexts

The main context for the development of HMM services in Australia has been the Home and Community Care program (HACC), the joint program of the Australian Government and the states and territories designed to provide a wide range of home and community-based aged care services to Australia's older people. Since the

beginnings of the HACC program in the 1980s, home maintenance and home modification have been viewed as two of the many service types that can be provided through the HACC program. Under the HACC program the priority given to various service types can differ considerably from state to state, as have the organisational arrangements for service provision. One consequence has been that HACC-funded HMM services differ markedly from state to state both in their level of provision and the service structure.

HMM services have also developed outside the HACC program, although in an incremental and somewhat haphazard manner. This has resulted in the complex patchwork of HMM services described in chapter 4 and summarised in Table 5. The main non-HACC HMM programs that are common to most states and territories can be briefly described. State and territory housing authorities provide HMM services for social housing tenants, although the level of investment in provision varies considerably. Four state housing authorities also provide loans to older people wishing to undertake home modifications. The Department of Veterans' Affairs (DVA) provides a number of HMM programs across the country for veterans and their families. Several state and territory equipment and aids programs provide funding for non-structural modifications for older people. State and territory community health centres and hospitals also support HMM services in the context of hospital discharge programs, falls prevention programs and programs supporting older people with chronic illnesses in the community. However, it is difficult to get precise and comprehensive information on the level and nature of health services' involvement in and funding of HMM services.

In addition to these programs, some states have developed unique HMM or HMMrelated services or programs. There are four that are of particular interest. The most extensive is the Queensland Government's Home Assist Secure (HAS) program that funds a network of 41 services providing home maintenance, repair and non-structural modifications to 50 000 consumers annually across the state. Perhaps the most innovative is the Victorian Government's funding of the building advisory service (Archicentre) of the Victorian Chapter of the Royal Institute of Architects to provide free home inspections to older people and people with disabilities, including recommendations on maintenance, repairs and modifications. The NSW State Government supports a State Council to provide coordination and advocacy for HMM providers and a Research and Resource Centre located at the University of Sydney. In Queensland the Smart Housing and Home Access initiatives provide information on access and building issues for home-building professionals, developers, real estate agents and consumers.

This potpourri of services provides the context for the contemporary consideration of HMM policy and research. It is best understood as a series of program contexts rather than as a policy context. In fact, there are no HMM policies at Commonwealth or state and territory government levels, with the partial exception of Queensland. Rather, there are a series of programs—programs in search of policies.

Research methods

In order to develop a systematic research and policy analysis of HMM in Australia, a multi-method approach was chosen. Firstly, the international literature was identified, reviewed, classified and described. This provided the basis for the definition of the HMM services presented and discussed in chapter 2 and the analytical framework set out in chapter 3. Secondly, the organisation and provision of HMM services in Australia was described, drawing on a wide range of documentary and web-based sources and a number of key informants from the various states and territories.

Developing the overview of HMM services presented in chapter 4 was a complex task that had not been previously undertaken with this level of detail.

Thirdly, a series of focus groups was held in all states and the Australian Capital Territory (ACT) involving 92 HMM service providers. The range of sectors, programs and roles represented in the focus groups is shown in appendix 2. The focus groups were designed to elicit service provider perspectives on the organisation and provision of HMM services across Australia, as well as to verify and expand on the descriptive overview of services in chapter 4. The service provider perspective is reported in chapter 5. Fourthly, 30 semi-structured consumer interviews were conducted in three states with older people who had received HMM services during the previous six months. The purpose of these interviews was to develop a greater in-depth understanding of the needs of consumers, their experience of HMM services and their perceptions of the outcomes of using HMM services. The consumer perspective is reported in chapter 6.

The findings of each of these sub-studies are summarised in the final section of each of the relevant chapters. In chapter 7 the aggregate findings of the study are discussed using the needs-services-outcomes framework developed in chapter 3. The final chapter also considers the policy implications of the study findings, proposing that, if HMM services are to make a sustained contribution to health, community care and housing policies for older people, a more rigorous policy framework will be required.

While the study achieves its goal of providing a foundation for further research on HMM in Australia, its limitations must be noted. The overview of services was designed to provide a broad picture of HMM services in Australia. It did not include detailed analyses or evaluations of particular programs or organisations. The service provider study was limited to the perceptions of those who participated in the focus groups. No systematic attempt was made to verify their perceptions. In the consumer study, efforts were made to ensure that a wide diversity of consumers were included amongst those interviewed. However, this is not a representative sample of the consumers of HMM services in Australia, and older people unable to access HMM services were not included in the study. While the evidence assembled and created in this study provides a sound base for the discussion of policy implications and alternatives, a key message of the report is that more detailed research is required to create a robust evidence base for HMM policy and provision.

Key findings

There are two key findings from this study. The first is that Australia lacks a systematic approach to the organisation of HMM services and that this is impacting negatively on our overall capacity to provide HMM services to older Australians. The second is that, despite these shortcomings, the older people who have used HMM services value them very highly.

Over the past twenty years many organisations and programs have been funded to provide HMM services and these organisations have developed considerable expertise in HMM provision and are well regarded by their consumers. However, the overall organisation of services has a number of shortcomings. There are no explicit policy goals, no benchmarks for levels of service provision, and great disparities in the level of service provision across the country. HMM services have a somewhat low-key identity in some parts of the country and linkages with the health system are underdeveloped. There are shortfalls of professional and technical expertise across the sector and no sector-wide information systems. The system as a whole appears to be significantly underfunded, although this is difficult to verify, given the lack of clarity around policy objectives and the absence of benchmarks for levels of service provision.

The shortcomings of service organisation create difficulties at all stages of service provision, including access to services, assessment of consumers, the actual delivery of services and review and evaluation. The main difficulties identified in the study include:

- $\rightarrow\,$ a lack of awareness of HMM services by many older people and the community generally
- → the uneven and sometimes poor quality of referral processes to HMM services, especially from hospitals, other health services and general medical practitioners
- → consumer perceptions of inequity of eligibility and subsidy arrangements
- \rightarrow the affordability of the services and the deterrent impact of user charges
- → those experienced by private renters due to the reluctance of HMM providers to invest in modifications and opposition from landlords
- → insufficient occupational therapists or other suitably trained professionals to undertake assessments for home modifications
- → delays in home modifications as a result of the lack of funding and/or the lack of skilled personnel
- → overall lack of funding for services resulting in the dilution of services and delays
- → problems in provision of services due to an increasingly complex and demanding regulatory environment.

While there are clearly issues that need to be addressed in the organisation and delivery of services, the consumer study found that consumer satisfaction with HMM services is high. Most consumers reported that:

- → they had a strong preference for continuing to live in their current home and that HMM services had significantly assisted them in staying put
- → they received some assistance with HMM tasks from their families, but they were reluctant to rely too heavily on busy family members and sometimes the assistance provided by family members was unreliable, delayed, or of poor quality
- → they had come to rely heavily on the local HMM service for information and advice on HMM issues, and a trusted, reliable and familiar service was highly valued
- → the HMM service effectively planned and coordinated the work
- → work was undertaken in a timely way, with significant delays and disruptions only experienced with major modifications
- → they were happy with the level of information they were provided about work proposed by HMM providers, and felt they had ample opportunity to have input into the provision of services
- → service providers were friendly, polite and reliable, and using the service gave them peace of mind
- → the cost of services a problem and there was support for increasing the capacity of services by providing more funding and staffing
- → they had had positive outcomes from access to HMM services, including greater independence, improved ease of undertaking tasks, heightened confidence and sense of safety, greater security, prevention of accidents and increased sense of wellbeing.

Policy implications

The central message of this report is that there is a strong case for reconsidering the current approach to the organisation of home maintenance and modification services for older Australians. HMM services are highly valued by older people, but the complex patchwork of programs and organisations that has developed incrementally over the past two decades is an inadequate platform for the development of HMM policies and services to meet the needs of the expanding population of older Australians.

One way of addressing this issue is to fundamentally rethink and re-engineer HMM policy. A new vision of HMM services would see these services as an important element of a national approach to ensuring that the housing of older Australians is suited to their changing needs and circumstances. From this perspective, HMM could be viewed as a housing program designed to achieve both shelter and non-shelter outcomes. It would comprise a national program with a set of objectives for housing, health and community care outcomes, linked to a national strategy for housing older people and whole-of-government ageing policy. It would involve a collaborative approach to policy and service provision between the two levels of government, with lead agency responsibility at state and territory levels resting with housing departments, and with close policy and operational links to health and community care departments and programs. Within each state there would be a network of local and regional HMM organisations responsible for the local provision of HMM services, linked to wider advice, information and referral services. These organisations could be responsible for HMM services funded by HACC, DVA and health organisations as well as services provided through the new national program. Service provision arrangements may vary from place to place but would address the issues of access, assessment, delivery and review raised in this report. There would be national benchmarks for levels of provision of services, terms of eligibility and user charges, and professional and technical expertise development. The new service arrangements would build on existing services and seek to incorporate some of their best features.

Based on the findings of this report, a strong case can be made for restructuring HMM services in this way. This would be the first major change to the structure of provision of HMM services since the beginning of the HACC program in the 1980s. However, if such a broad re-engineering of HMM is not feasible; numerous specific issues should be addressed in the existing service system at national, state and local levels. The key issues identified in this report are:

- → Objectives. There is a case for clearer articulation of the desired health, community care and housing outcomes of HMM services, with links drawn between these outcomes and provision of services
- → Information and awareness. There is a need for improved public awareness of HMM services and the range of services they can contribute to the wellbeing of older people
- → Referrals. Improved linkages at the local level between hospitals and primary healthcare providers, such as general medical practitioners, and HMM services are required in some places
- → Eligibility, priority and user charges. Improved information on the rationale for eligibility, priority and charging decisions appears to be required, and there may be a case for greater standardisation
- → Assessment services. An improved capacity for making assessment of HMM requirements, especially with respect to major modifications, is needed

- → Benchmarks. The level of provision of all types of HMM services varies widely from place to place and there are no benchmarks for levels of providing HMM services to older people. There appear to be shortfalls of most types of HMM services in most places, suggesting the need for significantly higher levels of funding of HMM services
- → Services beyond HACC. Other than the HAS program in Queensland, services to public housing tenants and veterans and their families, and some specific services in other states, no publicly funded HMM services are available to older Australians not eligible for HACC services. Consideration needs to be given to extending HMM services to the wider group of older Australians
- → Professional and technical expertise. There appears to be a major shortfall in the availability of occupational therapists and builders with expertise in HMM
- → Impact of regulation. The delivery of HMM services is hampered by the cumulative impact of numerous building, health, disability and legal requirements. There is a need for HMM organisations to collectively address the issues involved
- → Service provision data. Steps should be taken to find better ways to measure levels of provision of HMM services, starting with standardising definitions of service types. Ideally, data would be drawn from all HMM programs so that a national picture of HMM provision could be provided.

Research implications

While these policy implications are well supported by the research evidence presented in this report, a strong case can be made for further development of the research evidence base to underpin HMM policies and services in Australia. Building on the foundation of this report and the small number of other Australian studies pertaining to HMM policy, six areas for further research can be identified. These are:

- → Need and demand. The level and nature of current and anticipated need and demand for HMM services in Australia is largely unknown. A national survey of the housing circumstances of older people, including a strong focus on HMM issues, may be required to provide a strong foundation for evidence-based policy
- → Evaluation of key initiatives. One advantage of the incremental policy approach of the past two decades is that there has been a number of different approaches to HMM provision that should now be evaluated with a view to policy and program development
- → Pilot projects. Given the importance of a creative, innovative and outcome-driven approach to HMM provision, sponsorship of a number of pilot projects with a strong research component would provide much-needed data on the potential of HMM services to achieve particular health, community care or housing outcomes
- → Practice. A close examination of the actual practices of Australian HMM providers, designed to understand the factors impacting on the provision of services and outcomes, would significantly strengthen the evidence base
- → Labour market. Labour market issues, especially the supply of occupational therapists, architects and building tradespeople with expertise in HMM have been identified in this report as factors constraining the development of HMM provision in Australia. Studies of the factors impacting on this supply and the strategies that have been effective in addressing supply problems are required
- → Outcome and cost-effectiveness studies. Most importantly, there is a need for studies that examine the safety, independence and lifestyle outcomes of HMM and related services. Studies that examine the cost of services, relate these to

subjective and objective measures of outcomes over time, and make comparisons with the costs and benefits of alternatives such as hospitalisation and other forms of aged care provision are needed to provide a comprehensive evidence base to address the HMM issues raised in this report.

Conclusion

The potential role of home maintenance and modification services to achieve health, community care and housing outcomes for older Australians is yet to be realised. This report provides a research foundation for a wide-ranging policy discussion concerning HMM policy, provision and research. This discussion should locate HMM policies in the wider dialogue concerning the housing choices available to older Australians. The provision of HMM services is one component of a repertoire of policies that Commonwealth, state and territory governments might undertake to expand these choices. An explicit, comprehensive and effective approach to housing older people is fundamental to policies designed to meet the challenges of an ageing population, and HMM services are an important part of that approach.

1 INTRODUCTION

1.1 Aim and context

The aim of this report is to provide a theoretical and empirical research foundation for understanding the role of HMM services in achieving health, community care and housing outcomes in later life, and for developing more effective public policies relating to provision of these services. The project is predicated on a concern that the potential of HMM services to address the health, care and housing needs of older Australians is yet to be realised, and that this is an under-researched area of policy and service provision. The project aims to develop an approach to understanding HMM services in Australia that transcends particular service systems and that looks holistically at the role of HMM in improving the wellbeing of later-life Australians.

Public provision of HMM services for older people in Australia has developed in the context of health, community care and housing policies and services since the mid-1980s. The main source of provision is the HACC program, but services are also provided through the Australian Government DVA, state and territory housing authorities, and some hospital and health services. Provision of HMM takes a number of forms including information, assessment, advice and referral; direct provision of HMM and grant and loan services. Programs promoting universal and accessible housing design have similar purposes to HMM, but are not defined in this report as part of the HMM service system (de Jonge, Ainsworth & Tanner, 2006). The focus of this report is HMM services that have been developed under public auspices in the state and community sector. However, HMM services for people in later life are widely provided through the market sector, and the potential for a more integrated approach to HMM involving the state, community and market sectors is a key issue.

While the number of HMM programs around Australia has increased steadily over recent decades, the public policy framework for provision of these services is underdeveloped and the research evidence base for policy and service development is sparse. Linkages between the current array of programs and wider objectives of ageing policy, such as 'ageing in place' and facilitating housing adjustments in later life are not well articulated. A systematic policy approach requires a theoretical and empirical understanding of the linkages between older persons' housing needs, the provision of HMM services, and key outcomes for individual and social wellbeing. These links have not been explored in depth in the Australian context. We have only limited data on current and future need and demand; the distribution, range and types of services; outcomes for consumers; and impacts on demand for other services, including health services and residential aged care.

From a policy perspective, there are two imperatives for examination of this area. The first is to assess the role of HMM in service provision for Australia's ageing population. Is investment in HMM an efficient and effective means of managing the social and economic challenges associated with population ageing in Australia? The second is to examine the role of HMM services in achieving health, community care and housing outcomes for Australians in later life. What contribution can HMM services make to the safety, independence, and lifestyles of older Australians? On this point, HMM services have been viewed as relatively minor parts of the health, community care and housing systems for older Australians. This report examines the issues associated with viewing HMM from a more holistic perspective. Given the anticipated rapid growth of older people, what roles can HMM play in managing population ageing and enhancing the wellbeing of older people?

1.2 Scope and methods

The starting point for this research is the underdeveloped state of the research evidence base for HMM policy and service provision in Australia (de Jonge, Ainsworth and Tanner 2006). While there is an extensive international literature on HMM, which was summarised in the positioning paper for this study (Jones, de Jonge & Phillips, 2008), this material appears to have had limited impact in Australia. The main Australian research to date comprises analyses of service provision and consumer satisfaction data relating to services provided through the HACC program, some overall data on the need for HMM services, some research on falls, and a small number of evaluations of HMM programs (this material is reviewed in Jones, de Jonge & Phillips, 2008, chapter 5). No comprehensive research synthesis of Australian findings is available, nor is there an overall theoretical framework to underpin a systematic program of research.

This report addresses this lack of a research base for HMM in Australia in four ways.

Firstly, the report provides an analytical framework to guide and shape Australian research on HMM. This analytical framework is based on an extensive review of the international policy and research literature on HMM covering the past ten years. This review was based on a systematic search of the University of Queensland library catalogue, web-sources and databases: Social Services Abstracts, Sociological Abstracts, Medline, Rehabilitation and Physical Medicine, Allied and Complementary Medicine Database, Australian Public Affairs Information Service (APAIS) and Family and Society Plus. This review also included data pertaining to HMM produced by the Australian Bureau of Statistics (ABS) and the Australian Institute of Health and Welfare (AIHW), including program data from the HACC program. In addition to the review of literature dealing specifically with HMM, a review was undertaken of the literature on ageing policy in Australia, to enable links to be drawn between HMM service provision and this wider policy context.

The findings of this review were presented in detail in chapters 2, 3 and 5 of the positioning paper for this study. They appear in this final report in an amended form in chapters 2 and 3. In chapter 2 a definition and conceptualisation of HMM is presented that delineates this service field, the range of services that it encompasses and the outcomes that it seeks to achieve. This conceptualisation is based on the international literature and draws on health, community care and housing approaches to HMM.

In chapter 3 the key issues for research and policy in HMM are identified and an analytical framework developed. The review of the international literature, together with the preliminary analysis of the Australian context, indicates that there are four key sets of issues to be addressed: the nature and level of need and demand for HMM services; the form, availability and quality of HMM services; the impact of HMM services on client outcomes; and their impact on societal outcomes. The ways that these issues have been approached in the international literature, and relevant findings, are reviewed. Collectively, they provide the analytical framework that has been used to shape the investigations that comprise this study and that can be used as a foundation for further research.

Secondly, the report provides a themed description and overview of HMM services in Australia. A systematic review was undertaken of government and community agency websites to identify relevant policies, agency and program plans, program documentation, program data, evaluation reports and consumer information resources. Face-to-face and telephone interviews were conducted with approximately ten key informants and information was provided by email by a further ten key informants. A preliminary report based on these investigations was presented in the

positioning paper, chapter 4. This provided a broad overview of the main components of the service system, and the pattern of service provision in each of the states and territories.

The overview of HMM services presented in chapter 4 of this final report is based on the data gathered for the positioning paper, supplemented by further information obtained during the latter half of the study as a consequence of visits to each of the states and territories to conduct focus groups. The overview is in two parts. The first part describes the main HMM programs provided through community care, housing and health organisations and programs, and through the DVA. The second part summarises the main characteristics of the organisation of Australian HMM services and draws attention to important and innovative practices and services in particular states and territories that could be considered for wider application.

Thirdly, the report presents the findings of a study of the perspectives of HMM service providers concerning the adequacy, appropriateness and effectiveness of HMM services (chapter 5). Focus groups with service providers were conducted in each state and territory (details of methodology can be found in chapter 5). The views expressed by service providers cover issues of client access to services; client needs and need assessment processes; delivery of services; client outcomes; and service system issues. These findings provide insights into the issues associated with HMM services and policy, and suggestions for further development of HMM services.

Fourthly, the report presents the findings of a study of the perspectives of HMM consumers concerning their experiences of HMM services, based on thirty semistructured interviews conducted across three states (details of methodology can be found in chapter 6). These interviews cover all stages of the provision of HMM services, beginning with consumers' attitudes towards their homes, difficulties experienced in the home, accessing HMM support and services, service processes and quality, and outcomes of using HMM services. This small sample of consumers does not permit generalisations to be made regarding the whole population of consumers. However, the findings do provide insight into the perspective of consumers that can inform policy, practice and further research.

In the final chapter of this report, the findings of these four sub-studies and previous research are discussed. The chapter reviews what is known about the need and demand for HMM services, service system issues, and the policy and consumer outcomes of HMM provision. The chapter concludes with consideration of implications for policy and research.

1.3 Overview

Table 1 summarises the structure and content of the final report, showing links to the earlier positioning paper. It is strongly recommended that the positioning paper be read in conjunction with this final report. It provides greater detail on the Australian policy context, the HMM service system in states and territories and the international research. AHURI will also publish a research and policy bulletin that summarises the main findings of this study and its implications for research, policy and practice.

Table 1: Overview of final report

Chapter	Title	Purposes	Sources	
1	Introduction	To introduce the aims, context, scope and methods of the study	Positioning paper chapter 1	
2	Defining and conceptualising HMM	To provide a generic definition of HMM services and the outcomes	Positioning paper chapter 2	
		they seek to achieve	International literature	
		To delineate the health, community care and housing perspectives on HMM	review	
3	An analytical framework	To identify key issues for research and policy in HMM based on the	Positioning paper chapter 5 and 6	
		international literature	International literature	
		To develop an analytical framework encompassing need and demand, service provision, consumer and societal outcomes	review	
4	HMM services in Australia: an	To provide a themed description of HMM services in Australia	Positioning paper chapter 4	
	overview	To identify important and innovative practices and services in particular states and territories that could be considered for wider application	Analysis of policy and service documents and key informant interviews	
5	The service provider perspective	To examine the perspectives of HMM service providers concerning the adequacy, appropriateness and effectiveness of HMM services	Focus groups in states and territories	
6	The consumer perspective	To examine the experiences of HMM consumers concerning their need for HMM services, their access to services, their perceptions of service quality, and perceived outcomes	Semi-structured interviews with consumers	
7	Discussion and implications	To discuss the findings of the four sub-studies and previous research	Findings of the positioning paper and sub-studies	
		To consider the implications for policy and research		

2 DEFINING AND CONTEXTUALISING HMM

2.1 Introduction

HMM services in Australia are funded through a diversity of programs, provided by an assortment of organisations, comprising a variety of service types and directed towards a range of goals. In this respect, Australian HMM policies and service provision are not dissimilar to those of other countries. In the US context, HMM services have been described as a complex patchwork where various types of services have been developed and delivered through different service systems, each with their own particular goals, approaches and interventions (Pynoos 2001). In such a disordered and untidy context it is helpful to articulate a definition of HMM services that transcends particular programs and identifies the types of services and objectives that comprise this policy and service field. It is also helpful to identify the main policy and professional perspectives that shape the objectives, approaches and intervention repertoires of HMM services. A characteristic of HMM services in many countries, including Australia, is that they are located at the intersection of the health, community care and housing policy fields. It is therefore necessary to examine the ways that HMM services are shaped by these policy and professional contexts. These two tasks of defining and contextualising HMM are the focus of this chapter.

2.2 Defining HMM

HMM is a term that refers to services that are designed to maintain or modify the dwellings of people in later life in order to enhance their safety, independence, identity and lifestyle. The range of services encompassed by HMM is shown in Table 2. Broadly, HMM services can be viewed as comprising four main types of service: structural modifications, non-structural modifications, repairs and improvements, and ongoing maintenance. Structural modifications involve changes to the fabric of the home (e.g. widening doorways and passages and remodelling kitchens or bathrooms). Non-structural modifications are mainly concerned with installation or alteration of fittings and fixtures (e.g. grab rails and ramps). Repairs and improvements involve mending damaged or unserviceable elements of the home and surrounds, including steps, paths, floor coverings, roofs, lighting, and associated minor upgrading. Maintenance is work required on a recurrent basis to sustain the functioning and amenity of the home and surrounds, such as replacing smoke alarm batteries and garden maintenance. As well as these distinctions by service type, HMM services can be classified as direct (actual service provision) or indirect. Indirect services take many forms, including the provision of information and advice; referral; assessment, case management and brokerage; project management; and grants and loans.

The primary objectives of HMM services, shown in Table 2, can be viewed as threefold: safety, independence, and 'identity and lifestyle'. The safety objective leads to a focus on removal of hazards in the dwellings of older people in order to prevent accidents, especially falls. There is also a focus on the safety of older people with cognitive challenges through home modifications such as fencing and gates, safety locks and night-lights. The objective of independence focuses on enabling older people to continue to live in their home environment, including their need to manage activities in and around their home, maintain the dwelling and feel secure. This objective may involve the removal of physical barriers to the performance of daily activities, especially non-discretionary self-care activities. However, more broadly, it involves interventions designed to maximise the recipient's capacity to manage in the home and control the home environment. The term 'identity and lifestyle' introduces a

wider focus on the social meanings associated with housing at all life stages, including later life. Dwellings cannot be viewed simply in functional terms; they are expressions of people's identity and lifestyle choices. From this perspective, HMM services are one means of enhancing the range of options available to older people to create living arrangements that meet their needs and reflect their preferred identity and lifestyle. These three objectives are elaborated below in the discussion of the health (safety), community care (independence) and housing (identity and lifestyle) perspectives.

	Safety	Independence	Identity and lifestyle
Structural modifications Changes to the fabric of the home	 Redesigning bathroom/kitchen Improved lighting Additional rooms for carers Fencing and gates Showers without steps 	 → Redesigning bathroom/kitchen → Widening doorways and passages → Lowering countertops and cupboards → Reassigning spaces → Smart home technologies 	 → Modifications undertaken in ways that avoid an institutional appearance of the home → Additions and modification of spaces to new uses, interests, lifestyles, household structures and relationships
Non-structural modifications Installation or alteration of fittings and fixtures	 → Grab rails → Clear swing hinges → Non-slip flooring → Safety locks → Outlet covers → Alarm systems → Movement monitoring 	\rightarrow Grab rails	 → Modifications undertaken in ways that avoid an institutional appearance of the home → Modification of spaces and furnishings to facilitate hobbies and interests, social and recreational activities, communication and quality of life → Safety and independence modifications provided in ways that enhance privacy and self-esteem
Repairs and improvements Fixing damaged or unserviceable elements of the home and its surrounds Minor upgrading to the home	 → Repairs handrails, steps, cracked paths, uneven flooring → Improved lighting → Night-lights → Smoke detectors 	 → Repair steps to maintain access → Repair locks, latches, security doors 	 → Repairs to preserve appearance and value of home → Water-saving devices
Maintenance Maintaining the functioning or amenity of the home and its surrounds	 Replacing smoke alarm batteries Replacing light bulbs Removing hazards such as loose rugs and clutter 		 → Maintenance to preserve appearance of home → Lawn mowing and rubbish collection to maintain appearance

Table 2: HMM services: goals and interventions

The definition presented above and portrayed in Table 2 can be viewed as a heuristic tool designed to provide a framework for analysis of HMM services in Australia. As has already been indicated, and as is shown in chapter 4, the reality of HMM services in Australia is far more messy and complex, and existing services do not correspond neatly with the categories delineated in the table. Indeed, it is misleading in the Australian context to refer to an HMM service system. HMM in Australia comprises a diverse set of programs and services funded from a range of sources, loosely linked to one another, without strong policy or organisational coordination and direction, and without a strong sense of identity as a service system. Furthermore, there are wide variations in the level and type of provision in each state and territory. It can be argued that if the potential of HMM services to improve the wellbeing of later-life Australians is to be realised a far more explicit and systematic policy approach to this field of services is required.

2.3 Contextualising HMM

A good deal of the complexity of HMM derives from its location at the intersection of health, community care and housing services and policies. Each of these contexts provides a somewhat different perspective on the purposes of HMM, and emphasises different forms and types of provision. In order to appreciate the actual and potential roles of HMM in an ageing society, each of these perspectives must be explored and understood. While these perspectives are presented below as distinct approaches, there is in reality considerable overlap amongst them. HMM needs to be understood as a multi-field service contributing to the achievement of health, community care and housing objectives.

2.3.1 The health perspective

The terms 'home modifications' and 'home adaptations' are widely used in healthcare contexts to refer to 'any permanent alteration to a building carried out with the intention of making [it] more suitable for a disabled person' (Heywood 2004a, p. 134). HMM services are often understood in health contexts as 'changes made in a home environment in order to accommodate a particular set of human abilities' (Bridge 2005). There is often an emphasis on home modifications as corrective for problems specific to an individual, within a broadly medical approach (Wylde 1998). Services are provided as part of discharge planning following hospitalisation (Auriemma et al. 1999) or within community health or health-funded in-home services.

In the context of healthcare systems, home modifications are generally recommended by professionals to ensure that people with a particular impairment or health condition are safe and independent in their home (Auriemma et al. 1999), and to reduce the likelihood of admission to a hospital or care facility (Auriemma et al. 1999; Gitlin, Miller & Boyce 1999). The health condition is generally seen as having a predictable pathology which allows care to be routinely managed and provided. Often recommendations are made with reference to a specific health problem and less consideration may be given to other difficulties, impairments or aspirations the person may have (Tinker et al. 2004). Home modifications may be part of a suite of interventions, including medication and remedial exercise, which focus on remediation or correction of the health condition. However, home modifications, along with assistive devices and other interventions, are also used where function is permanently impaired. With a focus on the health condition of the person and the resulting consequences, interventions that remedy the condition or address the resulting dysfunction directly are prioritised.

Within a health approach, the home environment is typically conceptualised as a discrete physical entity where modifications can be routinely recommended in

response to the person's identified functional impairment or health-related conditions. Sometimes an assessment of the person's functional ability is carried out in a clinical setting and recommendations are made for the home environment without an on-site evaluation (Pynoos et al. 1998). When the home environment is examined, the focus is on potential safety concerns or specific physical barriers to the performance of daily activities, with a particular emphasis on non-discretionary self-care activities. Consequently, the focus tends to be primarily on the inside of the home and less attention is given to the ongoing maintenance and repair of the house and property and access to facilities in the garden and the local community. Typically, modifications recommended include non-structural changes such as grab rails, shower seats and other assistive devices (Pynoos et al. 1998; Renforth, Yapa & Forster 2004). Structural changes such as widening doorways and ramps are less common due to the time required to arrange these and cost factors (Auriemma et al. 1999; Pynoos et al. 1998: Tabbarah. Silverstein & Seeman 2000). With the focus on the individual's function, less attention tends to be given to the long-term suitability of the residence. Issues such as security concerns, the social acceptability of the modifications, or the impact of the changes on the meaning or value of the home tend not to be emphasised.

More recently, concerns about the prevalence of falls amongst older people living in the community have directed attention to potential hazards in the home environment, especially since approximately half the falls occur inside the home (Rogers et al. 2004). Home modifications have been recognised as one of a number of risk management strategies to reduce the number of falls among the elderly (Gillespie et al. 2001). Along with medication review, exercise, gait training, and education regarding safe use of assistive devices (Rubenstein et al. 2002), home modifications have been used as a preventative measure to address potential hazards in the homes of older people. A range of hazards such as clutter, obstacles, loose rugs, lack of supports and poor lighting have been identified as potential fall hazards (Clemson, Roland & Cumming 1997) and interventions are focused on removing these to ensure the older person's safety. However, to date there is little evidence that broadly targeted programs aimed at removing environmental hazards in the homes of community-living older people reduce the incidence of falls (Gillespie et al. 2001). More success has been achieved with tailored programs targeted at the specific needs of people with an increased risk of falls such as the frail elderly (Cumming et al. 1999) and those who have fallen previously (Close et al. 1999; Nikolaus & Bach 2003).

The rising incidence of dementia has resulted in a growing interest in ways to support older people with cognitive changes to remain living in the community. In this context, home modifications aim to support the caregiver who is responsible for supervising and assisting the person in the home as well as the person with a cognitive impairment (Silverstein & Hyde 1997). The focus of these modifications is to ensure the person's safety in the performance of activities of daily living in the home by preventing accidents and injuries and improving their capacity to respond to dangerous situations such as fire. However, carer concerns with managing difficult or dangerous behaviour are also addressed (Colombo et al. 1998; Gitlin & Corcoran 2000; Silverstein & Hyde 1997). Modifications may include structural changes such as an additional bathroom or bedroom, reassigning particular rooms in the house and adaptations, such as fencing and gates, safety locks on doors and cupboards, outlet covers, night-lights and improved lighting. A range of electronic devices such as smoke detectors, movement monitoring and alarm systems have also been used (Silverstein, Hyde & Ohta 1993). New assistive technologies are increasingly recognised as being useful both in helping older people at home and in monitoring and managing people with complex health conditions in the home (Colombo et al, 1998). Many generic technologies, such as mobile phones, sensors, passive alarms and remote video cameras are being utilised to enhance the safety and independence of older people (Tinker 1999). Dedicated environmental control, robotics, communication and security technologies have also been developed and are being integrated into the design of smart homes (Cowan & Turner-Smith 1999; Tinker et al. 2004). These technologies have the potential to decrease the likelihood of an adverse incident and also allow health conditions to be managed in the home rather than in a health setting. However, these technologies raise ethical dilemmas (Tinker 1999). Concern has been raised as to whose needs are being met through these technologies Older people may be at risk of being further isolated from human contact if they are to be managed and monitored remotely. Furthermore, homes are a place of privacy and intrusive technologies may be resented by the occupants or impact on the meaning of home (Heywood 2004a).

Traditionally, in health systems changes in the home have largely focused on physical impairment or vulnerability. Somewhat less attention has been given to the ways that the home can be adapted to accommodate sensory, cognitive, emotional and social changes associated with ageing. With common vision and hearing impairment in elderly people, attention is being directed to how the environment can be made easier and safer for people with sensory impairments. Better lighting, enlarged fittings, amplification devices, auditory signals and contrasting colours are examples of such modifications in the homes of older people (Auriemma et al. 1999). There is also awareness that an emotionally and socially supportive home environment increases self-confidence and self-esteem, making it easier to carry out daily activities (Pynoos et al. 1998).

In summary, healthcare systems, policies, and programs have provided one of the key contexts for the development of HMM services. Within the healthcare system, HMM services have been associated with discharge planning following hospitalisation, with care of chronically ill or disabled older people in the home environment (including the needs of older people with dementia and of their carers), and with falls prevention. While practices vary widely, a number of characteristics of the health approach to HMM can be identified. The primary focus is often on a particular health problem or condition, in which home modification is perceived as one of a suite of interventions designed to remedy the problem or address dysfunction. The key concerns are with the individuals' safety and capacity to perform self-care activities independently. The main mode of intervention is the provision of minor, non-structural modifications, although structural changes are recommended in particular situations, including the care of older people with dementia. There is an increasing interest in the use of new assistive technologies as enabling and monitoring instruments. As the health approach to HMM emphasises individual function, there is less concern with issues such as the long-term suitability of a residence, the social acceptability of modifications and issues of identity, meaning and lifestyle. The predominant emphasis is on physical impairment, with attention also being paid to the sensory, cognitive, emotional and social changes associated with ageing.

2.3.2 The community care perspective

As well as being part of the repertoire of health service interventions for older people, HMM services have emerged in recent decades as part of the range of interventions provided through community care services. The central emphasis of community care policies in many countries, including Australia, has been to enable older people to remain living in their own home and community and to reduce admissions to residential care (Duncan 1998a; Stone, 1998). In this context, HMM services have been defined as 'adaptations to living environments intended to increase ease of use, safety, security and independence' (Pynoos et al. 1998). The emphasis is on enabling older people to continue living in their home environment, acknowledging their need to manage their activities in and around the home, to maintain their dwelling and to be safe and secure in their home. From the community care perspective, HMM services are one of a wide range of community care programs that include home nursing, delivered meals, home help, transport, shopping assistance, allied health services and respite care. Community care services are designed to assist families and carers in supporting older people (Steinfeld & Shea 1993), as well as directly assisting older people.

While the main focus of HMM in health contexts has been on home modifications, in community care contexts the emphasis has been on both home maintenance and modification. The mode of delivery of these services varies considerable from place to place. Modification assessments are undertaken mostly by professionals situated in either health or social services (Klein, Rosage & Shaw 1999), and the modification work is then undertaken by building contractors and other tradespeople. Home maintenance assessments are undertaken by a wider variety of individuals including handy people, tradespeople, building contractors, social service organisations and families themselves (Pynoos et al. 1998). Many community services provide maintenance and modification services directly to the consumer. However, it has been suggested that brokerage services that assist in both assessment and identification of a suitable provider may often be more appropriate model for meeting older people's HMM requirements (Newman 2003).

A number of ways of describing the range and diversity of HMM services in community care contexts have been developed. As well as the four categories of HMM services in Table 2, a common distinction is made between minor and major modifications based on overall cost (Klein Rosage & Shaw 1999). Home-based adaptations have also been categorised as behavioural, non-structural and structural (Pynoos et al. 1998). Behavioural adjustments include adjusting the way in which activities are carried out. Non-structural adaptations involve reassigning spaces, installing grab bars and better lighting, or allowing the recipient to use special equipment or assistive devices. Structural changes include ramps, widening doorways, showers without steps, and lowering countertops and cupboards (National Resource Center on Supportive Housing and Home Modification, date unknown; Pynoos et al. 1998).

There is considerable overlap between home modifications and use of assistive devices (Pynoos et al. 1998). In the UK housing adaptations are classified as an assistive technology, defined as

any device or system that allows an individual to perform a task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed. (Cowan & Turner-Smith 1999)

Assistive devices are typically mobile and are not attached to the structure of the house (Pynoos et al. 1998), compared with home modifications that are more permanent and secure, and are fixed in place. Assistive devices are sometimes favoured by professionals and consumers when they are uncertain about how to undertake modifications (Pynoos et al, 1998; Steinfeld, Levine & Shea 1998), or are reluctant to commit to a permanent or more costly change (Pynoos & Nishita 2003).

A central theme in the community care literature is the role of HMM in delaying the need for personal assistance or avoiding an unwanted move, including a move into

residential care (Gitlin, Miller & Boyce 1999). There are a number of practical, financial and personal reasons why older people may wish to remain living in their existing home (Heywood, Oldman & Means 2002). Some may find the prospect of moving overwhelming. Others may be uncertain about what is involved and lack the energy required to make such a change. Downsizing may also present the challenge of storing or disposing of furniture and other possessions (Heywood, Oldman & Means 2002). The cost of moving, fear of loss of an asset, or reduced security of tenure may prevent some older people from making a move. For many the family home holds a great deal of personal meaning and is an expression of their personal identity. It represents their achievements and history and provides them with status. Many older people also wish to retain their independence as long as possible and consider a move a threat to their autonomy (Heywood, Oldman & Means 2002). In all these circumstances, HMM services can assist the individual to stay put rather than moving under duress (Clapham 2005).

While community care programs vary widely in their approach to the provision of HMM services, a number of dominant themes characterise the recent professional and practice literature. There is a strong emphasis on viewing the HMM assessment as analysis of the fit between the person and their home environment. Assessment models developed in the last decade, particularly through the profession of occupational therapy, have recognised the limitations of focusing on either individuals and their impairments or the barriers in their environment, and have emphasised the interaction between the individual and the environment (Rousseau et al. 2001). The emphasis is on the way that the individuals live in the home environment, rather than on more narrowly defined self-care activities (Peace & Holland, 2001). These models recognise that environments can provide challenges or 'press' (Lawton & Nahemow 1973), and that these vary for each individual. From this perspective, it is emphasised that the home environment needs to be adapted to better match the capabilities of older people, with an emphasis on establishing a balance between environmental demands and individual competencies (Gosselin et al. 1993; Rousseau et al. 2002). In this approach, home interventions are tailored to meet the particular needs of the individual. The difficulties that an individual experiences in the home are observed and analysed so that environmental challenges to daily activities can be addressed.

This emphasis on the transaction between the individual and environment is underpinned by the social model of disability, with its emphasis on the role of the environment in creating disability (World Health Organization 2001). From this perspective, an older people's disability arises from the inability of the home environment to accommodate their changing capacities (Cowan & Turner-Smith 1999; Tinker et al. 2004). It has been proposed that older people are 'architecturally disabled' by shortcomings of residential design (Hanson 2001), and this has led to an emphasis on reducing barriers to access and activity participation. The focus of attention has also shifted from the performance of basic self-care tasks to the capacity to manage in the home and the community. The social model of disability also extends the conceptualisation of the environment, so that it includes social and personal as well as physical factors.

The concept of independence is central to the community care approach, both generally and with respect to HMM services. Independence is commonly associated with the idea of living at home rather than in residential care, and it is sometimes argued or assumed that independence in this sense is the purpose of community care services, including HMM (Clapham 2005, p. 216). However, studies of the meanings of independence held by older people suggest more nuanced associations with the use of this term, including 'being able to look after oneself', 'not being indebted to anyone', and 'the capacity for self-direction' (Clough et al. 2004, pp. 119–20). Some

older people may thus consider that their independence is enhanced by a move to residential care. Central to the idea of independence is the sense of being in control with respect to family, friends and formal caregivers (Heywood, Oldman & Means 2002, pp. 55–7).

While HMM services are established in many countries as part of community care systems, there is evidence that these interventions are often underdeveloped relative to other community care services due to the providers' lack of training and funding difficulties (Pynoos et al. 1998). Community care systems tend to prioritise those at risk of being institutionalised (Clapham 2005). This may result in services being directed towards those with the least resources and the greatest level of need, as defined by professionals, rather than older people themselves (Clapham 2005). Professionals tend to give highest priority to health and safety concerns, followed by independence issues, and then quality of life (Mann et al. 1994). These priorities may result in other community care services being given higher priority than HMM.

In summary, the development of community care programs in recent decades has provided significant impetus to the development of HMM services. While HMM services remain underdeveloped in many countries relative to other community care services, they have an established place as part of the repertoire of community care services designed to enable older people to remain living at home, and to reduce admissions to residential care. The key value underpinning HMM services is the independence of older people, often defined as allowing older people the choice to stay put in their own homes and, less often, as personal control. In the community care context, HMM services encompass home and garden maintenance, repairs, nonstructural (including assistive devices) and structural home modifications. An emphasis in the community care literature on HMM is the need to focus on the interaction between the person and their living environment, rather than a narrower focus on individual abilities. From this perspective, HMM services need to be tailored to the particular circumstances of individuals, households and dwellings, and to focus broadly on their capacity to manage in the home and the community.

2.3.3 The housing perspective

Many older people make modifications to their home environments and seek assistance in home maintenance quite independently of the health and community care systems. Viewed from this perspective, HMM services can be understood, not only as part of the health and community care systems but as generic services designed to assist people in later life to make the housing decisions, choices and adjustments that best match their needs and preferences. As people progress through later life, their housing requirements and aspirations may change as a result of changes in household and family composition, employment status, health status, and life interests and lifestyle. In these circumstances, individuals have two broad choices: to move house or to make modifications to their existing housing. From a housing perspective, the purposes of HMM services are to enable people to modify and maintain their existing homes to accommodate changing circumstances, lifestyles and identities during later life. This conceptualisation of HMM encompasses, but is more universal in scope, than the ideas of 'accommodating a particular set of human abilities' (the health perspective) or 'adapting living environments to increase ease of use, safety, security and independence' (the community care perspective). It suggests that HMM services may be applicable to many older people at all stages of later life, rather than only to older people with a diagnosed need for health and community care services. It also suggests the need to view all HMM services from a wide perspective that emphasises identity and lifestyle.

The patterns of changes that people make to their housing arrangements at different points in their life course are referred to in the housing literature as housing adjustment (Howe 2003), housing careers (Kendig 1984), or housing pathways (Clapham 2005). These are similar concepts but with distinct emphases. Housing adjustments refers to the actual changes that individuals and households make in order to adjust their housing to their needs, circumstances and preferences (Peace & Holland 2001). Housing careers refers to the sequence of housing arrangements that individuals or households make over their life. It is aroued that broad societal changes are creating changes and greater diversity in established patterns of housing careers in many countries, including Australia (Beer, Faulkner & Gabriel, 2006). Housing pathways have been defined as 'patterns of interaction ... concerning house and home, over time and space' (Clapham 2005, p. 27). While the housing career approach focuses primarily on changes in the consumption of housing related to factors such as age, household structure, income and wealth, employment, and disability, the housing pathways approach emphasises the social meanings and relationships associated with housing. From a pathways perspective, housing must be viewed as more than a set of physical characteristics (e.g. space, layout, condition and access):

the house will [also] have a particular set of meanings to the household which may relate to its use as a home and the patterns of interaction within it. The house may be an element in the identity of the household, and the individuals within it, and may be a factor in lifestyle choice. (Clapham 2005, p. 28)

This understanding of the significance of the home environment for all people, including those in later life, is widely recognised in the research literature. A dwelling, as well as providing essential shelter, has social, cultural and personal dimensions that contribute to the meaning that home holds for individuals (Fisher 1998). Homes are places where people can express themselves through their possessions or routines, where they can engage in a range of roles and where they can exert autonomy and control over their use of time and space (Peace & Holland 2001). At any age housing bears significantly on the quality of life (Pynoos & Regnier 1997). Whether viewed emotionally or financially, housing is, for most people, their largest single investment (Hanson 2001). For many older people, housing may hold even greater importance if they spend a great deal of time at home (Newman 2003) or have lived in the same house for many years (Pynoos & Regnier 1997). Whether rented or owned, the home is often the focus of people's aspirations, identities and attachments and connects them into social networks with their neighbours, friends and family (Hanson 2001).

The concepts of identity and lifestyle are central to this wider understanding of the meaning of home, as elaborated by Clapham, drawing on the sociological theories of Giddens and others (Clapham 2005). It is argued that in contemporary societies the decline of traditional institutions has resulted in a move towards individualism and a situation where individuals are more able to make choices about the way that they live. 'This is encapsulated by the concern with "lifestyle", by which is meant the desire to choose an individual identity that leads to self fulfilment' (Clapham 2005, p. 13). Identity is our sense of who we are as individuals, and is forged by our relations with others. Identity is never settled, and individuals engage in processes of 'life planning' as they adapt to changing circumstances. Lifestyles are distinctive modes of living that differentiate us from others. They concern consumption, use of time, and choices about household and family relations. 'Lifestyles are expressions of identity in daily life. They help to define our identity by patterning our interactions with others' (Clapham 2005, p. 16).

These concepts provide a framework for thinking about housing in later life, including HMM services, that is broader than that suggested by the health and community care approaches. From this wider perspective, housing should be viewed not primarily in functional terms but as 'a means of fulfilment that allows other human activities to take place' (King, quoted in Clapham 2005, p. 17). Most people in later life can be viewed as seeking to maintain or establish their identity and lifestyle. Few think of themselves as being 'old' (Wylde 1998) and even fewer identify themselves as 'disabled' (Hevwood, Oldman & Means 2002; Wylde 1998). A wider focus on identity and lifestyle takes as its starting point the diversity of the housing aspirations of older people and suggests that for many older people their housing needs and preferences will be shaped by lifestyle choices rather than by perceptions of their future frailty. The health and community care approaches have tended to be based on professionally defined concepts of need, and in many countries they are increasingly targeted towards those assessed as having 'special needs' and on those at risk of admission to residential care. They are based on a conventional view of the nature of the life course (Clapham 2005). '

When care is provided to [author emphasis] older people on the basis of professional definitions of need based on physical abilities, it is unlikely to meet the lifestyle and identity needs of older people. (Clapham 2005, p. 232)

Clapham's formulation of the concept of housing pathways, with its emphasis on identity and lifestyle, has three specific implications for HMM policies and services for people in later life. Firstly, HMM services can be viewed as centrally important to the provision of housing choice in later life. While many older people choose to move house as their needs and preferences change (Heywood, Oldman & Means 2002; Stone 1998), others have a strong preference to continue to live in their current dwelling and HMM services have the potential to open up choices for this group (Tinker 1999). Most obviously, HMM service can assist people in later life to adapt their house to their changing abilities. But HMM can also assist people in later life to modify the use of particular rooms and spaces to new uses, interests and life-styles; to assist in the dwelling's maintenance, repair and upkeep; to enhance the security of a house; to reduce costs of home maintenance; and to change the appearance of a house. Older people use a wide range of strategies to enable them to remain living in the community (Peace & Holland 2001). HMM services can be viewed as one important means of enhancing the range of options available to people in later life to create housing and living arrangements that meet their needs and reflect their identity and lifestyles.

This conceptualisation of the role of HMM services is consistent with a wider view of the role of housing policy for older people that emphasises the role of governments in facilitating housing choice and housing adjustment rather than prescribing specific housing outcomes. Howe (2003) has suggested that the housing situation of older people is of interest to policy because of mismatches between the housing they occupy and their housing need, and that the extent and nature of the mismatch varies widely across the group of older people. All older people can be classified according to their need to make a change in their present housing, and their capacity to make the desired change. Within this framework, the role of HMM policy and services is to help those wishing to make housing adjustments in the context of their current dwelling, with a particular focus on those who for reasons of low income, limited skills, or lack of information have limited capacity to make these changes. The

aim of public policy should not be to achieve particular outcomes on the housing pathway but to enable people to take control of their pathway through the ability to make choices. (Clapham 2005, p. 234).

The second implication of an emphasis on identity and lifestyle is the need to take these factors into account in the design and delivery of HMM services. Concern has been raised about the negative impacts of home modifications on the meaning of home, and the lack of attention to this dimension in HMM programs and policies (Messecar et al. 2002). Home modifications have been found to impact negatively on people's self-image and connection with the home (Heywood 2005), as well as on their routines and sense of heritage (Heywood 2005). Adaptations to the home can result in labelling older people as different and, more importantly, making them vulnerable to ridicule or violence (Fisher 1998). For this reason, it is important that adjustments in the home are considered holistically, rather than focusing solely on specific issues such as performance of self-care tasks (Heywood 2005). It has been shown that the acceptance of interventions such as assistive devices is influenced by whether they support or undermine the older person's sense of personal identity (Harrison 2004). Older people and their families may reject HMM services because they have different perspectives and priorities to the service providers (Gitlin, Luborsky & Schemm 1998) or because of their perceived impacts on the recipient's sense of independence and autonomy (Messecar et al. 2002).

Thirdly, an emphasis on identity and lifestyle suggests that HMM services should be viewed as one set of options for older people seeking to adjust their housing, rather than 'staying put' being an over-riding policy goal. The perceived importance of staying put has been one of the cornerstones of public policy in community care. However, it has been argued that staying put has influenced the evaluation of consumer need to such an extent that the housing needs of older people can be overshadowed by assessments for community care (Peace & Holland 2001). While research suggests that many older people prefer to remain living at home as long as possible (Parker et al. 1998), it cannot be assumed that all older people are well served by 'aging in place' (Auriemma et al. 1999; Filion, Wister & Coblentz 1992). Many may not prefer to remain in houses that are ill suited to their requirements in old age. A significant number of older people live in large, old homes in constant need of maintenance and repair, which provide an ongoing challenge to their safety and independence (Tinker 1999). What was once their castle and a testament to their status and identity can become a cage, or millstone, undermining their identity and restricting their freedom and lifestyle (Heywood et al. 2002). Dwindling social networks and mobile families can also result in social isolation in changing communities. While many older people do wish to stay put, independence for many people means more than simply remaining in one's own home (Heywood, Oldman & Means 2002). HMM services are a means of adjusting housing to match an individual's lifestyle, rather than simply enabling individuals to 'age in place'.

In summary, HMM services can be viewed from a housing perspective as universal services that enable people to modify and maintain their existing homes to accommodate to changing circumstances, lifestyles and identities during later life. Housing choices in older age are shaped by the broader quest to maintain or establish their identity and lifestyle, as well as by their need for shelter and support. From this perspective, HMM policies and services are designed to assist people to take control of their housing pathways in later life, as well as to achieve specific housing outcomes. HMM services are a means of enhancing the range of options available to people in later life to create housing and living arrangements that meet their needs and reflect their identity and lifestyles. They should be delivered in ways that take into account the meanings of house and home for older people, without assuming that staying put is an overriding objective.

2.4 Conclusions

In this report, the term 'home maintenance and modification' (HMM) is defined broadly to refer to services that are designed to maintain or modify the dwellings of people in later life in order to enhance their safety, independence, identity and lifestyle. The term encompasses structural modifications, non-structural modifications, repairs and improvements, and ongoing maintenance. Defining the goals of HMM as including identity and lifestyle implies a broader perspective than that often adopted by health and community care professionals and services. It directs attention to the meaning and utility of their house and home for people in later life, as well as the important objectives of safety and independence. It focuses attention on consumer definitions of need as well as need defined by health and community care professionals.

A key element of this broader conceptualisation is recognition of the multi-service role of HMM and its contribution to achievement of health, community care and housing outcomes for older Australians. The challenge is to develop an integrated approach that fully recognises the diversity of roles that these services can play for people in later life. In Table 3 the central characteristics of the three main approaches to HMM, as discussed in this chapter, are summarised. While these can be portrayed as competing perspectives, this report views them as complementary approaches to HMM provision. A convergence of these approaches has the potential to maximise the role of HMM in improving the overall wellbeing of older Australians.

	Health	Community care	Housing
Definition	Changes in the home environment to accommodate a particular set of human abilities	Adaptations to living environments to increase ease of use, safety, security and independence	Adaptation of dwellings in response to changing circumstances, lifestyles and identities in later life
Broad objectives	Safety Independence	Independence Safety and security	Meeting lifestyle and identity needs
	Rehabilitation Capacity to manage in the home environment	Enabling older people to age in place	Facilitating housing choices and pathways Enabling older people to maintain control over their home environment
Assessment approach	Focus on specific health problem(s) Part of a suite of health interventions	The fit between the person and their home environment Part of a range community care services	A holistic approach to consumer needs Emphasis on consumer perspectives and preferences A partnership approach between consumers and professionals
Type of intervention	Non-structural modifications Removal of hazards and accident prevention Monitoring health conditions	Structural and non- structural modifications Repairs and improvements Home and garden maintenance Behavioural adjustments	Information and advice regarding housing choices in later life HMM interventions that take personal identity into account
Contexts of intervention	Discharge planning from hospital Falls prevention Management of chronic illness in the community Preventing hospital admission Support for people with dementia and their carers	Avoiding unwanted moves (especially into residential care) Support for carers	Mismatch between housing situation and housing needs Responding to changing life circumstances (income, activities, abilities, networks, preferences, lifestyle)

3 AN ANALYTICAL FRAMEWORK

3.1 Introduction

The definition and contextualisation of HMM services provided in chapter 2 provide a foundation for identifying the questions that need to be addressed in providing a research foundation for more effective public policies relating to providing these services. In this chapter an analytical framework for understanding HMM services, and their role in meeting the needs of an ageing population, is presented. This provides the foundation for the services overview, and provider and consumer studies described later in this report. It also serves as a framework for further research and policy development. The framework draws on the international literature on HMM services as well as the overview of HMM services in Australia provided in the positioning paper. The analytical framework is, in essence, a series of linked questions and sub-questions that need to be addressed regarding HMM services. These are set out in Table 4. They follow a needs-services-outcomes model. The key analytical questions are:

- → What are the nature and level of need and demand for HMM services in Australia?
- → How well organised and equipped are HMM services in responding to needs and demands?
- → How effective (and potentially effective) are HMM services in achieving positive outcomes for older people?
- → How effective (and potentially effective) are HMM services in achieving positive outcomes for society, in the context of policies designed to respond to the challenges of population ageing?

These four questions are discussed below, and in chapters 4, 5 and 6, which report the study's empirical findings. They are revisited in the concluding chapters that summarise the evidence base relating to each of these questions, and consider the implications it holds for policy and further research.

3.2 Need and demand

Estimating the level and nature of need and demand for HMM services presents a number of challenges. These are partly the familiar challenges of conceptualising the need for any community service, including the requirement to distinguish between felt need, normative need, expressed need (demand) and comparative need. There is also a challenge of service definition. HMM covers a broad range of services that are not defined in standardised ways across jurisdictions. Studies of the need for HMM tend to be embedded in a particular perspective of it. For example, understanding the need for HMM from a health perspective as compared to a housing perspective raises different issues. Another major obstacle noted in several international studies is the lack of reliable and appropriate data on HMM services (Gilderbloom & Markham 1996; Newman 2003). In the international literature to date, there has been only a modest level of research on the need and demand for HMM (Kutty 1999) and studies that do exist are 'often spotty, anecdotal and unsystematic' (Gilderbloom & Markham 1996, p. 512). Further knowledge generally about the housing, care and service needs and preferences of older people is also required (Newman 2003).

Nevertheless, a review of the international literature suggests a number of approaches that would be fruitful in assisting us to make valid and reliable estimates of need and demand for HMM. The research questions underpinning such approaches are categorised and listed in Table 4. In broad terms they are concerned

with population characteristics, dwelling characteristics, aspirations and preferences, and usage.

Key question	Sub-questions
Need and demand	Population characteristics
What are the nature and level of need and demand for HMM services	 → How many older Australians are there and what are the future trends in the older population? → What is the incidence and severity of activity restrictions related to disability and chronic disease in later life?
in Australia?	Dwelling characteristics
	→ What are the characteristics of the dwellings of older people, especially those relating to safety and independence (structural problems, prevalence of hazards, state of repair, maintenance requirements)?
	Difficulties and aspirations
	→ What specific difficulties are experienced by older people in their homes, and what types of modification/assistance are desired by them and/or assessed by professionals (occupational therapists) as desirable?
	→ What proportion of older people report that their life would be improved by modifications or other HMM services?
	 What are the housing aspirations of older people, particularly with respect to ageing in place?
	Usage
	→ What proportion of older people report that they have access to HMM services in their own locality?
	→ What proportion of older people have made home modifications or used HMM services?
	What proportion of older people envisage making home modifications or using HMM services in the future?
	What factors impact on their perceptions of their need for and use of HMM services?
Service	Service organisation
organisation and provision How well organised	→ How clearly are the social and consumer objectives of HMM services articulated and what are the impacts of legislation and regulatory requirements on HMM provision?
and equipped is the provision of	→ How adequate and transparent are the funding arrangements for HMM services?
HMM services?	→ What is the level of availability of each of the main HMM service types, including both direct and indirect services?
	How integrated and coordinated is the HMM service delivery system, including links with health, community care and housing services?
	→ Is the level of professional and technical expertise available to HMM services adequate and appropriate?
	 What research and information systems are in place to underpin policy and service provision?
	Service provision
	What information, advice, referral and access processes and provisions are in place?
	→ How adequate are client assessment processes?
	\rightarrow What is the quality of actual service delivery to the consumer?
	→ What processes are in place for the review and evaluation of HMM services, and the assessment of their distribution, impacts and outcomes?

Table 4: An analytical framework for HMM research and policy analysis

Key question	Sub-questions
Consumer	Safety
outcomes How effective (and	→ Do HMM services result in greater safety in the home environment, including reducing falls and other accidents?
potentially	Independence
effective) are HMM services in achieving positive outcomes for older	→ Do HMM services result in a greater capacity for independent living, including the capacity to undertake a wide range of tasks without external assistance?
people?	→ Do HMM services enable older people to stay put and avoid undesired moves?
	\rightarrow Do HMM services improve the capacity of carers to provide services in the home?
	Lifestyle and identity
	→ Do HMM services enhance lifestyle choices and recipients' ability to pursue their interests and activities?
	→ Do HMM services enhance their capacity to maintain and extend social networks and social participation?
	→ Do HMM services enhance their physical and mental health?
	→ Do HMM services restore or enhance their access to all areas of the house and grounds?
	Satisfaction
	→ How satisfied are older people with the availability, quality and cost of HMM services?
Societal outcomes	Fiscal sustainability
How effective (and potentially	→ Do HMM services reduce levels of hospitalisation and length of hospital stays?
effective) are HMM services in	→ Do HMM services enhance the capacity of social services to manage individuals with chronic conditions in the community?
achieving positive	→ Do HMM services reduce or delay entry to residential care?
outcomes for society?	Positive ageing
	→ Do HMM services enhance the quality of life of older people, including the dimensions identified under 'consumer outcomes'?
	Ageing in place
	→ Do HMM services assisting individuals to make appropriate housing adjustments, particularly the option of staying put?

Population characteristics

One general approach to assessing need has been to determine the number and percentage of older people with activity limitations and use this, combined with an understanding of population trends, as an indicator of current and likely future service needs. Internationally, there is an increasing number and proportion of older people living in the community with activity limitations (Kutty 1999; McCreadie & Tinker 2005; Sanford, Echt & Malassigne 1999). In the USA it has been reported that approximately 38 per cent of older people living in the community have some activity limitations resulting from chronic health conditions, of which approximately 12 per cent have limitations in a major activity (Kutty 1999). In Australia in 2003, 51 per cent of older people (aged sixty-five and over) reported a disability and 19 per cent reported they had a profound or severe core activity limitation (ABS 2003b). Some 41 per cent indicated that they required assistance to manage their health conditions or cope with everyday activities (ABS 2003a). Activity limitations increase markedly with age. Most

people over eighty-five years (84 per cent) report a need for assistance with activities compared with 26 per cent of those aged sixty to sixty-nine years (ABS 2003b).

Dwelling characteristics

Such data on activity restrictions needs to be related to information on the housing characteristics of people in later life. The social model of disability emphasises the role of the environment in creating disability: older people are architecturally disabled by the shortcomings of residential design (Hanson 2001). Traditionally, housing stock has been designed and constructed with little consideration of the needs of older people in terms of accessibility, safety, independence and location (Stone 1998). In the USA, for example, over 90 per cent of housing does not meet accessibility standards and is unlikely to be replaced in the near future (Steinfeld, Levine & Shea, 1998). In Australia significant numbers of older people live in the suburbs in detached houses which they have occupied for decades (Bridge 2005). Much of this housing was designed for young families with private cars and has design features that create hazards and barriers to independence for the occupants as they age (Bridge et al. 2002; Faulkner & Bennett 2002). Houses with stairs, narrow doorways and corridors, inaccessible toilets and bathrooms and limited space create disability (Heywood, 2004a; Oldman & Beresford 2000) and can compromise the safety (Stone 1998; Trickey et al. 1993), independence (Frain & Carr 1996) and wellbeing (Heywood 2004a) of older people. Such housing design features can contribute to early institutionalisation (Rojo Perez et al. 2001). The design of many homes can present significant challenges to modification due to the cost and effort involved in making changes (Tabbarah, Silverstein & Seeman 2000).

Some studies of shortcomings of residential design have attempted to quantify the number of types of structural problems. An investigation of 127 people over sixty in receipt of services from a rehabilitation program in the USA found that each home had at least four problems or difficulties for older people (Mann et al. 1994). The most common problems were in the kitchen (69.5 per cent) such as high cabinets (28 per cent), and the bathroom (50.4 per cent) such as the lack of grab bars or a transfer bench (22 per cent). There were also problems with getting to the house from the street (33 per cent), appliances (27.6 per cent), electrical outlets and switches (25 per cent), lighting (23.6 per cent), and stairs (22.8 per cent) (Mann et al. 1994). In the UK approximately 20 per cent of households headed by someone over seventy-five have been assessed as being 'in substantial disrepair or requiring essential maintenance' (Peace & Holland 2001).

Other studies have focused on the prevalence of hazards in the homes of older people. A study of 1103 community-living people over seventy-two years in the USA found that 59 per cent of bathrooms had two or more hazards (Gill et al. 1999a). Many homes were found to have loose throw rugs (80 per cent) or obstructed pathways (50 per cent) and only 39 per cent had grab rails in the bath/shower (Gill et al. 1999a). A further study found that grab bars were uncommon in the homes of community-living older people, even among those with documented performance difficulties (Gill et al. 1999b). In addition, hazards were just as likely, and in some cases more likely, to be present in the homes of people with a reported disability (Gill et al. 1999b). This raises concerns about the demands the home environment is placing on older people at risk of injury, although the relationship between hazards and falls within the home remains somewhat unclear (Gitlin 2003).

Difficulties and aspirations

A closely related research approach has been to ask older people about specific difficulties experienced in the home and the type of assistance required. Older

Americans report difficulty maintaining pavement surfaces, carpets, stairs, handrails, clutter, plumbing and electrical fittings as well as roof, windows, doors and furnaces (Mann, et al. 1994). An analysis of the 1995 National American Housing Survey (AHS) indicates that approximately 14 per cent of older Americans had a housing related disability, that is, a difficulty in using or functioning in their dwelling (Newman 2003). Older Australians (26 per cent) report requiring assistance with property maintenance because of their disability or age (ABS 2003a). There is a rise in rate of need of assistance as people age. People aged seventy-five years and older living in the community report high rates of needing assistance to undertake home maintenance and gardening (46 per cent) and heavy housework (41 per cent) (data extracted from the Australian Longitudinal Study of Ageing (ALSA), wave 7). Data extracted from ALSA also indicates that 19 per cent of people over seventy-five years of age considered that changes or alterations to their home would make their home easier to live in or increase their independence. Of those who indicated they would like changes to their home, 21.3 per cent required general maintenance, 21.3 per cent wanted rails or bar straps, 14.9 per cent wanted ramps or changes to the floor, steps, path and driveways, and 12.8 per cent required structural changes. Other desired changes include heating or air-conditioning (5.3 per cent), security locks (3.2 per cent) and changes to doors (widening or change of door swing) (2.1 per cent).

While most studies addressing the need for HMM services focus on issues of safety and capacity for independence, there is also an acknowledgment that the meaning of home for older people and the housing aspirations of older people are also central to an understanding of need and demand for HMM services. There is a large international body of literature that indicates that most older people prefer to stay in their own home than enter residential care (Gibson 1998, pp. 12–13), and research that emphasises the strong attachment that many older people have to their home (e.g. Davison et al. 1993). Although some attention has been given to the importance of considering older people's emotional connection with the home in relation to home modifications, there is a concern that this can be overlooked when addressing issues of safety and independence (Heywood, Oldman & Means 2002; Heywood 2005, Tanner, Tilse & de Jonge 2007). Understanding the attitude of older people to ageing in place is integral to assessment of the need for HMM services. Many older people wish to stay put because they are in a familiar home and neighbourhood, and are attached to the family home and close to their social networks. Others find themselves living in houses that are not suited to their requirements in later life. HMM services are a means of adjusting housing to match an individual's lifestyle, rather than enabling individuals to age in place irrespective of circumstance.

Usage

Another approach to understanding need and demand for HMM has been to examine perceived access to HMM services. For example, in the USA an American Association of Retired Persons (AARP) survey found that 34 per cent of people over forty-five years reported that their local community had a service that offered light home repairs and 29 per cent reported that there was a local service that specialised in home modifications for older people (Greenwald and Barrett 2003). These percentages were considerably lower than those reported for most other home and community services. Many factors impact on the awareness of the availability of HMM services, including the extent to which existing services are marketed to older people. In a recent survey of HAS in Queensland many older people reported that they heard about the service through word-of-mouth (Johnson 2005). One of the concerns expressed by the clients was that people in need might not find out about services if they do not have a well-established social network, or they have a limited understanding of what the service offers (Johnson 2005).

A common approach to assessing need is to examine expressed need in the form of actual or envisaged usage of services. Early reports on home modification utilisation in the USA reported prevalence as low as 10 per cent in older people (Gilderbloom & Markham 1996; Ohta & Ohta 1997). However, a more recent survey of 7500 people over seventy in the USA in 1994 on physical and functional health, housing and service use found that almost 40 per cent of homes had functional modifications of some kind or another (Kutty 1999). Most common were bathroom modifications (27 per cent) including grab rails and shower seats, followed by accessibility modifications (12 per cent) to facilitate wheelchair access and manoeuvrability (Kutty 1999). In 1995 the AHS found that 49.29 per cent of older people had undertaken at least one modification in their home. The most common of these were hand or grab rails (35.7 per cent), ramps (14.0 per cent), bathroom redesign (11.8 per cent) and widening of hall/doorways (9.5 per cent) (Newman 2003). There are also specific health conditions, such as diabetes, stroke, hip fracture, fall or joint replacement which increase the likelihood of having home modifications (Tabbarah, Silverstein & Seeman 2000). An AARP survey of 2001 mid-life and older Americans found that most people (85 per cent) have made at least one simple home modification to make their homes easier to live in (Bayer & Harper, 2000). With respect to envisaged use of HMM services, an American study found that most (82 per cent) Americans over sixty-five years of age plan to stay in their houses as they age, but only some (40 per cent) anticipated making changes to age in place. This was despite the fact that many did not have suitable adaptations such as non-slip floor surfaces (46 per cent), an entrance without steps (63 per cent), bathroom aids (68 per cent) and personal alert systems (87 per cent) in their current home (Greenwald & Barrett, 2003).

Little directly comparable national data on usage and envisaged usage is available for Australia. An AIHW survey indicates that around 16 per cent of people aged sixty-five years and older have a home modification, mainly hand-rails or grab rails (AIHW 2003). The main source of data on HMM usage in Australia are the data sets on service usage under the HACC program (DOHA 2004). Data collected in 2004 show that home modifications are provided to 21,979 (3 per cent) of HACC clients, with an average of A\$328 spent per client per modification (DOHA 2004). Most HACC home modification and home maintenance services are provided to people aged over seventy years. However, data from the Disability, Aging and Carer Survey (DACS) of 1998 indicates that a far higher proportion of older people use private home maintenance services (234.5 per 1000) than those who use publicly funded services (42.5 per 1000) (ABS 2003a). An Australian study of out of pocket costs for people following a stroke, indicates that 23 per cent of the 353 people bore home modification costs within the first year following their discharge from a Melbourne hospital (Dewey et al. 2004). These findings are consistent with a US study that found that 75 per cent of home modifications are funded by the consumer alone (Tabbarah, Silverstein & Seeman 2000). Home modification rates in Australia appear to be low compared with the use of aids and equipment services (AIHW, 2003).

Finally, a number of factors that impact on perceptions of need for and usage of HMM services have been identified in the international literature. Older people are often reluctant to undertake modifications to their home environment (Steinfeld & Shea 1993; Struyk 1987; Trickey, et al. 1993). Factors associated with levels of uptake include, on the demand side, age, gender, race, health conditions, education, income, price of goods and the use of other devices (Kutty 1999). On the supply side factors such as the type of tenure and dwelling structure are also likely to impact on the use of modifications (Kutty 1999).

There is also a tendency for older people to make a more positive appraisal of their residential situation than experts (Auriemma et al. 1999). Environmental problems are

often under-reported (Pynoos, et al. 1998; Steinfeld & Shea 1993) and modifications are often under-utilised (Mann et al. 1996). Many older people with identified difficulties in the home are reluctant to undertake modifications (Gilderbloom & Markham 1996). The need for modifications can come unexpectedly, which means that people are unprepared (Duncan 1998a). Lack of knowledge of what is available (Pynoos 2004), of how to undertake modifications (Steinfeld & Shea 1993) and of who can assist (Duncan 1998a) prevent many homeowners, renters and landlords from exploring options. The scarcity of suitable services also presents difficulties (Gilderbloom & Markham 1996). In a national study in the USA older people identified the complexity and cost of home modifications as key deterrents (Bayer & Harper 2000; Pynoos & Nishita 2003). Another factor is the disruption and stress associated with home modification (Steinfeld & Shea 1993) and the potential to impact on the meaning of home, affecting the person's privacy, autonomy and personal identity (Heywood 2005; Peace & Holland 2001).

Link to research

Estimating the need for HMM services is complex and requires a number of approaches. Australia has good data on the levels and types of disability amongst older people, and data on the provision of HMM services under HACC and some other services. However, there is a lack of systematic data on the characteristics of the dwellings of older people relating to safety and independence, the specific difficulties experienced by older people in their homes, and the types of modifications or maintenance services that older people require, as judged by older people themselves or professionals such as occupational therapists. While there are some studies of the general housing aspirations of older people, these have not examined the need and demand for HMM services. There is no comprehensive data on the proportion of older people who have modified their homes or used home modification services, or on their future intent to do so.

To address these shortcomings in our current understanding of the national need and demand for HMM services would require a national survey of the housing circumstances of older people, with a strong focus on issues of home maintenance and modification. However, the consumer study reported in chapter 6 provides qualitative data that casts light on some of these issues. Through a sample of thirty users of HMM services it examines the nature of difficulties experienced in the home and the ways that older people manage these difficulties, as well as issues associated with their connection to their home and their feelings concerning staying put or moving. This data begins to build a more sophisticated understanding of the factors associated with the need and demand for HMM services in Australia, and lays a foundation for more extensive investigations.

3.3 Service organisation and provision

The issues involved in analysing the provision of HMM services are identified in Table 4 where ten questions to guide the analysis of HMM service provision are presented. Each of these is considered below. Service organisation and provision issues have been a significant focus of the international literature, and key themes and findings from this literature are reported below. These issues are strongly shaped by the national context. However, the international literature, particularly that drawn from the USA and UK, raises key themes relevant to the Australian context.

'Service organisation' refers to the overall structures and processes that shape the provision of HMM services. These include service objectives, funding arrangements, overall service availability, relations amongst service organisations, the deployment of human resources, and research and information systems. 'Service provision'

concerns the structures and processes that directly impinge on consumers. These include access arrangements, assessment processes, the actual delivery of services, and evaluation.

Service organisation

The provision of HMM is shaped by the character and clarity of the social and consumer objectives articulated in legislation and other policy documents that mandate and provide resources for HMM services. In several countries HMM services are provided as part of broad legislation aimed at addressing the needs of older people such as the *Title III Older Americans Act* in the USA (Pynoos & Nishita 2003) and the *Community Care Act* in the UK. HMM is typically one of many sets of services provided under such legislation and as such sometimes it does not receive a high priority or distinctive treatment (Pynoos & Nishita 2003). In the UK, the *Housing Grant, Construction and Regeneration Act 1996: Mandatory Disabled Facilities Grant* requires local housing authorities to provide grant aid of up to $\pounds 25$ 000 to eligible people with a disability for a range of modifications to their homes, subject to a means test (Department for Communities and Local Government 2006). However, critics of this legislation point to the poor publicity of this grant and the low take-up and a reactive rather than a proactive and preventative approach to home modification needs (Awang 2002).

The provision of HMM may be shaped by other legislation linked to wider antidiscrimination goals (Steinfeld et al. 1998). For example, in the USA the Fair Housing Act includes provisions that 'tenants can make needed modifications to multi-family units for accessibility purposes' (Steinfeld, Levine & Shea 1998, p. 16). However, this Act does not apply to single family housing and smaller complexes (Steinfeld, Levine & Shea 1998). This limitation and the reluctance of older people to use legal means to rectify their problems have limited the impact of this legislation in the USA (Pynoos and Nishita 2003). HMM provision is also shaped by building codes and regulations. Policies designed to require or encourage a universal housing design would, over time, reduce the need for major modifications to accommodate the needs of older people (Pynoos et al. 2004; Steinfeld, Levine & Shea 1998). Visitability legislation, which requires specific accessibility features to be incorporated into single family houses, has been passed in a number of localities and states in the USA (Smith 2003). The Swedish Prohibition of Discrimination Act (2003) and clauses in other legislation apply, for example, to the general Planning and Building Act and the Social Services Act (Swedish Institute 2007). The Act on the Support and Service for Persons with Certain Functional Impairments was introduced in 1994 and is a rights law supplementing other legislation (Swedish Institute 2007). It aims to give people with extensive disabilities greater opportunities and support so they may lead an independent life and to ensure equal living conditions and full participation in community life (Swedish Institute 2007). Support may take the form of personal assistance in everyday life, counselling, and housing with special services, or relief provision for the parents of children with disabilities (Swedish Institute, 2007). This law applies only to certain groups of people with disabilities and individuals not covered by this law can seek assistance from their municipal authority under the Social Services Act (Swedish Institute 2007).

In some countries access to the HMM service by older people may be mandated by disability policy and legislation. Ever since the 1960s the goal of Swedish disability policy has been to give disabled people the opportunity to live like everyone else (Swedish Institute 2007). Their policy concerning people with disabilities focuses on integration, full participation and equality (Lilja, et al. 2003). The cornerstone of Swedish disability policy has been the The Standard Rules on the Equalization of

Opportunities for Persons with Disabilities that was introduced in 1993 (Swedish Institute, 2006). A Disability Ombudsman was appointed to supervise compliance with the rules in 1994 (Swedish Institute, 2007). When, in 2000, the Swedish Parliament adopted the national action plan for disability policy that extends to 2010, Sweden moved a step closer to a universally accessible society (Swedish Institute 2007; Lilja, Mansson, Jahlenius & Sacco-Peterson 2003).

Legislation in Sweden is a state issue, whereas housing is the responsibility of the local authorities (Lilja et al. 2003). Swedish building regulations state that all new buildings and renovations should be accessible to and usable by people with disabilities, including the external environment and dwellings, including private homes that have been built since 1978 (Lilja, et al. 2003). Sweden differs from other countries in that their *Building Act* (SFS 1987, p. 10) constitutes the core statute for ensuring that all housing and public buildings and spaces are accessible and useable for people with a mobility and orientation handicap (Fange 2007, personal communication).

Closely linked to legislative provisions are the funding arrangements for HMM service provision. Public funding of home modifications is limited in many countries and is widely considered to be insufficient to meet the growing demand (Duncan 1998b; Healy 1988; Heywood 2001; Heywood, Oldman & Means 2002; Picking & Pain 2003; Pynoos 2004; Steinfeld & Shea 1993). In both the UK and the USA the supply of HMM is rationed (Heywood et al. 2002; Pynoos et al. 1998). In the USA many home modification programs are funded from several sources, leading to fragmentation, numerous administrative requirements and reduced flexibility (Pvnoos 1993: Steinfeld. Levine & Shea 1998; Pynoos & Nishita 2003). Unlike assistive technologies, home modifications do not have access to funding sources such as Medicare and Medicaid (Pynoos & Nishita 2003). In the USA many older people fund modifications out of their own resources, using their savings, assets or income to cover the costs involved. Home modifications range in cost from a few hundred dollars for a simple grab rail to several thousand dollars to remodel a bathroom (Pynoos & Nishita 2003). Over 75 per cent of older people make private payments without third-party assistance to incorporate accessibly features into their homes, compared with 50 per cent for assistive technologies (Pynoos & Nishita 2003). Even when limited third-party funding is available many homeowners, renters and landlords are not aware of available options (Pynoos & Nishita 2003). Some home equity and reverse mortgage loans are available through federal and state-operated programs, although it is reported that some of these schemes are difficult to access. In addition, many older people are reluctant to borrow against their major asset (Pynoos & Nishita 2003). In the USA there is also a limited access to appropriate private home loan programs to enable older people to undertake necessary modifications to their dwellings (Pynoos & Nishita 2003).

In addition to legislation for new dwellings an individual can apply for a housing adaptation grant under the Swedish Housing Adaptation Act where the current housing does not fulfil their accessibility and usability requirements (SFS 1992, p. 1574; Fange 2007, personal communication). The full cost for a housing modification can be granted for preventative, rehabilitation or long-term care reasons (Fange & Iwarsson 2005). The various municipalities administer and finance modification grants (Fange & Iwarsson 2005). A professional certifies the individual's eligibility for the grant and the Community Occupational Therapist administers the grant (Fange & Iwarsson 2005). The modification may be administered under its own legislative framework but can combine with other interventions to assist individuals in their homes (Fange & Iwarsson 2005).

Funding shortcomings impact on the level of availability of HMM services. In the USA, funding limitations often restrict HMM organisations with respect to the number of clients they can serve and the types of services they can offer. Modest budgets often result in long waiting lists and a focus on low-cost solutions (Pynoos et al. 1998). In the UK the shortage of funds has resulted in differing levels of service in different geographic areas and in restricting services to people on pensions and with a low income (Heywood, Oldman & Means 2002). In both the UK and USA the funding arrangements, type of services provided and the nature of organisations providing HMM services can vary greatly from one geographic location to another (Picking & Pain 2003; Pynoos et al. 1998). Rural areas are especially under-serviced (Klein Rosage & Shaw, 1999; Pynoos 1993). In many locations, older people need to be assertive, well informed and prepared to wait a considerable length of time to have their needs addressed (Heywood, Oldman & Means 2002; Picking & Pain 2003; Tinker et al. 2004). There can also be variations in service delivery depending on the time of the year and the availability of associated funding and resources (Department for Communities and Local Government 2006).

Relations amongst the organisations involved in provision of HMM, and in particular issues of integration and coordination, have been identified as key matters of concern. In the USA complex funding systems have resulted in a patchwork of agencies providing HMM services (Pynoos et al. 1998), leading to a lack of connectivity amongst services and professionals working in the area (Pynoos 2004). Services are provided across health, community care and housing sectors, each with their own priorities, eligibility requirements and delivery systems (Pynoos & Nishita 2003; Pynoos et al. 1998). Services often vary in their purpose, the population served, the source of funding, the scope of the service, the type of modification, the budget per home and approval processes (Klein, Rosage & Shaw 1999). In most communities it is difficult to identify one group or individual who can provide the full range of services, with many providers specialising in specific aspects of the process or particular types of modifications (Pynoos et al, 1998). Consequently, consumers are likely to need to access more than one service to have their needs addressed (Pynoos et al. 1998). Limited information makes it difficult for consumers to effectively navigate these services (Pynoos et al. 1998). With a number of agencies in health, social and housing services that are responsible for one or another aspect of the home maintenance or the modification process (such as information and referral, assessment, funding, supply of specific modifications), it is difficult for consumers to have their needs comprehensively met (Pynoos & Nishita 2003). Furthermore, the provision of assistive devices and home modifications are often provided by different service systems (Duncan 1998a)

A further issue raised in the international literature is the availability of professional and technical expertise. The two key issues are the role of the building industry and the role of HMM professionals, especially occupational therapists.

HMM services rely heavily on the building industry to implement recommendations. However, it is common for health and community care professionals to experience difficulties in interacting with this industry. Firstly, dealing with a building contractor is often more difficult than anticipated. Obtaining estimates of costs, dealing with specialised trades, storing materials and tools, subcontracting, managing liability and building quality control are unfamiliar tasks for health and community care professionals (Pynoos et al. 1998). It is also often difficult to locate skilled subcontractors to coordinate the range of home modifications that clients need (Pynoos et al. 1998). Poor workmanship can result in grab rails being incorrectly installed or positioned (Lansley et al. 2004). Contractors may not be well informed about the needs of older people and the suitability of adaptations (Auriemma et al. 1999; Pynoos et al. 1998; Steinfeld, Levine & Shea 1998) and few have developed specialised expertise (Duncan, 1998a). They may have established ways of working that are difficult to change, and they may be reluctant to try new methods and products (Pynoos et al. 1998; Steinfeld, Levine & Shea 1998). They may not be interested in small home modification projects (Pynoos 1993; Steinfeld, Levine & Shea 1998). In the USA the housing industry has been slow to explore the home modification market (Duncan 1998a).

The building sector is also bound by a variety of standards and codes that can negatively impact on modification solutions or add substantially to their cost (Steinfeld, Levine & Shea 1998). Contractors are required to meet a range of national and local codes that may require additional work or particular methods that can add substantially to costs (Steinfeld, Levine & Shea 1998). Rigid and variable interpretations of codes can impede the negotiation of solutions that meet the requirements of both the code and the householder (Pynoos 2004). Standards and codes are often not developed with older people in mind and may not be suited to a residential environment (Klein, Rosage & Shaw 1999; Pynoos & Nishita 2003; Sanford, Follette & Jones, 1997; Steinfeld, Levine & Shea 1998). Complying with building codes can result in modifications having an institutional appearance not in keeping with the meaning of home to the consumer (Lund & Nygard, 2004).

Considerable attention has focused on educating design and construction professionals on the requirements of HMM services. However, there continues to be a need for industry education (Steinfeld, Levine & Shea 1998). It has been argued that there is a need for marketing campaigns, design awards and similar initiatives designed to raise awareness of design considerations for older people (Duncan 1998b), particularly issues of accessibility and usability (Steinfeld, Levine & Shea 1998). Improved communication and coordination between health and community care professionals and the building industry has been identified as a key service delivery issue (Heywood, Oldman & Means 2002).

The availability of professional expertise has also been identified as a key issue (Heywood et al, 2002). It is often difficult to find qualified professionals (Pynoos 1993; Steinfeld, Levine & Shea 1998) and in some areas there is a chronic shortage of occupational therapists, who have been identified as the key HMM profession (Department for Communities and Local Government 2006). In the UK context such shortages have resulted in an average waiting time of 11 months for the first HMM assessment (Heywood, Oldman & Means 2002). Occupational therapists can provide training to other service providers in HMM assessment to address shortages of professionals (Department for Communities and Local Government 2006). A key issue is the capacity to work effectively across sectors including health, community care, housing and design and construction (Duncan 1998a).

Service organisation also encompasses research and information systems. It has been argued that research on HMM has been hindered by a number of factors (Heywood 2004a). Randomised control trials, the preferred form of research in the health arena, are difficult to mount in community settings. Chronic health conditions, the problems of older people and housing issues have historically had low status in medical research. Research by community-based health professionals such as occupational therapists tends to be underfunded, small scale and difficult to access. Research in this field is also scattered, spanning the domains of health, disability, ageing and housing. Finally there are a number of methodological difficulties in conducting research in this field (Heywood 2004a). Without supporting evidence it difficult to promote these services with government and secure support for increased funding (Duncan 1998b). Nevertheless, many writers have identified issues related to HMM requiring further research to inform policy and program development (Liebig & Sheets, 1998). The changing needs of older people with housing disability needs to be detailed (Duncan 1998b; Liebig & Sheets 1998). Attitudinal, financial and institutional barriers that limit access to modification services also need to be explored and those at risk of having unmet needs identified (Liebig & Sheets 1998). Studies need to be undertaken to determine the impact of modifications, and their effectiveness in meeting the needs of the consumer (Liebig and Sheets, 1998; Picking & Pain, 2003; Pynoos 2004). The cost effectiveness of modifications also needs to be investigated (Department for Communities and Local Government 2006; Duncan 1998b; Liebig & Sheets 1998). Factors impacting on the effective use of HMM also need to be examined and best practice in HMM service delivery identified (Liebig & Sheets 1998).

It has been suggested that HMM services would be enhanced through educational programs directed at a range of stakeholders (Duncan 1998a; Pynoos 2004). Increased advocacy for HMM services by aging, disability and housing networks to policymakers, funders, program mangers and property professionals would ensure that they were better informed about the need for and potential benefits of home modifications (Duncan 1998a; Liebig & Sheets 1998; Pynoos 2004; Steinfeld, Levine & Shea 1998). Training for doctors and other professionals on how to identify a patient's need for modifications and make a referral to an appropriate service would also improve service delivery (Liebig & Sheets 1998). The education of consumers could empower them to periodically review their needs and plan for the future (Auriemma et al. 1999; Connell & Wolf 1997; Duncan 1998b).

Service provision

Access issues, including information, advice, and referral processes and requirements, are key elements of effective service provision. Accessing home modification services can be difficult for consumers, often requiring some form of expert intervention or case management (Steinfeld, Levine & Shea 1998). Information services can play an important role. It has been argued in the UK context that information on services and access processes needs to be disseminated widely to the general public, service users and their advocates, as well as professionals and other related service providers (Department for Communities and Local Government 2006). Information and referral centres, toll-free telephone services and service directories have been proposed as means of improving access to HMM services, including occupational therapists, design professionals, and contractors with specialist interests and skills in the area of home modifications (Duncan 1998b; Picking & Pain, 2003; Pynoos & Nishita 2003; Steinfeld, Levine & Shea 1998).

Referral pathways are also of central importance. The early liaison between health services and home modification services has been identified as important in reducing the length of stay of people in hospital and facilitating their early return home (Hakim & Bakeit 1998). Shared application processes amongst service providers and cross training of staff have been proposed as ways of improving inter-agency coordination (Liebig & Sheets 1998).

Some specific groups have been identified as having particular difficulty in accessing HMM services. Tenants in particular have access difficulties due to the difficulty in gaining permission from landlords to undertake modifications (Heywood 2001; Heywood, Oldman & Means 2002; Picking & Pain 2003; Pynoos & Nishita 2003). In the USA lack of access to private insurance for long-term care decreases the likelihood that home modifications will be recommended by health and community care professionals (Lysack & Neufeld 2003).

Client assessment processes have also been identified as a key element in HMM provision. Reviews of these processes have found inconsistencies and variations across services in the way in which older people's needs for HMM are assessed. Different services use a variety of assessment tools, assessors, procedures and service criteria to determine the need for modifications (Klein, Rosage & Shaw, 1999; Pynoos et al. 1997). Many assessment tools are not standardised and have often been developed by individual services providers (Auriemma et al. 1999). While some standardised checklists have been developed for hazard assessment (Clemson, Roland & Cumming 1992), poor reliability of other tools e.g. shower and toilet assessments (Auriemma et al. 1999; Clemson, Roland & Cumming, 1992) can result in a great variation in assessment processes and outcomes (Department for Communities and Local Government 2006).

Effective assessment of need has been identified as being critical to good service delivery (Klein, Rosage & Shaw 1999). In particular, it has been found to be important to evaluate both the functionality of the environment and the specific requirements of the older person (Pynoos 2004). Accurate specifications are necessary to ensure that work is carried out appropriately (Heywood 2001; Picking & Pain 2003). Informing the client about the work to be carried out and what to expect in the modification process has been found to assist the consumer in dealing with the experience (Picking & Pain 2003). Consumers have reported that they value professionals who understood the stress the experience of modification presents (Picking & Pain 2003).

The importance of heeding the views of consumers and their families has also been found to be important in assessment processes (Hawkins & Stewart 2002: Heywood 2004a). This can avoid wasteful adaptations, as recommendations that do not take psychological factors into account or consider the meanings of the home to the older person are not likely to be accepted or well utilised in the home environment (Heywood 2004a). Over-emphasis on safety and performance problems can detract attention from other issues such as independence, injury prevention, caregiver health and social integration (Duncan 1998a; Pynoos 2004). It has been found that the family environment often receives only selective or cursory examination and its role in supporting frail older people is often overlooked (Pynoos & Nishita 2003; Pynoos 2004). Many service providers tend to propose modifications that fall within the financial resources and expectations of the subsidising organisation (Rousseau, Potvin, Dutil, and Falta, 2001b). However, the best value may not always be the cheapest option. It has been found that interventions that do not fully satisfy the current and anticipated needs of the household may result in wasted expenditure (Department for Communities and Local Government 2006). Modifications that have an institutional or medical look and feel may be at odds with the home environment (Duncan 1998a).

Lack of consumer involvement in assessments and decision-making (Auriemma et al. 1999; Hawkins & Stewart 2002; Nocon & Pleace, 1997) has been identified as a continuing issue. Older people often have quite different views on their home and needs to service providers. This can impact on how they value advice and their willingness to proceed with recommendations (Auriemma et al. 1999). There is concern that the delivery of home modifications services can disempower consumers by not allowing them sufficient choice and control over the process (Hawkins & Stewart 2002; Heywood 2004a; Sapey 1995). It has been proposed that interventions must reflect older people's views as well as those of professionals (Department for Communities and Local Government 2006; Wylde 1998). Furthermore, consumers must be involved in the coordination of home modification services and remain active in the home modification process (Picking & Pain 2003).

These are arguments that effective service delivery is dependent on professionals working collaboratively with the older person (Department for Communities and Local Government 2006; Klein, Rosage & Shaw, 1999; Ohta & Ohta 1997) to ensure that the older people and their homes are considered holistically (Auriemma et al. 1999; Hawkins & Stewart 2002), and that their cultural background is acknowledged and respected (Krefting & Krefting 1991). From this perspective, assessments must consider the personal, social, temporal and cultural dimensions of the home, as well as its physical characteristics (Harrison 2004). In collaboration with the client, the service provider needs to identify the range of potential solutions and discuss which best facilitate the client's preferred activities and lifestyle (Hawkins & Stewart 2002). The use of the Canadian Occupational Performance Measure (Law et al. 1994), which allows the consumer to define and prioritise their own areas of need and the relationship between the environment and the person to be examined, is one such collaborative approach (Hawkins & Stewart 2002). This means that service providers become 'supportive enablers and a resource' rather than 'controllers of a limited budget' (Hawkins & Stewart 2002, p. 85). It also allows the value and meaning of home to be acknowledged as interventions are negotiated with respect for the occupants and the dynamics of the household (Hawkins & Stewart 2002; Steward 2000).

The quality of the actual delivery of services to consumers has also been addressed in the HMM literature. In the UK many service users have experienced a lack of coordination between the services, interruptions to service delivery when staffing and funding is not available, and poor communication from service providers (Department for Communities and Local Government 2006). The amount of time service providers spend in the home is often limited by funding and reimbursement policies (Duncan 1998b). This means that there can be insufficient time to consult with families and enable them to make informed decisions (Duncan 1998a). In some cases professional judgement may be prejudiced by these organisational constraints, resulting in ineffective or harmful recommendations (Heywood 2004a). Other problems are delays in providing modifications due to lengthy application processes, long waiting lists for assessments and hold-ups in the work being carried out (Hawkins & Stewart 2002; Picking & Pain 2003).

A further issue is the difficulty of coordinating the variety of services and service providers required for the successful and timely implementation of modifications (Steinfeld, Levine & Shea 1998). A common problem is the discharge of older people from hospital to unsuitable homes that then require immediate modification (Heywood, Oldman & Means 2002). Delay in the provision of home adaptations has been found to unnecessarily prolong hospital stays (Hakim and Bakeit 1998). Older people and their families are often faced with the difficult task of coordinating the many different providers that may be needed for a home modification including occupational therapists, installers, suppliers and service agencies (Pynoos & Nishita 2003). Having someone to coordinate and monitor progress and troubleshoot is valued by consumers (Picking & Pain 2003; Pynoos 2004). Although HMM service delivery cuts across a number of service areas and relies on the skills and experience of people from a wide range of disciplines, it is desirable that the service recipient experience a seamless, interconnected service (Department for Communities and Local Government 2006). This may require joint agreements, protocols and service level agreements amongst the services. A central point of enquiries or referral would also assist users in accessing relevant services (Department for Communities and Local Government 2006).

Consideration of service quality implies the availability of processes for review and evaluation of HMM services, including assessment of consumer satisfaction, and

service impacts and outcomes. Follow-up processes would assess the impact of the modification, the quality of equipment and installation and safe use, as well as identifying unexpected difficulties and making final adjustments (Gitlin, Miller & Boyce 1999; Klein, Rosage & Shaw, 1999; Mann et al. 1994). One study has reported an overall lack of follow-up in home modification services (Auriemma et al. 1999). Follow-up studies on bathroom modifications found a number of problems, including the failure to deliver equipment, the delivery of the wrong equipment, the improper installation of equipment and consumers' difficulty in using the equipment (Gitlin, Miller & Boyce 1999).

Link to research

The literature on HMM in other countries, notably the USA and UK, identifies a long list of service organisation and provision issues that require investigation in the Australian context. Very few of these issues have been systematically researched in Australia, and there has been little examination of the organisation and provision of HMM in Australia beyond the description and evaluation of individual services (de Jonge, Ainsworth, & Tanner 2006). The current study makes a contribution to Australian research in this area in three ways. Firstly, in chapter 4 an overall description of HMM services in Australia is presented, based on secondary sources and key informant interviews. Based on this account, a number of defining characteristics of HMM organisation and provision in Australia are identified. Secondly, in chapter 5, the views of selected HMM service providers in all states and territories on service organisation and provision issues are presented. This includes an analysis of both service organisation and service delivery issues, addressing many of the themes raised in this chapter. Thirdly, the consumer study in chapter 6 examines service delivery issues from a consumer perspective. It considers the processes through which they accessed HMM services, their experience and evaluation of services and their perceptions of the impact of services on their lives. These three contributions to analysis of the organisation and provision of HMM services provide a platform for constructing an evidence base to develop enhanced HMM services

3.4 Client outcomes

The outcomes of HMM services can be classified into two broad groups: direct consumer outcomes and societal outcomes. 'Client outcomes' refers to the consequences of HMM service provision for the consumer or recipient of the service. Following the framework of goals of HMM services provided in Table 2, three broad sets of outcomes can be identified: safety, independence, and lifestyle and identity. These are shown in Table 4, alongside the more immediate outcome of customer satisfaction. The international literature on the outcomes of HMM services is sparse in comparison to the literature on needs and demands, and service organisation and provision. There are but few studies that specifically examine the outcomes of HMM service provision.

Safety

The key issue with respect to safety, is whether the provision of HMM services results in greater safety in the home environment, particularly reduction of falls and other accidents. There is only a small body of research findings. A number of studies undertaken in Australia have investigated the impact of hazards in the home (Carter et al. 2000; Clemson & Martin 1996; Mackenzie, Byles & Higginbotham 2002; McLean & Lord 1996), and the impact of home modifications on falls in older people (Cumming et al. 1999; Day et al. 2002; Peel, Steinberg & Williams 2000; Steinberg et al. 2000; Stevens et al. 2001; Thompson 1996). These studies do not establish a direct

relationship between environmental hazards in the home and the incidence of falls (Gillespie et al. 2001), although this may be due to the different approaches used in defining core concepts such as home hazards (Gitlin 2003). Home modifications have not been found to independently reduce falls. However, in combination with a comprehensive home visit, home modifications do significantly reduced the risk of falling for frail older people who have previously fallen (Close et al. 1999; Cumming et al. 1999). These results suggest that home modifications targeted at the specific needs of at risk people may be the most effective with respect to falls.

Independence

The issue of independence, as discussed in chapter 2, has a number of dimensions. It is concerned generally with the capacity for independent living, including the capacity to undertake a wide range of tasks without external assistance. It is also concerned with enabling older people to stay put and avoid undesired moves. It encompasses the capacity of carers to provide services in the home. The impact of HMM on these outcomes has received little research attention. One study based on a randomised control trial of ninety frail elderly home-based people found that the intervention group, who were systematically provided with assistive technologies and environmental interventions, were found to decline at a slower rate (experiencing reduced morbidity) than the control group and to have reduced institutional and in-home personal care costs (Mann et al. 1999). Another study that examined the provision of education, physical and social environmental modifications to families with a member with dementia found a reduced decline in instrumental and self-care activities and fewer behavioural problems (Gitlin et al. 2001). A study based on case studies found that environmental interventions cost significantly less than providing ongoing residential care, except in cases where people had severe impairments (Lansley et al. 2004). A number of studies focusing on issues of lifestyle and identity also address issues of independence, and these are reported below.

Lifestyle and identity

Issues of lifestyle and identity are closely linked to independence, but the focus is on the ability to pursue interests and activities, the capacity for social participation, the enhancement of physical and mental health, and access to all areas of the home. A number of studies with this focus were identified, and this appears to be an emerging area of research.

A recent study in the UK examined the health outcomes of modifications in the homes of people with disabilities, including older people. This primarily qualitative study found that people with disabilities living in unadapted or badly adapted housing experienced pain, accidents, exacerbated illness or feelings of depression. In contrast, well-designed adaptations were found to impact positively on the physical and mental health of the person with a disability (Heywood 2004a). Furthermore these were long-term benefits and extended to improve the health of other members of the family as well (Heywood 2004a). This study confirms findings of previous studies, which found a reduction in the pain resulting from minor modifications such as the installation of grab rails (Clemson & Martin 1996; Edgington 1984). Preliminary findings of another study found that introducing home modifications and other control-oriented strategies to functionally vulnerable people over seventy years of age reduced their mortality (Gitlin et al. 2006).

The outcomes of home modification interventions have also been evaluated in terms of the performance of functional activities. A small study of the impact of assistive devices and environmental interventions on the occupational performance of sixteen older adults found that the interventions improved the clients' satisfaction and perception of performance of a range of self-identified activities in the home (Stark 2003). A number of practical outcomes were also identified. Another UK study found that home modifications enabled people to engage in activities they had become unable to undertake and restored their access to some areas of their home. Modifications were also perceived as preventing accidents and falls and reducing the mental and physical strain on carers. This study found that modifications could also impact positively and negatively on the meaning of home, affecting the security, privacy control and autonomy provided by the home as well as its residents' self-image and relationships (Heywood 2005). In another qualitative study, Heywood (2004b) found that material needs such as access and safety may not always be the most important to modification recipients. The need to retain or restore dignity, to have their values recognised, to be afforded choice and to take an active part in society are important aspects of the home environment and require due consideration by those providing HMM services (Heywood 2004b).

Similarly, a qualitative study undertaken in Australia on the impact of home modifications on the meaning of home for older people residing in public housing, found that home modification has the potential to enhance the experience of home as a place of significant and unique personal and social meaning for older people (Tanner 2005). By reducing the demands of the environment, home modifications improved people's safety, security and comfort in the performance of their daily activities, gave them increased independence and efficacy in performing valued activities and roles, reduced the stress of their carers, and supported the continuation of social networks and relationships (Tanner 2005). The study also found that highly functional approaches to provision of home modifications eroded the meaning of home and diminish the effectiveness of home modifications (Tanner 2005).

Consumer satisfaction

Studies of consumer satisfaction with HMM services consistently report high levels of reported satisfaction. A UK study found that recipients of minor modifications believed that these had a range of lasting positive consequences, including 'improved safety and reduced risk of accidents'. Major modifications such as bathroom conversions, extensions and lifts were perceived as having a greater impact, having 'transformed people's lives' (Heywood 2001). Consumers felt that the modifications had enabled them to avoid hospitalisation, and reduced the strain on their carers (Heywood 2001). Another study o sixty-seven people aged over seventy who had received a home modification service reported high levels of satisfaction, particularly with respect to the way that the modifications enabled them to exercise control over many of their day-to-day activities (Lansley et al. 2004).

An evaluation of HAS services in Queensland similarly found high rates of satisfaction (Johnson, 2005). The clients reported that assistance with security and maintenance provided them with peace of mind and reassurance and made living in their home easier and safer (Johnson, 2005). A study undertaken in 2002 by the Queensland DOH on their home modification program found that most consumers reported moderate to extreme satisfaction with the completed modifications and felt that the changes had a positive impact on their safety, independence and quality of life (de Jonge Ainsworth & Tanner, 2006).

Link to research

There has been very limited examination of the outcomes of HMM to date, both internationally and in Australia. The literature review points to the range of studies required and, in particular, the need for studies that address a diversity of outcomes including safety, independence, and lifestyle and identity. The current study makes a

modest contribution to understanding of the outcomes of HMM services. Together with the previous research reported in this chapter, this provides a foundation for more systematic examination of the consumer outcomes of HMM services, particularly in the Australian context.

3.5 Societal outcomes

'Societal outcomes' refers to the consequences of HMM service provision for society and, in particular, the relations between HMM provision and the goals of social policy. Defining the goals of HMM in policy rather than consumer terms adds an important perspective. In the health system HMM services may be linked to the goal of reducing health expenditure by preventing falls and other accidents, by enabling patients with chronic illness to be managed in the community, and by facilitating early discharge from hospital and reducing risk of readmission. In the community care system HMM services can be viewed as part of a suite of community care services designed to prevent unnecessary admission into residential aged care facilities. From a housing system perspective, HMM services may enable older households to make more efficient and effective choices with respect to their housing consumption. They can also be viewed as part of a wider package of measures to enable older people to address their housing needs and reduce demand on the social housing system.

In Chapter 3 of the positioning paper a detailed account is provided of the ageing policy context of HMM service provision (Jones, de Jonge & Phillips 2008). It suggests that the three broad goals of ageing policy in Australia relevant to HMM provision are fiscal sustainability, positive ageing and ageing in place. These three sets of policy goals provide a framework for considering the societal outcomes of HMM service provision. Other than the studies reported in section 3.4, there is an absence of international and Australian research linking HMM to these wider policy goals. The discussion that follows is, therefore, a predominantly theoretical approach to identifying the research questions to be addressed in considering the effectiveness of HMM services in achieving positive societal outcomes.

Fiscal sustainability

The central issue in ageing policy in Australia during the past decade has been the impact of ageing on the long-term fiscal sustainability of the Australian government. This issue gained prominence internationally in the early 1990s and gained momentum in Australia in the mid-1990s (National Commission of Audit, 1996; Borowski, Encel & Ozanne 1997, pp. 8–15; Clare & Tulpule, 1994). In recent years the fiscal impact of ageing has been discussed in a number of Australian Government reports (Australia 2002; Australia 2007; DOHAC 1999; Productivity Commission 2005). The dominant perspective presented in these reports is that population ageing will require new policy approaches, but that it is not a crisis at this stage. The Productivity Commission summarised the prevailing view as follows:

Population ageing has been called the quiet transformation, because it is gradual, but also unremitting and ultimately pervasive. Population ageing will accelerate over the next few decades in Australia, with far-reaching economic implications. It will slow Australia's workforce and economic growth, at the very time that burgeoning demands are placed on Australia's health and aged care systems. Unless offsetting action is taken, a gap will open up between Government revenue and spending that will need to be closed ... Population ageing will require new policy approaches at all levels of government. (Productivity Commission 2005, p. xiii)

The central emphasis of public policy on ageing at the national level is to address the fiscal gap over the long term through measures to increase labour force participation and economic productivity, while limiting public expenditure in areas such as health, aged care and income support (Australia 2007).

Public expenditure on HMM is very small relative to major areas of expenditure on older people, such as residential aged care, health care and income security. The key issue is whether or not increased expenditure on HMM might play a role in significantly reducing expenditure in other areas of social provision, that is, that expenditure on HMM may have a net positive fiscal impact. There are four areas in which HMM might have such an impact.

Firstly, improved HMM services may reduce levels of hospitalisation and the length of hospital stays. The links between rates of hospitalisation of older people and the nature and quality of their home environments have been recognised. The creation of age-friendly environments at home or in the local community that increase individuals' capacity for self-care and independence is of great importance to hospital discharging processes and the goal of minimising time in expensive hospital facilities (MacCallum 1997, p. 69). People aged sixty-five and over account for one-third of all hospital admissions and over 40 per cent of the cost. The average cost of a hospital stay for a person aged sixty-five and over is 50 per cent higher than for younger people (DOHA 2003, p. 34). HMM services that improve the safety of the home environment and assist older people to live independently may have a key role to play in reducing hospital admissions and the period of hospitalisation.

HMM services may also enhance the capacity to manage individuals with chronic conditions in the community. An important issue in the management of older people in the community with complex and chronic health conditions is the integration of hospitals, primary healthcare systems and community care services. There has been a longstanding emphasis in some areas of geriatric medicine on the need for a more integrated approach to the management of older people with chronic health conditions (Andrews & Carr 1990, p. 119; Healy 1990, 144–6). However, the interface between the health and community care systems remains problematic (Healy 1990, pp. 143–4; Howe 1997, pp. 317–18; Parliament 2005, pp. 124–7 and 164–72).

Perhaps most importantly from a fiscal perspective, HMM services may reduce or delay entry to residential care services. As will be discussed in the following chapter, the main source of funding for HMM services in Australia is the HACC program, alongside other community care programs such as Community Aged Care Packages (CACP) and Extended Aged Care at Home (EACH). A major impetus for the development of these programs during the past two decades has been the objective of reducing the number of older people cared for in expensive aged care facilities. There is currently little evidence on the role of HMM services relative to other community care provisions in reducing or delaying entry to residential care.

Positive ageing

Alongside the policy discourse on fiscal sustainability is another that is concerned with the issue of how older people are perceived and treated in public policy and in community life. This set of ideas is broadly concerned with addressing negative stereotypes about older people and their role in society, and constructing public policies that facilitate more positive views of older people, that enhance their quality of life, and that recognise and make possible their societal contribution. These ideas stem in part from developments in social gerontology since the 1970s that challenge a prevailing view of growing old as a period dominated by physical and mental decline, often accompanied by disengagement from society. This has led in turn to an emphasis on the need to develop more positive constructions of ageing both in public policy and in the wider society (Phillipson 1998).

The idea of viewing ageing in a positive frame, and developing policies and programs accordingly, has been adopted with great enthusiasm by policymakers and older people's advocacy organisations in Australia since the 1990s. Whereas the issue of fiscal sustainability has been the primary motif of economic policy departments and agencies at the national level, 'positive ageing' has been the core theme of the state and territory offices of ageing and of many other departments and agencies involved in health and social service provision to older people (e.g., DOHAC 2000; DHHS 1999). Other terms such as 'successful ageing' (Powell 1992), 'productive ageing' (Ranzijn & Grbich 2001), 'healthy ageing' and 'ageing well' have also become part of the common language of ageing policy.

The reconceptualisation of ageing in positive terms is widely accepted and supported in Australia and constitutes a new orthodoxy of ageing policy. HMM services can play a number of key roles with respect to positive ageing spanning issues of safety, independence and lifestyle and identity, as discussed in section 3.4. The key themes of positive ageing essentially correspond with the positive consumer outcomes identified in section 3.4. In broad terms, the public policy theme of positive ageing emphasises the importance of the health, independence, social and economic participation, and quality of life of older people as a social objective as well as an objective for individuals and households.

Ageing in place

Fiscal sustainability and positive ageing can be viewed as the central macro-themes of ageing policy in Australia that impact across a wide range of ageing policy areas. Another broad theme of ageing policy of particular relevance to HMM is ageing in place. In the Australian context, the term 'ageing in place' has carried a number of meanings. In the narrowest sense it has been used to refer to changes introduced in the late 1990s in the residential aged care system that allow residents to make the transition from low care to a high-care service without having to move between facilities (AIHW 2002). More broadly, it refers to the capacity of older people to continue to live at home for as long as possible, rather than moving to a residential aged care facility (Tinker 1999). In the most general sense it is used to refer to the idea of staying put, i.e. older people remaining in their own home and/or community rather than being required to make unwanted moves to new dwellings or locations.

Ageing in place has been widely viewed as a principle of ageing policy that should underpin policy and services in areas such as aged care, housing, urban planning and provision of community infrastructure for older people. It is based on the widespread belief that older people generally wish to remain in their current homes as they age. This is based on evidence that older people move residence far less frequently than younger people (ABS 2003b, p. 16), on studies that emphasise the strong attachment that older people have to their home (e.g. Davison et al. 1993), and on a large international body of literature that indicates that most older people prefer to stay in their own homes rather than enter residential care (Gibson 1998, pp. 12–13). The principle of ageing in place has underpinned the deinstitutionalisation of aged care and the growth of home-based care for older people in Australia (Gibson 1998, pp. 10–16). It has also underpinned the development of a range of policies by state and local governments to create 'age friendly communities' (Australian Local Government Association 2006; Bartlett & Peel 2005).

While the concept of ageing in place is widely used in Australia in the context of community care, housing and urban planning policies for older people, a number of

questions have been raised concerning its use as a general principle in ageing policy. There is evidence of increasing residential mobility amongst older Australians, particularly voluntary moves associated with lifestyle goals (Borowski & Hugo 1997, pp. 36–44). Recent research has suggested that older people are more attached to locality than to a particular dwelling, and that the baby boomer generation will be increasingly willing to move house as their life circumstances change (Olsberg & Winters 2005). The emphasis in the international literature is now on understanding the range of factors that may lead an older person to move or stay put, rather than assuming that ageing in place is an underlying preference (Clough et al. 2004; Heywood, Oldman & Means, 2002).

HMM services play a critical role in the achievement of ageing in place either viewed narrowly as the capacity to stay put or more broadly as the capacity to make appropriate housing adjustments in response to changing preferences and circumstances in later life. HMM services have the potential to enable many older people to avoid involuntary and unwanted moves, such as living with their family or in residential care. HMM services can expand the housing and location choices available to older people faced with complex and important decisions about housing adjustments, particularly the key question of whether to move or to stay put.

Link to research

The impacts of HMM services on fiscal sustainability, positive ageing, and ageing in place have not as yet been the focus of sustained research, either internationally or in Australia. The role of HMM in achieving these goals of ageing policy, either alone or in conjunction with other community care provisions, should be part of the agenda for HMM research and policy analysis. However, the present study is not directly focused on these issues, and a greater understanding of needs and demands, service organisation and provision, and the consumer outcomes of HMM is a prerequisite of such studies.

3.6 Conclusions

The analytical framework presented and discussed in this chapter is based on the international research literature and consideration of the Australian policy and services context as reported in the positioning paper. It provides a framework for HMM research in Australia, and also indicates the current state of play in HMM research. It is clear that HMM research in Australia does not at present provide a substantial evidence base for policy development, although some findings from the international literature are relevant to Australian HMM policy and service provision. With respect to the Australian literature, there is only a limited evidence base concerning the nature and level of need and demand. Most of the need and demand research questions identified in the analytical framework have been at best only partially researched. The research questions relating to HMM service organisation and provision are, similarly, largely unanswered. With respect to outcomes, there is a small body of Australian research around falls prevention and some HMM services have been evaluated. But a systematic evidence base relating to safety, independence, and lifestyle and identity outcomes has not been developed. The evidence to link HMM provision to Australian ageing policy objectives such as fiscal sustainability, positive ageing and ageing in place is lacking.

The research reported in chapters 4–6 is based on the analytical framework presented in this chapter and aims to make a number of specific contributions to the evidence base. Chapter 4 provides a systematic description of HMM services in Australia and addresses a number of the research questions listed under the heading 'service organisation and provision'. The findings of the service provider study that are

reported in chapter 5 provide further data on service organisation and provision as perceived by a providers drawn from all states and territories. The consumer study reported in chapter 6 provides insights into consumer need for HMM services, focused in particular on research questions relating to consumer difficulties in the home and aspirations. It also provides data on consumers' experiences of services and their perceptions of the outcomes of services for themselves and their families and carers. These findings and policy and research implications are discussed in chapter 7. Hence, the framework presented in this chapter provides a structure both for reporting of research findings and for identification of gaps in the evidence base and the need for a more extensive and more comprehensive research approach.

4 HMM SERVICES IN AUSTRALIA

4.1 Introduction

The purpose of this chapter is to provide an overview of HMM services in Australia, firstly by describing the main programs and secondly by identifying the main characteristics of the organisation of services. HMM services in Australia have tended to be viewed primarily as a service type provided under the HACC. While HACC is the main funder of HMM services there are a number of other services or organisations that do so, and this chapter aims to describe the overall service arrangements. Relatively little attention has been paid to the organisation of HMM services as a whole, or to the impact of program, funding and organisational arrangements on the delivery of services. In section 4.2 the main programs through which HMM services are provided are described, including services provided in the community care, housing, health and veterans' affairs sectors. In section 4.3 key characteristics of the organisation and delivery of HMM services as a whole are identified, based on the description provided in section 4.2. This provides a foundation for addressing the questions concerning service organisation and provision identified in chapter 3, and a context for the service provider and consumer studies reported in chapters 5 and 6 respectively. The chapter builds on the description provided in the positioning paper. which also provided a state-by-state analysis of HMM provision.

This overview is based primarily on a literature review of available information obtained from documents and websites, supplemented by information collected from phone and face-to-face interviews with key informants. A list of the main sources and interviewees is provided in appendix 5.

4.2 The main programs

HMM services in Australia are provided through four main groups of organisations. In all states and territories HMM services are provided as part of the national community care program, although the level and method of provision of HMM services vary considerably from state to state. State housing authorities (SHAs) are also involved in HMM provision, but with great variation from state to state in the type and level of involvement. State and territory health services also play roles in HMM provision, but again with great interstate variation. Finally, the DVA provides HMM services to veterans and their families across the country. As a result of state-to-state variations in the community care system and the different roles played by housing and health departments in each of the states and territories, HMM cannot be viewed as a nationally uniform program. All states and territories have some HMM provision, but the particular configuration of community care, housing, health and veterans' services is unique to each jurisdiction.

4.2.1 Community care

The HACC program

The main programs through which HMM services are provided in Australia are the national community care programs, including the HACC, CACP and EACH. The HACC program is the main vehicle for provision of community care services to older people and people with disabilities and the main source of funding and legislative authority for HMM provision in Australia. HACC is a joint Australian government, state and territory program that operates under the Home and Community Care Act 1985. The Australian government, through the Department of Health and Ageing (DOHA) contributes around 60 per cent of funding and is involved in setting broad strategic directions. The states and territories contribute around 40 per cent of funding and

manage and deliver the program through health and community care organisations and local government (DOHA 2006).

The HACC program provides assistance to frail aged people, younger people with disabilities, and their carers to promote and enhance independent living. In order to access HACC services clients must be assessed as being 'at risk of premature or inappropriate long term residential care' (DOHA 2006). Having met this test they are considered to be HACC eligible. HACC funds the delivery of a repertoire of community care services including HMM. Other HACC services include day care, domestic assistance, personal care, transport, food services, community nursing, allied health services, advocacy services and support for carers. These services are heavily subsidised but require a co-contribution from service users based on their income. In Victoria local government authorities invest additional funding, including for home maintenance and gardening services, to supplement the resources available through HACC.

Funding and services

Funding priorities are determined in each state and territory based on annual plans negotiated with the Australian government. These plans include decisions about the distribution of funding across geographic areas and the mix of services provided. Across the country, HACC provides services to approximately 750 000 clients per year. HMM services comprise only a small proportion of HACC services. The relative priority given to HMM under HACC varies considerably between regions and jurisdictions, measured in terms of standard HACC data definitions such as the number of hours or the dollar value of services provided per 1000 HACC target population, or in terms of the proportion of overall HACC expenditure. In NSW, which has the second highest expenditure on home modifications and an above average expenditure on home maintenance, expenditure on HMM comprises almost 6 per cent of the total NSW HACC budget (KPMG 2006a; Department of Ageing, Disability and Home Care [DADHC] 2006). In Tasmania HACC funding for home maintenance comprises about 4 per cent of the Tasmanian HACC budget, with only minimal funding for home modifications (DHHS 2005).

HACC-funded HMM services include structural and non-structural modifications and home maintenance. The most common structural modifications are changes to bathrooms and kitchens, and widening doorways. Non-structural modifications include fitting rails, ramps, alarms and other safety and mobility aids. In 2004–05, approximately 21 000 HACC clients received home modification services, with a total expenditure on home modifications of \$8.18 million. This is an average of under \$400 per client. The national average expenditure was \$4598 per 1000 HACC-eligible clients in 2004–05. The highest expenditures reported were \$10 592 per 1000 eligible clients in the ACT and \$10 411 in NSW. In Tasmania HACC expenditure on home modifications is well below the national average. In 2005–06 it was reported as being \$73 000 in total, supplemented with \$150 000 from other state government sources. The lowest expenditures were \$871 per 1000 eligible clients in South Australia and \$401 in Western Australia. The Northern Territory (NT) and Victoria reported no HACC expenditure on home modifications services, as minor modifications are funded and reported as home maintenance services (DOHA 2006).

HACC-funded home maintenance services include handyman work, repairs, lawn mowing, rubbish removal, wood chopping and repairs to roof or guttering (DOHA 2006). Approximately 97 000 clients received home maintenance services across Australia in 2004–05 (DOHA 2006). HACC home maintenance services are measured in hours provided per 1000 HACC-eligible clients. The national average for home

maintenance services was 470 hours per 1000 HACC-eligible clients in 2004–05, ranging from 965 hours in Western Australia to 256 hours in NSW.

Local factors can have a major impact on the level and distribution of HACC-funded home maintenance services. For example, the NT has the second highest level of provision of any state or territory, with 435 clients and a service rate of 765 hours per 1000 HACC target population in 2004–05. This rate reflects a strong focus on remote and Indigenous communities where service provision was 2685 hours per 1000 HACC target population.

In summary, there is a great diversity in the type and volume of HACC-funded services amongst the states and territories. While HACC is the major funder of HMM services in Australia, the overall level of provision through HACC is modest with only 1–2 per cent of Australians aged sixty-five and over receiving HACC-funded home modification or home maintenance services in 2004–05.

Service delivery

Service delivery arrangements for HACC-funded HMM also vary considerably amongst the states and territories. In the ACT, NSW and Queensland, HMM services are mainly provided by specialist HMM community organisations. In the ACT there is one major HACC-funded HMM community organisation, Handyhelp Inc, which provides a wide range of services including project managing structural modifications. Specialist HMM community organisations also play a central role in the delivery of HMM services in Queensland, which has a network of forty-one HAS organisations located throughout the state (see below). In Queensland HACC-funded home maintenance services and home modifications valued at less than \$1000 are delivered by both generic HACC community organisations (providing a number of HACC service types) and the specialist HAS organisations. HACC-funded home modifications valued at greater than \$1000 are delivered by a state-wide network of thirteen selected HAS services.

The largest and most highly organised network of specialist HMM community organisations is in NSW, where there are ninety HACC-funded HMM organisations. This network comprises local, regional and state-wide organisations. Local organisations undertake modifications costing less that \$5000, regional organisations undertake modifications costing up to \$20 000, and a state-wide organisation is responsible for major modifications costing over \$20 000 (KPMG 2006a). The network is supported by a State Council that acts as a peak organisation representing HMM service providers. A research and resource centre run by the University of Sydney provides information and resources concerning home modifications, universal design, adaptable housing and related topics. HACC-funded community organisations that specialise in HMM offer their services on a fee-for-service basis to individuals who are not eligible for HACC, and provide HMM services on a contract basis to organisations such as DVA and disability organisations.

States and territories where generic HACC community organisations provide HMM services include Queensland (as stated above), the NT, South Australia (in nonmetropolitan areas), and Western Australia. In South Australia, a state government service delivery network, Metropolitan Domiciliary Care, provides a wide range of HACC services including HMM. This organisation has a specialist workshop staffed by building professionals to undertake home modifications, and has developed considerable technical expertise in home modifications with a strong research and development capacity. In Tasmania HACC-funded home maintenance and minor modification services are provided through community organisations, with a small number of home modification services delivered through state government community and health services centres.

In Victoria, HACC-funded non-structural modifications, repairs and maintenance services are primarily delivered by local government. Some Victorian local authorities have specialist HMM units of a considerable scale. In Victoria there is only limited availability of HACC-funded structural modifications. Victoria is unique in its high level of reliance on local government to deliver HACC services, including property maintenance.

Information and advice

In addition to funding direct HMM services, HACC is involved in the funding of information and advice services in several states and territories. In the ACT, Tasmania and Western Australia, HACC funds information, advice and referral services through the Independent Living Centres (ILCs). This includes advice on building standards and product options and referrals to builders who undertake and/or specialise in home modifications. ILCs form a national network of services providing information and advice to people with disabilities and older people about products and services to assist them to live independently in their own homes. In Western Australia information and advice about home modifications is also provided by Technology Assisted Disability Western Australia. The ILC also administers funding from LotteryWest that can be used for home modifications. Information about HMM is provided through Commonwealth Carelink Centres, a national network providing information through shop fronts and the internet about the range of services available for older people.

4.2.2 Housing

Alongside the HACC-funded HMM services network, SHAs and related housing organisations play a number of roles in the funding and provision of HMM services. The nature and level of involvement varies considerably amongst states and territories. All SHAs are involved in maintaining social housing dwellings and modifying them to meet the needs of particular older tenants. Several states provide subsidised home loans for home modifications, maintenance and/or repairs. One state has become involved in providing specialised HMM services to older people who are private tenants or home owners.

Social housing

SHAs and other social housing organisations are major providers of rental housing for older people on low incomes, and as such are involved in ensuring that housing is appropriate for tenants with disabilities and special needs. All SHAs undertake housing modifications or arrange transfers to meet the needs of their public housing tenants and most fund or encourage modifications to properties under community housing programs. Social housing landlords are responsible for normal landlord maintenance on all properties, and most maintain and clean the gardens and common areas of multi-unit developments.

SHAs include adaptable and accessible housing in their portfolios through planned acquisition and upgrading programs, and consider requests from tenants and their carers for home modifications or transfers. SHAs employ or contract specialist occupational therapists, architects and building professionals to assess client needs and supervise modifications. For example, HomesWest employs a disability coordinator and contracts occupational therapists to support its home modifications program for public and community housing tenants.

Data is not available from all jurisdictions but where home modification activity is reported, the levels are significant. For example, the Queensland DOH reported modifying over 2000 dwellings in 2005–06 at a total cost of nearly \$8 million. Between 2000–01 and 2004–05 a total of \$34.4 million was spent on home modifications to 11 546 public housing dwellings. The Queensland department employs occupational therapists in all area offices to provide assessments and advice on modifications.

Similarly, the NSW DOH provides housing for people with a mobility-related disability through its ongoing program of home modifications. Typically, work includes modifications to hand rails and ramps for physical access and may also include minor alterations to kitchens and doorways. In 2005–06 the total expenditure of \$7.26 million resulted in 1613 dwellings being modified. Expenditure has increased from \$4.93 million in 2001–02 (Department of Housing [DOH] 2006). The amounts expended on home modifications by both NSW and Queensland DOH in 2004–05 are similar to the total national HACC expenditure on home modifications in that year.

Loan products

SHAs in Queensland, Victoria, South Australia and Western Australia also provide home loans specifically designed to finance home modifications for eligible borrowers. The loans incorporate features such as subsidised or capped interest rates, flexible repayment arrangements and low (or no) deposit. A higher level of risk may be accepted than is usual for commercial lenders. In some cases these loans are supplemented with advice, grants or subsidies. However, the take-up of these loans by older people has been limited.

There are considerable variations amongst the loan products offered in the different states. In Queensland, as part of its 'Home Access' strategy, the DOH introduced a home adapt loan in 2005 to assist homeowners on low and moderate incomes to modify their homes. The Home Access strategy includes tools for home owners and renters to assess and rate the accessibility of their homes. The home adapt loan can be supplemented with a grant of up to \$10 000 subject to eligibility. The take-up of the loan has been slow with only five loans having been approved in 2004–05. In South Australia Homestart, the government home lender, provides a carers' loan up to \$35 000 with interest rate subsidies that can be used for home modifications. In Victoria the Office of Housing also provides home renovation loans and funds the Archicentre to deliver a home renovations advice and assessment service. This service is subsidised for older people on low incomes. In Western Australia, Keystart, the government home lender, administers an Access Home Loan Scheme which provides loans between \$5000 and \$50 000 for home modifications. Fifty-one loans totalling \$7 million were approved in 2005–06.

Other HMM initiatives

The most extensive involvement of any of the SHAs in HMM outside the public housing system has taken place in Queensland with the funding of a state-wide network of home maintenance, repair and minor modifications services for older people. The HAS program is available to all older people, not only those who are eligible for HACC. As well as directly providing HMM services, HAS provides information, assessment, referral to private contractors, project management, and financial subsidies to assist with non-structural modifications. HAS focuses on preventing falls, home security and physical mobility and safety around the home. These services are delivered through a state-wide network of forty-one services that assisted over 50 000 households in 2004–05. The 2005–06 annual budget for the HAS program was nearly \$15 million. The HAS service network is used to deliver a high proportion of HACC-funded home maintenance and modification services in

Queensland. Evaluations of HAS have found high levels of demand for the services and a high level of client satisfaction (DOH 2002; Johnson 2005).

The other major initiative of SHAs is the funding by the Victorian Office of Housing of a home renovation service to provide expert inspection, assessment, advice and project management by architects for older people and people with disabilities. The service is provided by the Victorian chapter of Archicentre, the building advisory service of the Royal Australian Institute of Architects. Archicentre provides free home inspections and a report on building conditions with recommendations on maintenance, repairs, alterations and home modifications. Archicentre is also contracted by the Department of Disability Services in Victoria to undertake inspections of funded home modifications. Archicentre provides training for architects involved in this service and will also provide fee-for-service architectural and project management services relating to home modifications.

Other important initiatives by SHAs include the promotion of accessible housing standards for home designs and building products. For example, the Queensland Smart Housing and Home Access initiatives provide a wide range of information to home-building professionals, developers, real estate agents and consumers. Some SHAs have also promoted schemes to involve volunteers in HMM provision. For example, the NSW DOH, together with DADHC, sponsors a neighbourhood aid program that involves volunteers in providing home and garden maintenance for older social housing tenants. In Tasmania service clubs and church groups are involved in similar activities, often in conjunction with local HACC services.

4.2.3 Health

In all states and territories, hospitals and community health services are involved in HMM services through their roles in accident and injury prevention, the management of injuries and chronic illness, and preventative health care linked to the goal of reducing demand on hospital beds. While the overall pattern of health service involvement in HMM can be described, limited information is available on specific arrangements such as the funding of HMM services from the generic budgets of hospitals and community health centres.

Community Health Services

Community health services differ considerably in roles and staffing from state to state. In most states they have a strong focus on rehabilitation and managing chronic illness and disability and employ a range of health professionals, including occupational therapists. In some states community health services manage aids and equipment programs, undertaking assessments and allocating resources in response to funding applications. Community health centres tend to be involved in HMM in two ways. Firstly, they are a key source of referrals to HMM services in their roles as care coordinators and case managers. Secondly, occupational therapists employed in community health have a key role in assessing individual's need for a range of HMM services and programs. In some jurisdictions they are responsible for assessments for aids and equipment programs, HACC-funded HMM services and public housing home modifications. This role may extend to assisting clients to access funding for their home modifications and project-managing building work. In some cases this work receives explicit program funding or is provided on a fee-for-service basis, but this is not universally the case. This can create problems if insufficient occupational therapists are available to undertake home modifications assessments.

Hospitals and discharge services

Hospital discharge programs aim to assist patients to return home following hospitalisation, as they recover from their accident or surgery. Hospital-based occupational therapists may be involved at this point in providing assessment advice and referral for patients to HMM services. Patients may be eligible for HACC services or, in some states, for modifications funded through equipment and aids programs. They may also be eligible for specific programs relating to their condition, such as the recently announced funding in Queensland to assist in discharging people with spinal cord injuries from hospital. Some patients may self-fund home modifications or have access to loans or insurance payouts. Access by patients to home modifications assistance on hospital discharge appears to depend heavily on coordination and referral by hospital social workers and occupational therapists. Responsibility for the funding of HMM services for discharged patients appears to be unclear in some cases and can be a source of tension between health and community care services.

Falls prevention programs

Falls prevention has attracted considerable interest in the health system as a way of maintaining the health of older people and avoiding hospitalisation. The Australian Government's National Falls Prevention for Older People Initiative was introduced in 1999 to provide a coordinated national approach, focusing on information and assessment programs and the identification of risk factors. Generally, falls prevention programs, other than the DVA Home Front program, do not specifically fund HMM services and rely on existing services systems such as HACC for the actual provision of HMM services.

Equipment and Aids Programs

All states and territories have their own equipment and aids schemes which developed following the dismantling of a previous national program. The names and scope of the programs and eligibility guidelines vary between jurisdictions. These equipment and aids programs are administered by either disability or health agencies and are small programs with annual budgets ranging from \$0.47 million in Tasmania to \$22.5 million in Victoria. In some states and territories home modifications (usually non-structural modifications) are funded under these programs, while in other they are excluded. Older people are eligible recipients under equipment and aids programs in some jurisdictions, but are excluded from others.

Examples of equipment and aids programs that include HMM services for older people are those in Victoria and the NT. The Victorian aids and equipment program is administered by the Office of Disability Services and is delivered through state government health centres and hospitals. 'Frail aged' people are eligible and the service include home modifications. There is a lifetime limit of \$4400 per household and no structural work is funded other than widening doorways. In the NT, the Territory Independence and Mobility Equipment Scheme provides assistance with home modifications, repairs and maintenance. In 2000–01, a total of 20 per cent of the program budget was allocated to HMM services.

4.2.4 DVA

The DVA funds and administers a number of national HMM services to eligible veterans that mirror mainstream community care, housing and health programs. These services include assistance with home and garden maintenance, falls prevention, rehabilitation appliances, home maintenance advice and loans for home modifications. The stated policy objectives of DVA services include maintaining health and independence, enabling veterans to live in their own homes and local

communities for as long as possible, and reducing demand on medical and health services and residential aged-care facilities. Service delivery is largely contracted out by DVA to community and market sector providers.

Veterans' Home Care Program

The Veterans' Home Care Program is similar to the HACC program in that it provides a range of home care services, including low level personal care, domestic assistance, and home and garden maintenance. The focus of the home and garden maintenance services is on safety and reducing hazards in and around the home Client assessment and service delivery is contracted to local governments, community organisations, religious welfare agencies, and for-profit organisations. In 2005–06 the total Veterans' Home Care Program budget was \$91.4 million. Over 70 000 veterans and war widows were approved for services, including approximately 14 000 for home and garden maintenance services. However, home garden and maintenance services are only a small component of the overall program, accounting for approximately 3 per cent of service hours (DVA 2006). Services are restricted to minor maintenance or repairs such as replacing light bulbs and tap washers, installing batteries in smoke or security alarms, and cleaning gutters and windows. Major tasks requiring a tradesperson are not funded. The services are subsidised but recipients make a co-contribution based on their income.

Home Front

Home Front aims to prevent falls and accidents in the home in an effort to maintain the health and independence of veterans and war widows, and reduce demand on medical and hospital services. Home front provides free home assessments to identify hazards in and around the home that may contribute to falls or accidents. Where hazards are identified, Home Front can provide advice, assistance and financial support for installation of minor, non-structural modifications and safety appliances. In the 2005–06 financial year, 9966 veterans and war widows or widowers received services from Home Front.

Rehabilitation Appliances Program (RAP)

Home modifications may also be funded by DVA under the RAP where a clinical need is assessed by an occupational therapist. To be eligible for this assistance veterans and war widows must have a Repatriation Health Card and not be resident of an aged care facility. Both structural and non-structural modifications may be funded if they address issues of safety, access and independence around the home.

Veterans' Home Maintenance Line (VHML)

The VHML is a toll free national telephone service providing advice to veterans on home maintenance and repairs, and referral to local tradespeople. To be recommended by the service, tradespeople are required to meet a number of standards including trade qualifications, professional indemnity and public liability insurance. The service will also arrange home inspections to assess home maintenance issues. While the telephone advice service is free, recipients are responsible for the costs of their maintenance work. The operation of the maintenance line is contracted out to a private sector operator. During the 2005–06 financial year 5159 people are reported to have received assistance from the VHML (DVA 2006).

Home Support Loan

Home Support is a loan of up to \$10 000 to assist veterans with the costs of home maintenance, repairs and modifications that encourage independent living. Interest is subsidised to provide a capped rate up to 1.5 per cent below the market benchmark

rate. Some veterans may also be eligible for a Defence Service Homes Loan that provides up to \$25 000 at subsidised interest rates for similar purposes.

4.3 Characteristics of Australian HMM services

In chapter 3 it was noted that HMM services in the USA have been described as a 'complex patchwork' (Pynoos 2001) of programs, each with their own goals, funding arrangements, eligibility requirements and interventions. This term is an equally apt description of Australian HMM services. In Table 5 the components that comprise the Australian complex patchwork of HMM service organisation and provision are shown and summarised. The table shows that over the past twenty years Australia has developed a substantial platform to provide HMM services to older people. Nevertheless, the organisation and provision of HMM services remains a complex patchwork. On the basis of the data presented earlier in this chapter, together with other data gathered as part of the service review and introduced in this section, a number of characteristics of the organisation of HMM in Australia can be identified, as follows:

- → while individual programs and organisations have clearly articulated objectives and policies, there is no overarching policy framework for HMM provision at the national level or in most states
- → there are limited integration and coordination mechanisms and processes to ensure that HMM organisations and programs operate as an integrated service system
- → HMM services lack clear identity and visibility in many parts of the country
- → levels of HMM provision are uneven across the country
- \rightarrow there are shortages of professionals and tradespeople with expertise in HMM provision
- → planning and development of HMM services is hampered by an absence of integrated HMM information systems.

These characteristics of the organisation of services have implications for all stages of HMM provision: access, assessment, delivery and review. HMM services in Australia can be described as programs without policies: there are numerous initiatives but these have not as yet developed into a clearly articulated national HMM service. These characteristics of Australian HMM service organisation are briefly summarised below.

Policy framework

Neither the Australian Government nor most states and territories have clearly articulated policies for the provision of HMM services to older people. The main national policy context for the development of HMM services is the HACC program and related community aged care programs. HMM services are one of a number of service types provided through this program. HMM services are also provided across the country as a part of the services available to particular groups of older people, notably veterans and their families and social housing tenants. Only in Queensland is there a policy of state-wide provision of HMM services to the general older population through the HAS program. Other programs that support HMM services do so through quite specific initiatives—such as the Archicentre Home Renovation Service in Victoria and the Research and Resource Centre in NSW—or as a small part of other broad-spectrum funding programs such as the various equipment and aids programs in the states and territories.

Service/program	Description
Home and Community Care (HACC) program and other national community care programs	→ Generic, national community care program, funded by Commonwealth and states, with HMM as a modest component
	 People who are eligible are 'at risk of premature or inappropriate long term residential care'
	→ Include structural and non-structural modifications, repairs and maintenance
	ightarrow Considerable inter-state variation in the level and mix of services
	\rightarrow 1–2 per cent of Australians receive HACC-funded HMM services
	 Type of organisation involved in delivery varies from state to state including specialist HMM services, generic HACC providers and state and local government agencies
	 Information, referral and advice services funded through ILCs in some states
SHAs: provision of HMM for social housing tenants	 All SHAs include adaptable and accessible housing in their portfolios through acquisition and upgrading programs
	→ All undertake housing modifications or arrange transfers to meet the specific needs of older social housing tenants
	→ All undertake the normal maintenance required of landlords, and maintain gardens and common areas of multi-unit sites
	 All employ or contract specialist occupational therapists, architects or building professionals to assess client needs and supervise modifications
	→ Levels of activity are significant, with annual expenditure on home modification in some states equivalent to the total national expenditure through HACC
SHAs loan products	ightarrow Four states provide subsidised loan products for home modification
	ightarrow The take-up of these loans by older people has been limited
Queensland's HAS program	 State-funded network of home maintenance, repair and minor modification services for older people in owner-occupied or privately rented accommodation
	 Provides information, assessment, referral to private contractors, project management and financial subsidies
	ightarrow Focus on falls prevention, home security, physical mobility and safety
	→ State-wide network of forty-one services that assists over 50 000 older people annually
	 Delivers a high proportion of HACC-funded HMM services in Queensland
Victorian Archicentre Home Renovation Service	→ Service provided by the building advisory service of the Royal Australian Institute of Architects and funded by Victorian DOH
	ightarrow Free home inspection for older people and people with a disability
	 Report provided on building conditions and recommendations on maintenance, repairs, and modifications
	 Fee-for-service architectural and project management services available
NSW State Council and Research and Resource Centre	→ State Council provides coordination and advocacy on behalf of HMM providers in NSW
	→ University of Sydney Research and Resource Centre provides information and technical resources for HMM services

Table 5: The Australian complex patchwork of HMM services

Service/program	Description
State community health centres	→ A key source of referrals to HMM services in their roles as care coordinators and case managers
	 Occupational therapists in community health assess need and eligibility for a range of HMM services, e.g. aids and equipment programs, HACC-funded HMM services, public housing home modifications
Hospital discharge programs	→ Hospital-based occupational therapists provide assessment, advice and referral
	→ There may be funding programs relating to health-specific conditions that include HMM provision, e.g. Queensland's program for people with spinal cord injuries
	→ Responsibility for the funding of HMM services can be a source of tension between health and community care services
Falls prevention programs	 The National Falls Prevention for Older People Initiative provides a coordinated approach to falls
	→ Generally falls prevention programs rely on existing services systems such as HACC for the actual provision of HMM services
Equipment and Aids programs	→ All states and territories have equipment and aids schemes that vary in name, scope and eligibility guidelines
	They are generally small programs which in some (but not all) states include non-structural modifications
	\rightarrow Older people are eligible recipients in some states, but not in others.
	An example of a scheme that includes HMM for older people is Victoria, which provides modifications up to a lifetime limit of \$4400
DVA programs	 DVA funds and administers a number of national HMM services that mirror mainstream programs
	→ These include home and garden maintenance services provided under the VHC Program, non-structural modifications to prevent falls under the Home Front program, home modifications provided as part of the RAP, information, advice and referrals relating to HMM provided through the VHML, and loans for home modification through the Home Support Loan scheme.
Other HMM provision	 Commonwealth Carelink Centres provide information about a range of services, including HMM, for older people
	 Local government in Victoria supplements HACC funds for home maintenance
	→ ILCs in WA have funds for home modifications
	 NSW HMM specialist providers offer HMM services on a fee-for-service basis to individuals who are not eligible for HACC
	→ In Tasmania some home modification services provided through state government community and health services centres
	→ Technology Assisted Disability Western Australia provides information and advice about home modifications
	→ Queensland Smart Housing and Home Access initiatives provide information to home building professionals, developers, real estate agents and consumers
	 Some SHAs involve volunteers in HMM provision, e.g. the NSW DOH Neighbourhood Aid Program

The net effect is a collage of services that falls far short of a systematic national approach to the organisation and provision of HMM services, linked to wider national goals for an ageing society. As discussed in chapters 2 and 3 of this report and in more detail in chapter 3 of the positioning paper, HMM services potentially contribute to a range of community care, health and housing outcomes for older people. These in turn are linked to broader themes of fiscal sustainability, positive ageing and ageing in place. While connections to policy outcomes are made at a program level, there is no explicit link between the collection of programs shown in Table 5 and the goals of HMM services are primarily shaped by policies and funding arrangements that only partially address the diversity of goals of HMM services portrayed in this report. In order to achieve a tighter link between the goals of HMM and the provision of services, more explicit HMM policies and funding arrangements are required.

Integration

The complex and fragmented nature of HMM programs and funding also gives rise to significant problems of integration and coordination. The main strands of direct HMM provision—HACC, SHAs and DVA—operate as largely parallel and unconnected systems, except where DVA contracts HACC-funded service providers. Formal integrative structures and processes amongst HMM service providers appear to be weak in some states, with the notable exception of the NSW State Council. A major integration issue is the link between health services and HMM providers. Hospital discharge programs and falls prevention programs rely on HACC-funded HMM services in most states, and determining responsibility for the funding of HMM services that are linked to health provision has been a source of tension. As noted in chapter 2, HMM services lie at the intersection of the health, community care and housing policy fields, and a comprehensive approach to HMM provision would include strong linkages to each of these sectors.

Nevertheless, there are a number of examples of effective coordination arrangements. In Queensland the coordination of HACC- and HAS-funded HMM services has been approached through the use of the HAS service network to deliver many HACC-funded HMM services. In some states the provision of HACC-funded home modifications and modifications for public housing tenants rely on consumer assessments conducted by community health or hospital occupational therapists. In the NT the program guidelines for HACC and the Territory Independent Mobility Equipment Scheme are cross-referenced to clarify the linkages between the programs. A recent Victorian review recommends closer links between the home modification component of the aids and equipment program and the Home Renovation service (KPMG, 2007). These are examples of the kinds of processes that are required for HMM services to operate in a more connected manner.

One important set of connections are those between publicly funded HMM services and the private market of handypeople and building contractors available to undertake home maintenance, gardening and repair work for all households, including older person households. There is also a small emerging group of private occupational therapists, architects and builders with specific expertise in home modifications for older people and people with disabilities. For example, Maximum Independence is a private company in Western Australia involved in providing self-funded home modifications services. While many older people will continue to access private providers of home maintenance and repairs without recourse to publicly funded HMM services, there is a role for HMM services as brokers and information providers to older people experiencing difficulty in accessing suitable private sector services.

Identity

One consequence of the absence of explicit HMM policies, and the range of policy fields, funding programs, service providers and professional groups involved in HMM is the somewhat muted identity of HMM services in several states and territories, as well as nationally. As discussed earlier in this chapter, the service delivery arrangements for HACC-funded HMM services differ widely from state to state, and these arrangements impact on the identity and visibility of HMM services. In some states and territories, HMM services lack visibility and are widely perceived simply as a small element of the HACC program. HMM services have the greatest visibility in states and territories such as Queensland and NSW that have an identifiable network of specialised HMM organisations. The State Council of HMM services in NSW. combined with the Research and Resource Centre at the University of Sydney, is the only formal and funded infrastructure to support state-wide networking, capacity building and research and development. Other HMM-specific initiatives, such as the Archicentre Home Renovation Service also give identity and visibility to HMM, including the recognition of HMM-specific professional and technical expertise. Informally there are networks of HMM services in some localities and regions. There is no national organisation that represents the interests of HMM organisations and professionals.

Levels of provision

In the absence of national goals, standards or benchmarks for HMM service provision, a diverse pattern of service provision has emerged with great variations amongst the states and territories in level of provision of HMM services. These differences are in large part a consequence of the HACC planning process which has emphasised state and regional priority setting rather than national uniformity. As already described, there are great differences from state to state in the proportion of HACC funds spent on HMM services, and in the relative weight given to different types of HMM services. Different policy emphases from state to state in non-HACC programs add to the pattern of diversity in levels of provision. Queensland is the only state with a network of HMM service providers for older people who are not eligible for HACC, and an advisory service for builders and consumers. Victoria is the only state with a free home inspection service for older people. Only four states and territories have loan products for HMM. Some, but not all, state-based equipment and aids programs make provision for non-structural modifications, with varying eligibility and entitlement provisions. State health agencies, such as community health centres, are involved to varying degrees in HMM provision. The only HMM programs available on a nationally uniform basis are those provided to veterans and their families by the DVA.

While it is clear that the level of provision of HMM is far from even across the nation, it is difficult to collate reliable information on service levels or service adequacy due to the lack of cross-program data, the lack of standard service definitions and the absence of benchmarks for HMM service provision. However, a general picture of the availability of services can be assembled by examining in turn each of the four major types of HMM services.

Structural modifications are the most expensive and complex form of HMM services and there is a wide variation in their availability and the way they are delivered across Australia. The most common types of structural modifications include changes to bathrooms and installing access ramps. Others include adapting kitchens, widening doorways and hallways or raising floors to create level surfaces. Undertaking structural modifications typically involves a number of processes; including information and advice about design standards, products, funding options and service providers; expert assessments by occupational therapists and architects or building consultants; assistance in securing financing or subsidies; design and specification services; project management, including securing permits and contracting building work; access to expert builders or building trades contractors; and inspections to confirm the quality of work, consumer satisfaction and compliance with regulatory standards and specifications. While examples of each of these service components were identified during the study in particular services, rarely were all available as an integrated service. In cases where a comprehensive range of services were available in a locality or jurisdiction, they were not always well coordinated and often were narrowly targeted.

Generally speaking, specialist community-based HMM services have the primary responsibility for project-managing HACC-funded major modifications in states such as NSW and Queensland. These specialist organisations also contract on a cost recovery basis to deliver DVA-funded and some state-funded home modifications. However, where no specialist HMM services operate, project management may be contracted out to private organisations and, in some cases, occupational therapists employed by state health departments take on these roles in the absence of suitable alternatives. For self-funded projects, these services may be undertaken by private contractors including architects, building consultants and, for some smaller projects, occupational therapists. Services such as the Home Renovations Service in Victoria and regional major modifications services in NSW, Queensland and the ACT may also manage self-funded projects on a fee-for-service basis. However, older people in many parts of Australia have little or no access to such project management services.

Non-structural modifications tend to be less expensive, more standardised and more widely available than structural modifications. The most common forms reported by service providers were grab rails, hand-held showers and small ramps. In some cases older people may require several items, which increases the total cost. The most common funding arrangements are for recipients to pay a contribution towards the cost, which may be a rate based on their ability to pay or paying for the materials, with the labour component of the cost subsidised. Many non-structural modifications are relatively small and straightforward. Some tasks are undertaken by a handyperson or building tradesperson, although even minor modifications usually require an occupational therapy assessment. Finding the best solution may require collaboration between the occupational therapist and installer to accommodate both client needs and the constraints of building. Assessing the availability of access to non-structural modifications is difficult, owing to the complex and fragmented nature of funding and service delivery arrangements. Funds are made available through a variety of state and national programs including HACC, HAS, equipment and aids programs, and state housing authorities.

Home repair services, the third type of service provided by some HMM organisations, are generally minor in nature and often have a safety and health purpose. Typical items are repairs to broken steps and paths or torn floor coverings. One impetus for such repairs is the safety of aged care staff and contractors entering and providing services in homes, and the requirement to comply with occupational health and safety requirements. As with non-structural modifications, the lack of data makes it difficult to assess the overall availability of minor home repair services. With respect to major or structural repairs, the only widely available advice service is that provided by the Home Renovations Service in Victoria, which provides a free home inspection and a report to older people.

Some specialist HMM services also provide minor home improvement services, with a focus on issues such as safety and security. These are sometimes undertaken in association with other agencies and may contribute to other policy objectives.

Examples include working with police to address security and crime prevention issues, with fire services to promote smoke-detector installation and maintenance, with water authorities to install water-saving devices and promote water-wise strategies, and with health services to make minor home improvements as part of falls prevention programs. These initiatives tend to be intermittent and relatively ad hoc and a more strategic approach to working with these services in an ongoing way may be desirable.

Finally, the availability of home maintenance services varies widely from place to place, depending on the policies and resources of local service providers. Some specialist services, such as the VHML, limit their service to providing advice and referral to local tradespeople who meet the standards established by the service. Others, such as HAS services in Queensland, undertake a comprehensive range of services; including inspections of the home; advice about repairs, maintenance, safety and security; undertaking handyman maintenance and gardening tasks; organising and subsidising tradespeople; and making referrals to tradespeople and contractors. The primary funding source in most parts of Australia for home maintenance is HACC. However, local governments in Victoria supplement HACC funding to extend these services and the HAS program in Queensland funds similar services to those provided through HACC for older people who are not eligible for HACC. A high demand for all these services is reported, which often results in subsidised services being highly targeted towards maintenance issues with direct health and safety implications. There is strong demand for garden maintenance, with HMM services varying in their policies and practices concerning provision of gardening and lawn mowing. Most services appear to limit their gardening service to emergency situations and once-off clean-ups to remove hazards and health risks, or impose time and subsidy limits per client.

Expertise

HMM services involve two main types of professional expertise: occupational therapy and allied professionals with understanding of the fit between older people and their dwellings; and building and property professionals, including architects and builders, who can design and undertake modifications to dwellings. Both sets of expertise may be involved in assessing need for HMM services, as building professionals are required to undertake the actual modifications; and both groups may be involved in assessing the quality of work undertaken and outcomes achieved.

It is evident from the data reported in this chapter that the availability of appropriate expertise at each stage of HMM service delivery can be problematic, and that there are variations in the pattern of availability from state to state and in different places within states. For example, some SHAs such as Queensland employ occupational therapists in all service centres to undertake HMM assessments, while other SHAs rely on the availability of occupational therapists through state community health centres. Only Victoria has a funded service that makes architects available to older people for assessments of building condition and maintenance and modification needs. Specialist HMM service providers are well placed to build networks of private builders and other tradespeople with expertise in HMM work. Developing HMM expertise amongst both occupational therapists and building professionals, and an expansion of the availability of expertise appear to be important priorities.

Research and information

The availability of information on HMM service provision in Australia is limited by the fragmented nature of HMM services and the absence of cross-program information systems. Data on provision and usage is available on HACC-funded HMM services, and programs such as HAS in Queensland, the DVA HMM programs, and SHA loan

products also collect service data. However, there is no composite picture of the extent of HMM provision based on all these sources. Furthermore, there is little data on HMM services provided on a fee-for-service basis by private sector tradespeople, or services provided on an informal basis by family and friends.

Other impediments are the absence of uniform service definitions and information gaps. For example, in the HACC minimum data set, 'minor modifications' appear to be treated as home maintenance in some jurisdictions, leading to the under-reporting of home modifications in some states. HMM services provided through aids and equipment programs do not appear to use standard categories across states in reporting. Data on public housing modifications is not readily available in some states and territories because it is not separately reported in maintenance and upgrading budgets. Very little data is publicly available about home modifications provision in the health system. These gaps and inconsistencies make it difficult to build a clear picture of HMM services as a whole.

Sources of data on HMM other than provision and usage statistics are also limited. Some services undertake formal client surveys but these are not usually publicly available. There have been a number of recent reviews of HMM and related services, perhaps indicating growing policy interest in this area. These include a review of the HMM service delivery model in NSW (DADHC 2006; KPMG 2006a, 2006b); a review of the HAS program in Queensland (DOH 2002) followed by a client satisfaction survey (Johnson 2005); and a review of the aids and equipment scheme in Victoria (KPMG 2007). These reviews drew attention to a number of the themes raised in this chapter, including the need for the greater availability of professional expertise, problems of lack of integration and coordination, and the need for improved data systems.

Stages of provision

These characteristics of the organisation of HMM services have numerous implications for each stage of the provision of HMM services including access, assessment, delivery and review. At the access stage, the complexity of the system may presents challenges for consumers seeking information about services, and a lack of coordination can result in the lack of referrals from health and other services to HMM organisations. The assessment stage may encounter difficulties associated with the limited availability of professional expertise, such as occupational therapists, in many localities, and the lack of uniformity in eligibility criteria. Delivery of HMM services may be impacted on by the limited availability of the services and shortages of qualified staff. Service review may be hampered by inadequate information and unclear objectives. These and other aspects of the provision of HMM are explored in greater depth in the service provider and consumer studies.

4.4 Conclusions

HMM services in Australia have developed over the past two decades in an incremental fashion. The main programmatic context for this development has been the HACC program, but other important developments included the programs provided by the DVA and the provision of HMM services by SHAs for social housing tenants. Innovative services in specific states that may have potential for more widespread adoption include the HAS program in Queensland; the home inspection service in Victorian; and the Research and Resource Centre operated by the University of Sydney. There are also a number of other smaller programs and provisions located in health and housing organisations. Collectively, these services comprise the complex patchwork of Australian HMM services.

On the basis of the descriptive material presented in this chapter, a number of broad characteristics of the organisation of HMM services in Australia can be identified. Across the country there are numerous programs and organisations that provide a sound platform for the delivery of HMM services, as summarised in Table 5. However, HMM services in Australia are characterised by a policy framework that is only weakly articulated. There are no clear national objectives concerning the goals and desired scope and coverage of HMM services, and no clear connections to the wider goals of ageing policy. HMM services have a somewhat muted identity, and the main HMM organisations and programs are generally not well integrated. Linkages to health and housing policies and services need to be further developed. There is great diversity in the level of provision of HMM services from state to state. The availability of necessary expertise in occupational therapy and the building trades is also varied. There is a lack of service data that extends beyond specific programs. All these factors directly impact on the provision of HMM services at all stages: access, assessment, delivery and review.

The description of HMM services in this chapter provides a backdrop to the more detailed analysis provided in the next two chapters. In chapter 5 the views of service providers concerning service organisation and delivery issues are presented, and in chapter 6 a consumer perspective is presented. Building on the material provided in this chapter, these studies add to our understanding of the issues to be addressed if HMM services are to maximise their potential to achieve health, community care and housing outcomes for Australians in later life.

5 THE SERVICE PROVIDER PERSPECTIVE

5.1 Introduction

In this chapter the findings of a study of the perspectives of HMM service providers concerning a wide range or service organisation and provision issues are presented. The chapter is based on focus groups with service providers conducted in each state and the ACT. The data presented builds on the description of the main characteristics of HMM services in Australia provided in the previous chapter. It also presents a perspective that can be compared and contrasted with the consumers' perspective presented in chapter 6. The data is linked to the issues raised in the analytical framework in chapter 3. In particular, it addresses each stage of the service provision process: consumer access to services; assessment of consumer need; the actual delivery of the HMM service; and the outcomes of services for consumers. Wider issues of service organisation are also addressed. The chapter thus presents a picture of the collective views and concerns of a carefully selected group of service providers from all jurisdictions except Northern Territory regarding key aspects of the adequacy, appropriateness and effectiveness of current HMM services.

5.2 Methodology

The aim of this study was to understand the major issues of service provision and organisation facing HMM services in Australia through an analysis of the views of selected service providers. Focus groups were chosen as the primary method for obtaining these views. It was decided that this method would be the most likely to elicit the depth of understanding desired, as well as allowing the participation of a wide range of service providers within the time and resources available to the study. The intention was to bring together a diverse group of service providers in each jurisdiction and facilitate a guided discussion around key policy and service delivery issues.

Focus group interviews were conducted with policymakers, service managers, professionals and technical staff in six states and the ACT between July and September 2007. The participants were drawn from a wide range of types of services and sectors in each jurisdiction with the aim of achieving a diverse mix of perspectives both within each jurisdiction and across the nation. Details of focus group participants are provided in appendix 2. The participants were initially identified using contacts made during the service system review. These contacts, usually managers or professionals in key service organisations, were asked to nominate people who could represent particular perspectives in the focus groups. Potential participants were then recruited by email or phone. In some cases these recruits made additional suggestions of possible participants, and many of these were followed up. In NSW the state HMM Council assisted the study by attaching the focus group to the last day of their State Council meeting. This enabled participation by delegates from across the state, as well as other Sydney-based participants. There was strong interest in the study and in participation in the focus groups in all states. A cap of fifteen participants was set to allow for active involvement of all participants in discussions.

A common set of questions was used for each focus group with questions based on the research framework outlined in chapter 3 (see appendix 1). Focus groups were recorded and the proceedings transcribed. This data was analysed using NVivo. Key themes and sub-themes were identified and these provide the structure and content of the remaining sections of this chapter.

5.3 Consumer access

The first set of issues raised in many of the focus groups across several states concerned consumer access to HMM services. Service providers expressed a range of views concerning consumer awareness of available services, referral pathways and eligibility issues.

Consumer awareness

A common theme in many focus group discussions was the limited awareness by older people, the general community and many service providers concerning HMM services. The participants identified the complexity of HMM program and service delivery arrangements and lack of accessible information as key concerns:

I mean, I get confused about who is eligible for what funding and things like that. How is a client supposed to figure that out and how are they supposed to know that things are available? TAS

... the problem is most consumers have no idea about that [funding] ... but none of this information is freely available and that makes it extremely complex. NSW

Several participants reported that their services avoid public advertising or awareness-raising strategies because they have limited capacity to respond to additional demand:

It's a catch-22 because basically if services do advertise in their local paper ... because we're underfunded they can't cope with the demand that comes out of the advert. So it's catch-22. ... So we tend not to advertise. NSW

We actually cringe when we know there is going to be an education campaign because we get a huge increase in referrals and we can't cope with them. ACT

Other service providers see awareness raising and information dissemination about HMM services as an important part of their role but are constrained by the availability of staff and other resources.

Many participants, especially those operating home maintenance services, believe that word-of-mouth is an important promotion strategy for older people. Some linked this to the importance of information being accessed at the time that a service is needed:

All our efforts to promote are purely by word-of-mouth. That is because older people—they trust word-of-mouth that someone else has used the service. QLD

Referrals

Referral processes were a significant concern for service providers, with the quality of referral processes from hospitals to HMM services being a particular source of concern to some:

Discharge planning ... and also too they [hospital discharge units] will do plans and specifications for jobs where they haven't even seen the house. I think it should be mandatory that they discharge them back to the occupational therapists [OTs] that are in those areas. NSW

Service providers highlighted the important role general medical practitioners (GPs) could play in referring patients to HMM services. In some states participants expressed disappointment at GPs' lack of knowledge about aged care and HMM

services, and their reluctance to proactively assess the needs of elderly patients and refer them to services:

We actually asked one of our medical doctors about the 75 plus program [Enhanced Primary Care Assessments] ... and he's, 'Oh, we're not going to be bothered about that, it's too much paperwork'. SA

... a lot of people pass through GPs that potentially would benefit from coming here but they don't refer them. The odd GP does, but not very many. ACT

In other locations, participants reported strong relationships between GPs and HMM services and active strategies by services to engage GPs:

Yeah, most of our referrals come from GPs. WA

Cross referrals were reported between HMM services in locations where strong linkages have developed between different service providers who may be funded under different programs and therefore have different eligibility criteria or provide a different range of services:

She [another worker] is saying, 'Under the guidelines, [name of program] aren't going to pay for it so can you shoot it through to major mods for them to do it?' QLD

Information and advice services

Many participants argued for a greater emphasis on prevention by providing older people with easier access to information about HMM services, especially information on home modifications:

How do we get that information to your fifty-year olds that are looking at renovating their house ... I don't think that information is out there to the public. SA

...we also have a years' grant ... to develop a booklet to enable people to assess their gardens and make them safe and sustainable. That was under a falls prevention grant. NSW

Many providers also reported that consumers are becoming better informed and increasingly discerning about the services they receive:

But one thing that we're finding, though, is because there is so much information accessible now on the internet and people becoming very savvy in finding information so you're getting this new breed of consumer that is coming through that is just very knowledgeable. NSW

Program eligibility

Issues of complexity, overlaps and differences in eligibility criteria and perceived inequities were also highlighted by service providers. Program eligibility criteria vary in terms of the level of consumer incapacity, their ability to pay or their veteran status:

The person with the gold card going off to bowls can get their lawns mowed through the Veteran's Home Care but the person next door to them who is supported through HACC doesn't get lawnmowing. QLD

HACC funding has very strict criteria whereas our areas of responsibility [community health] are literally the whole community. You don't have to be frail or aged to need a home modification. ACT

If someone's on a ... Community-Aged Care Package, they're ineligible for Community Aids and Equipment funding, and therefore they have to look at private funding. VIC

You can't get [another program] because you've got a package ... The CAPC program guidelines do allow for ... home modifications up to \$2000. SA

Concerns were expressed about differences in eligibility for subsidies and the application of means tests. Examples were provided of self-funded retirees on moderate incomes who are not eligible for HACC subsidies, while people in receipt of some DVA service pensions, which are not means tested, may have relatively high incomes and be eligible for DVA HMM subsidies:

I spoke to some of them yesterday, mainly self-funded retirees. A lot of them are on the lower end of the self-funded spectrum so they have exited from all the discounts and things that pensioners can get. Those people do struggle to get things done ... They are not really eligible for a subsidy. QLD

I think it's a horrible thing to have to do to assess somebody on their ability to pay. I think it's probably the worst bit of the job. ... It's not easy asking people for their private information. NSW

Some service providers suggested that age is an eligibility criteria often adopted as a proxy for 'aged and frail':

Anyone over seventy has proactive-type stuff because they should not be climbing ladders in their seventies if they feeling uncomfortable doing it. There is a grey area of people in between who have retired, that are not considered frail aged and I don't know what happens to those people if they can't get on to our services because we are basically the lowest level. SA

In some states and territories older people with disabilities are eligible for disability services such as modifications funded under aids and equipment programs, while in others anyone over sixty-five is automatically ineligible:

That's right. So the other catch is that once they are sixty-five they go into Aged Care and Rehabilitation. So they get the double whammy that they're aged care, and disabled. We don't have that many on our books but they're slowly creeping up. ACT

Yeah so if they are already your consumers they would continue to remain your consumers after sixty-five. They can't come in as a new consumer: no. When they're sixty-five they're aged. WA

Residents of public housing or seniors' specific housing, such as in retirement villages, may be excluded by services from eligibility for modifications based on an assumption that such accommodation will be accessible and designed to meet the needs of older people:

... would also include the people in ACT government or ACT housing homes, because ACT housing have the responsibility for [modifications]. ACT

The policy is if it is a retirement village, independent living unit, supported accommodation, SRF, whatever and they have promoted themselves as being seniors accommodation then we won't fund doing the modification there. SA

5.4 Assessing consumer needs

A key aspect of the process of providing HMM services is the assessment of consumer needs. Service providers raised issues about the nature of HMM

assessments, the issues involved in finding the best solution, and moving house as an alternative solution.

Nature of HMM assessments

The service providers generally identified the purpose of the initial assessments as gaining an understanding of the interaction between the consumer and their home environment in order to identify the extent of their HMM needs and to determine whether specialised occupational therapy or building assessment is required. They emphasised the importance of home visits for these assessments in many situations:

They do a very extensive assessment initially. From that initial assessment they'll determine whether an occupational therapy assessment or home assessment is required. ACT

General practitioners generally see their consumers in their rooms. They might be unaware that their patient lives in squalor. They've never seen the environment that their patient lives in. SA

The initial assessments usually have a primary focus on assessing needs of the consumer but may also consider issues for carers, family and visitors as well as for any staff or contractors undertaking work in the home. Service providers reported that initial assessments may be undertaken by home care services or community nurses as part of a broader clinical or aged care needs assessment, or may be undertaken by specialist HMM services:

A domestic assistant may only go in for an hour and a half once a fortnight, but a carer might be there seven days a week, but we check power points near water, basic power point safety, light safety, making sure there's escape routes through the house. ACT

It means that we have to consider the holistic environment ... that they might have children in there. SA

Some participants reported that their initial assessments are less comprehensive for home maintenance and gardening, where they may be limited to a basic checklist or a phone assessment:

... it is a holistic assessment, comprehensive assessment that we do, there is a limiting factor to it though that anyone needing pure home maintenance doesn't actually get assessed. VIC

There is a basic checklist done with them and they are offered the service of going through a comprehensive checklist. QLD

The service providers reported increasing funding for ongoing or one-off provision of crime prevention security, fire safety, water saving and falls prevention assessments:

There are occasional programs so, for instance, some of the health regions at various times they've had small initiatives and sometimes the police and the fire brigade sometimes have some money to do some safety aspects. But the issue is one that is actually integrated. So that's what I see as a big issue. NSW

Some services rely on home modifications assessment undertaken by external occupational therapists or referring agencies, while others insist on making their own assessments:

... the greatest majority of our consumers are consumers of other programs

... So, for example, the referral for a home modification might be through the

assessment team who have actually gone out to assess the person for personal care. TAS

From [name of service] point of view we have got a duty of care to make sure that the modification is safe in that it meet standards where required ... but we are not at a point yet where we can let that go and say, okay, we think that all occupational therapists in South Australian hospitals have got the degree of competence required. SA

Regular and timely assessments are considered important as preventative and early intervention measures, and are advocated because of the ongoing changes in the needs of older people:

So that, if they had a grab rail installed in a timely manner, that would prevent a fall, which would then prevent a broken hip or... so then it's expense on the health system. NSW

... if the gap between the occupational therapy assessment and the home modification is too long then the consumer's needs will actually change. NSW

I mean we do the assessments twelve-monthly ... Because all of our consumers they're all deteriorating. They're getting older. They're getting more dependent on other things and that is something that we've got to keep an eye on. TAS

Expert assessment from occupational therapists and architects or building professionals are both viewed as critical. Some services seek separate building and occupational therapy advice, but there is wide agreement amongst practitioners that a collaborative approach involving occupational therapists and building professionals is beneficial in achieving the best outcome:

But it is something that the builders are expected to do, too, when they visit the home, is actually do a general assessment of the home and in relation to other issues. There might be a referral that will come from an occupational therapist to do particular things and the occupational therapist might see the home in one way and yet the builder might see it in another way NSW

I will send my occupational therapist out and she will do an assessment on the medical side. I will go out and look at the job and see if it is plausible and, if it is, I take the builder out. We don't seem to have any problem. QLD

Over time skills transfer and a common framework for assessing options emerges between service coordinators, occupational therapists and building professionals who collaborate extensively on home modifications:

... to our advantage we have a great wealth of knowledge of our own tradesman because we have got people who ... have become very, very unique in the way they can asses the environment. So, you know, it is the different [perspectives]—merging the skills together. SA

Finding the best solution

Providers pointed to the many factors involved in making HMM assessments and the role of assessment in rationing access to home modification services:

... there is really no integrated reliability of assessment. We have our own definition of high priority and whether, between programs and between therapists, we all define an accepted level of how people can survive in their aged years at home. I might think it is alright until the day you die, as long as you are not going to fall down or you have got excruciating pain. Another

person may not feel it is appropriate. We have people who are happy to sponge bath for the rest of their life. Others sponge bath for six weeks and they are desperate for a shower. QLD

We didn't do the home mod because the consumer was ... a very needy consumer who needed to move on to residential care. We realised she could never use the mod. QLD

Service providers were particularly conscious of the need to balance the interests of consumers and cost-effective solutions where work is publicly funded:

... if the front's only got two steps as opposed to five steps at the back and they would prefer the ramp at the back, because it's a big bulky structure and doesn't always look the greatest, no matter what you do to it: but it has to go at the front because that's ... the least amount of work and the least cost. VIC

This is actually a huge issue for OTs as to what we should have in the body of our recommendations. Do we recommend the absolute best solution to that person's problem, regardless of the cost, or do we have a responsibility to the people who are actually subsidising that work to find the most cost-effective solution to that issue? ACT

Providers discussed the strategies employed to involve consumers in finding the best solution that is affordable for the consumer and the service:

What we do now is when we go with the OT's to the consumer, the builder goes, the client service officer goes and they are with the OT and they talk. ... we then talk to the consumer. It is almost like counselling. We try very hard to allay lots of fears, lots of doubts and lots of uncertainty for them about the financial parts ... It is possible but it is very frustrating. TAS

Moving house as an alternative solution

Service providers indicated some reluctance to discuss relocation with consumers and a general reluctance by older people to move:

... that process may well have been gone through where the consumer may have had tactfully suggested to them that they are in a totally inappropriate house and I'm not going to say that to most of the people, but, gee, I'd love to at times. ACT

... if we feel that the property is unsuitable we do cover that and we will say in our reports that that was discussed with the consumer, but the consumer's preferred option is [usually] to remain where they are. ACT

Moving is seen as an option that is most often available and feasible for public housing tenants, although often this decision is taken by the housing authority rather than the tenant:

... it's Housing ACT who determine the cost effectiveness of the modifications that are being asked for and they may decide that they're unable to modify that existing property and they may suggest to the tenant that they be relocated and that's very distressing for the tenant. ACT

A lot of their [public housing] stock is quite old as well, so they're tending to try and get people shifting into newer places rather than actually modifying TAS

The participants indicated that access to specialised information and practical assistance to relocate is not readily available to older people, although some services reported providing these services:

We often get requests from people: could we help them move? We can't do it, and we don't know where to send them either ... So, it is a bit of an issue, and that's one of those things that falls between the cracks. WA

We are one of the services that will broach that subject, to say, 'Have you considered moving?' We have only assisted one consumer with moving and that was years and years ago when we started ... We assisted with some of the removal. It cost us a few hundred dollars and saved thousands. QLD

We also advocate and we do a lot of work with the Archicentre to look at relocating our consumers and whether or not they sell, trade, whether they take an equity loan against their property, whether they move into supported accommodation. ... then we bring ACAT in [and hold a] case conference around that. VIC

Participants perceived that suitable alternative housing is not available for older people in many locations:

A lot of the places that are called fifties and over, they are still two-storey. QLD

I have two other people who discussed the option of finding something else. They have not been able to find something in the same lifestyle that is suitable and the right price range. For real oldies it is out of the question. VIC

Not being able to afford to move was identified as a significant barrier to older people relocating:

Sometimes the location issue could mean you can't really trade into the village because your house may not be sufficient value. Stamp duty, agent's fees, relocation costs, tens of thousands of dollars. ... There is every chance that the new home might require some modifications also, maybe not to the same extent but something. There is a cost there too. VIC

Another reason older people are reluctant to move was reported as the emotional attachment to the home and fear of dislocation:

Then you have actually uprooted yourself from your family home and potentially where your partner and your children were, the emotional cost of that. VIC

5.5 Delivery of services

Service providers also identified a wide range of issues that impact on the delivery of HMM services. These included the impact of location and housing characteristics, access to informal supports, issues concerning the quality of work and risk management, the availability of volunteer programs, private funding of services, and the level of unmet need.

Impact of location and housing characteristics

A common theme in the focus groups was the way that local conditions, in particular the characteristics of housing, impact on the demand for and delivery of HMM services. Issues raised by the participants included the type, age, design, form of construction, materials, fittings and condition of housing. Local conditions including climate, topography, soil type, size of housing blocks and tenure.

Housing design is often associated with the time period of construction and local residential development patterns. The implications of housing design on the suitability of housing for older people and the difficulties in maintaining and modifying it were raised at all focus groups:

In the [name of suburb] area a lot of the homes were built just after World War II, high-set older homes, small bathrooms, not very elderly friendly. That is one of the big issues that we come up with. Houses quite often need a lot of home maintenance and modification of bathrooms. QLD

Certain materials and fittings were identified as presenting particular challenges:

The other area would be showers over baths, like a whole generation of people [have] their shower over the bath. SA

There was another problem in there—the majority of ACT housing homes that were built up until about the early '80s actually contain asbestos sheeting in the bathrooms ... What it does mean for modification ... you have to gut the room: take all the wall lining out and start again. ACT

The participants discussed how the form of construction can affect the difficulty and expense of undertaking modifications. Wall construction, in particular, impacts on the installation of grab rails:

One peculiarity that we find in Western Australia is that probably about 95 per cent of everything is constructed as double-brick, which is a bit harder to modify than a frame house. WA

Non-standard forms of housing were identified as an issue where funding bodies and service providers may be reluctant to subsidise modifications:

... a lot of people retire to the caravan parks and mobile home villages that haven't been developed very well. [Funding programs]... might decide, well, [we] don't want to spend \$6000 putting a ramp in because ... these villages or these caravan parks are actually where these people retire to. NSW

The participants highlighted how hilly locations increase the demand for access modifications such as ramps and, when this is combined with climatic conditions, it may create significant issues for safety and access:

And with the weather we have, because whether it's a concrete slab or a steep slope, they are very hazardous in terms of slippery surfaces, slime, algae forming, wherever. That's one of our handyman jobs, to go out with the high pressure hoses. TAS

Some housing characteristics, such as modern slab on ground construction in more recently developed areas and single storey houses in flat locations were identified as easing the pressure on services:

This is a very general statement—single house, single-storey, single block and on the Perth sand-plains; they're nice and flat. In some sense it's great. WA

Consumers living in private rental housing face considerable barriers in accessing home modifications:

In a private rental we will put rails on for people as long as we get the landlord's written permission. But often it's quite difficult because the landlords don't want their houses modified or they want you to guarantee that when they get rid of that tenant we will come and take everything off which we won't. VIC

We had— I had a phone call from a consumer earlier—his lease was a bit tenuous ... a fairly tight rental market and landlords don't have to put up with this sort of stuff and they'd be just as likely to give him notice. So that was his real concern. SA

... quite a bit of private rental as well. We certainly would be quite reticent to do major changes in—unless we can see that someone's basically got that house for life, as it were. NSW

Access to informal supports

Service providers identified a range of factors that impact on the ability of families to assist older people with home maintenance and modifications:

And I think there's a reluctance from them to ask family as well. Yes, elderly people don't expect their children to come back and help them. NSW

... you know they have got families but they're just— they'll say they are too busy— then we'll have to rely on HACC services more and more to probably do some of the things that family have done in the past years. WA

Some service providers were more positive about the level of assistance provided by family members:

Occasionally I have one who makes out a list for the son when he comes over every month. I would rather do the work for them rather than make them wait a month, change the light bulb the next day. QLD

I suspect the ones that are well supported we don't see. They are coming along at a tertiary level for home modification. By the time I get to assess consumers, the repairs are done and there is often something the son or family member has done as well. I am not despairing at the lack of family involvement, considering people's schedules. NSW

Some service providers reported consumers only require specialised assistance. Many referred to the role of older men in home maintenance and the gap this leaves for their wives when they are no longer able to undertake household tasks:

We might only go there once because the husband ... He refuses to let anybody else in the house to do anything. But he doesn't know how to put a grab rail in the shower. We night never go back to the consumer until he passes away. QLD

Light bulbs never blow when the husbands are alive. They fix them. They say 'everything has happened since Jim died'. You are taking their place ... QLD

Some participants commented on the varied ability of older people to rely on community networks of friends and neighbours to lend a hand:

I'm amazed at how many times I ask people, 'do you have an emergency contact?', and they just go blank. 'Oh, well my kids are in Western Australia and I don't talk to my neighbours and—I can't even give you a phone number to contact in an emergency'. There are that many people so isolated. NSW

I think there are some people who are very well networked with neighbours and families, but you've got to have the skills set to be able to do some minor maintenance around homes and some people have it and some people don't. VIC.

The self-reliance and improvisation of people living in rural areas was commented on by several service providers:

But in the country I think that's a much stronger, almost cultural thing. There's this, 'Oh, we'll put it together with a bit of baling wire and some Mallee roots'. SA

... in regional areas ... they wouldn't call a home mod service to install a grab rail. They'll just get their son who is also on the farm to do it for them. 'Oh Dad, I'll knock that up'. So there is a lot of informal stuff that's going on that we're completely unaware of. NSW

There is a lot of do-it-yourself that goes on, especially in rural ... Oh yes, everybody gets together and they all bring the tools over. TAS

Quality of work and risk management

A common theme in the focus groups was the risks associated with unqualified people undertaking home maintenance and modifications. Some people mentioned insurance and duty of care liabilities, including the risk that improperly fitted modifications could cause additional injury:

the [name of agency] actively discourages families from being involved because of the insurance issues. If we do get someone to install the rail we would have them sign a disclaimer that they're responsible. WA

In this sort of scenario, sometimes shortcuts are taken by people. Somebody's brother in law is a 'tradie', he'll do it and the job is finished and there's a leak there. Who's going to take the blame? VIC

In some cases concerns were expressed about the additional cost to services of remediating work undertaken by unqualified people or the waste of money if the modifications fail to meet standards and are unsafe or unusable:

I guess we've seen too many shoddy jobs and it's cost us big money to pull down and replace it and fix it. WA

However, some service providers admitted they rely on families to install modifications where no other option was feasible or where regulations prohibit the service from installing a cost-effective solution. For instance, in some states regulations prohibit installation of hand-held shower hoses within a set distance from electrical fittings:

The only instance we've had is one on the Great Sandy Desert because noone was going to go out there. But they're not encouraged at all. WA

More often than not it's things like shower hoses we get the family to put in, because of our problems with putting in shower hoses WA

Use of volunteers

Volunteers tend to be used primarily for gardening and handyperson services. A small number of organisations reported that they rely heavily on these volunteers:

...we have volunteers within our organisation who have been there for as long as we've been there, twenty-seven years. ... as a volunteer organisation I think we've got a fairly good formula and it's working very well. So we're having schools volunteer. We've got twenty-seven schools involved with that. WA

I wouldn't say it was high levels, but there definitely are some organisations that have volunteers that will do a bit of gardening or do something like that. NSW

Private funding of modifications

The focus group participants reported a range of informal assistance provided to older people to fund the cost of HMM services including families, service clubs and community fundraising:

From what I gather, quite a lot of families are putting money in to do up Dad's home to keep him there. We finished one ... two brothers took out a loan, a \$22 000 job. QLD

... or that can get knocked back so they would go to Rotary, or they would go through Lions Club or a club like the Robert Rose Foundation. VIC

... with local government councillors, they've got allowances to spend in their wards. So they might allocate some funds to families for modifications. VIC

Participants identified new and emerging options for self-financing of HMM services, including community lending, health insurance and reverse mortgages:

A couple of NILS but they're limited to \$2000 ... In our area the two neighbourhood centres have got it ... NSW

Consumers who are articulate enough can negotiate, so if they haven't had their allocation in physiotherapy or speech pathology or whatever, then it can go towards OT. ACT

Somebody did say to me recently that under this new arrangement where doctors can refer people for certain allied health, Medicare will cover OT assessments. I am not registering because it is not cost effective for a private practitioner to do it. That system is based on a 20-minute or a 40-minute consultation. ACT

Participants in the NSW focus group expressed concern about the emergence of reverse mortgages as a potential funding source for renovations, home maintenance and modifications:

I have a worry about [reverse mortgages]. In years to come I think some people are going to get themselves involved in that and not quite realise the implications of what is going to happen with those reverse mortgages. NSW

... the last two issues of the ... industry magazine had huge articles on reverse mortgages ... I'm thinking there they are cashing in the equity on their house on beautifying the bathroom and the kitchen and not looking at it from the accessible or able to be modified point of view. NSW

Well one of our consumers, her children had to get together and buy off her reverse mortgage because she was about to lose her house. And I wonder whether that is going to become more of the norm. NSW

It has crept into our new home mods guidelines and the reference group actually were quite vocal about it going in. NSW

Unmet needs

The focus group participants were asked to identify unmet needs or needs that are inadequately addressed by HMM services. They generally responded from the perspective of their service and their contact with consumers. One area of unmet need was identified as preventative and early intervention modifications:

... mainly people who do not have a history of falls or falls-related injury, who have just expressed an interest in getting ready for old age ... They're the ones that tend to be sitting on our waiting list for up to a year. ACT

.... who only need equipment or only need minor mods and they are mobile, they are showering independently, they are doing whatever—their priority generally comes out lower. SA

If you are a HACC consumer you could use the prevention program ... Except for our small involvement ... there are probably no fall prevention strategies until you become a HACC person or a veteran's affairs person. QLD

Gardening was identified as a service that consumers highly value but where services are commonly unavailable or highly rationed:

I did a survey quite a number of years ago now. But most of the people who answered the survey said that having someone to look after their garden ... especially the front so that people didn't think an old person lived there ... As long as it looks nice, they'll forego maintenance services to get gardening services. SA

And funny enough, a lot of elderly people, it's often their garden too. I know that sounds funny but their gardens—a lot of them, that's all they have. NSW

Assistance with home security was perceived by a several providers as a service gap:

One other gap is the security area. Given the times we live in now, it is a high priority. The front line of defence at the end of the day is secure windows and doors. QLD

Security screens became a bit of an issue ... a couple of years ago. Obviously the culture changed and people were getting robbed and feeling vulnerable. NSW

Some providers believe that repairs and preventative maintenance should have more attention:

Yeah, preventative maintenance. I think not maintenance— we respond to maintenance that's straight away for safety, security— toilet won't flush or whatever. But there might be a drawer that's sticking for a long time but it wouldn't get a high priority until lady pulls it out and drops it on her foot and it broke her foot. Then it becomes a bigger issue. NSW

There is a gap in the services available. I have looked at it in major maintenance issues. Restumping, rewiring and reroofing would be the three big things. QLD

Many providers identified delays caused by a lack of funding, or shortage of OTs or building contractors as a major issue impacting on unmet need:

Look, I suspect that the delays are more in getting trades, because that's the big difficulty in Perth at the moment. WA

... the OT's aren't getting out there quick enough, so you're not getting out there and preventing falls. TAS

Because of our long waiting list, 12 months to get a modification done, we do only higher urgent. Anyone who is medium or below is not a priority ... until they are getting to the crisis point where they need us to step in. QLD

In some focus groups, providers complained about the limited funding available for major modifications and more expensive equipment:

A lot of what we are seeing is outside the scope of what [name of program] would provide in dollar terms and the work that needs to be done ... it is squarely around access, bathroom mods, the bigger sort of jobs that you are probably not going to pick up. VIC

Several participants identified the need for more proactive approaches to accessible design, especially for housing targeting older people:

So if there was some regulation about universal design or something—you know in retirement villages that would help us all out I think. SA

... trying to influence draft local environmental plans so that it does allow for adaptable housing. NSW

One provider was concerned about the over-emphasis on a medical model in the provision of HMM:

The other major gap is that it is an incredibly clinical medical model. Basically we're concerned with function, bowel and bladder functions and hygiene and there is no scope with our scheme for looking at quality of life. TAS

5.6 Consumer outcomes

The service providers were asked to comment on their general perceptions of the outcomes of their services for consumers, and the steps they take to obtain feedback from consumers. Their comments fall into three main categories: take-up, satisfaction with services, and consumer outcomes.

Take-up

Service providers indicated that many consumers are pleased to accept recommended home modifications and maintenance services. There are, however, many reasons for older people to refuse or delay changes to their homes, especially where major or structural modifications are involved. They recounted instances where older people reject services because of a reluctance to accept that they need assistance:

We regularly get it. As late as yesterday afternoon I got a call from a daughter of a consumer—he's a crotchety old fellow— he's very set in his ways, he doesn't want to admit that he needs modifications and he's finally accepted a couple of grab rails. But as far as fixing doors and that sort of thing, he [thinks he] doesn't need it. ACT

[We encounter] some reluctance to take up the program. They think they are losing independence, rather than enhancing it. QLD

There is a lot of denial in all this as well. None of us like to think that we're going to get older. TAS

... and they just think, 'Oh, I'll never get that bad. I'll be dead before I can't get in the shower'. TAS

We will often suggest, you know, putting in grab rails ... 'No, no, I will keep battling on, I will just grab' and they are grabbing plants and they are using towel rails as grab rails. VIC

Some older people are not prepared to endure the disruption caused by home modifications:

You also have ... the older, frailer people who live by themselves and the whole prospect of having major work done is just too overwhelming and they just put it all in the 'too hard' basket and decide not to go ahead. ACT

Services try to respond to consumer concerns by identifying solutions that are less disruptive and more acceptable to the consumer:

In those instances they're more likely to accept a grab rail than a piece of equipment, which is not the best solution but it's all they're prepared to deal with, rather than a major bathroom modification. ACT

Service providers are conscious of their role in overcoming consumer resistance to change and persuading them of the benefits of accepting HMM services:

... so you have got to do a bit of a sales pitch as well ... you are trying to almost force a consumer into accepting a modification. QLD

But leading up to it there is this slight resistance. 'I wonder is this going to be what I want? How will I cope with this change?' Change is such a big thing for them, so it is amazing what does happen. TAS

Service providers reported that cost is a factor affecting the take-up of services:

The other thing that people do look at ... is cost. We are subsidising the majority of it and in fact we quite often waive costs if it's going to mean getting the thing in and making them safer. ACT

... with most pensioners it is funding, isn't it? It comes down to funding They don't worry about their fall or anything like that but that \$27.50 [cost of a rail] is what they concentrate on. TAS

Where consumers are ineligible for subsidies, service providers try to identify costeffective options and assist consumers to find ways to fund major modifications. This was identified by service providers as a significant challenge, particularly in programs where there are low subsidy caps or limited funding for structural modifications:

We try and find solutions they can afford. SA

Some family members will help, yes, others won't. It is very complex, a whole lot of factors. VIC

I came up with 14 different ways you could actually siphon off money for home mods ... but none of this information is freely available and that makes it extremely complex. NSW

Service providers reported that borrowing to cover the cost of major modifications is the only funding option for many of their consumers. Older people are often reluctant to take up this option, even where subsidised home loans are available:

I think the idea of a loan for many people ... who are over sixty, it is the fear of: 'How I am going to pay it back and service that loan?' VIC

They do not want to borrow. They have spent their life paying off a loan and that's the last thing they want to do. VIC

Reluctance to change the appearance of the house, the location of furniture and fittings and the way spaces are utilised was commented on by several service providers:

They don't want to change the appearance of their house. It is their home and it's been their home for a long time. ACT

They don't want toilets in bathrooms and things like that. TAS

In some cases consumers are more concerned about how the modifications may appear to other people. This may relate to concerns about personal safety:

... where ramps or other modifications are visible from the street, partly it's about a sense of, 'I don't want people to know I'm vulnerable. I don't want to be a target for a home invasion', or whatever. SA

Others are concerned about aesthetics and the perceptions of others:

 \ldots I don't want to put in a ramp because that will look ugly and it will stigmatise the house. VIC

A common concern is to avoid creating an institutional appearance:

Some of their family members don't want the home changed either ... to look like a hospital. NSW

Service providers reported a widespread concern that home modifications may impact on the resale value of the home:

In a lot of cases I think we're actually decreasing the value of the home. Because a young couple don't necessarily want to buy a home which looks like a disabled person lives in the home. NSW

Regularly we're asked if we can take it away—will it be removable? In other words, that's resale value as well. ACT

Older people and their families are commonly concerned that the cost and appearance of home modifications will have a negative impact on family inheritance:

... and one of the factors is, believe it or not, old people say, 'I don't want to upset the house ... because my family is going to inherit it'. ACT

... some families don't want it because they think, 'Mum and Dad—oh can I say this—are about to die and the house is going to be altered and then it's not going to be so great for selling'. I've seen that a few times. NSW

Participants at several focus groups discussed their observations of generational changes in the attitudes of older people to services such as HMM:

... [there is] that group that have always looked after themselves and feel that it's their duty to look after themselves. But then there are the other ones that say, 'Well no, I'm going to get everything I can from these buggers. I paid tax all my life and this is part of that'. SA

Some services have experienced older people refusing HMM services, even when under pressure from other home care services to make changes:

We have had cases where we have had referrals come through. The services that are attending are getting to the point where they are going to withdraw their service unless the modification is done and the consumer is still refusing. QLD

Service providers were aware that the modifications are sometimes not as aesthetically pleasing as they could be:

It would be nice to give them a beautiful bathroom as well ... I say 'You can buy some feature tiles on the weekend. The guy might put them in between the basic ones, if you are lucky'. A lot of these people have not had any home improvements for yonks. QLD

Sometimes the acceptability of the modification is related to how well it addresses the older person's specific concerns. What the service providers believe to be appropriate may not be acceptable to the consumer:

...sometimes you might put it where you think is the perfect access and they continue to use the other door. SA

It's changing habits and that is [difficult] ... So even though we might clinically think that that's the most appropriate structurally and all those things,

sometimes it's around the consumer's habits ... the effect of consumer perception where they think they want it is hugely important. SA

Feedback and satisfaction

Generally service providers were keen to receive positive and negative feedback from consumers on the services provided:

... if we get negative feedback from a consumer, we try and put something in place ... We are very much encouraged to record that as a risk. Unfortunately it only captures negative areas and tends not to capture the positive but certainly our organisation asks us to report all positive feedback ... I got half a dozen eggs once but I didn't want to send that up the line. ACT

Some providers reported that consumers regularly provide unsolicited feedback:

Yes... well the consumer is not slow in coming forward. WA

We every now and then get good feedback, unsolicited good feedback and we also do produce a newsletter ... they're encouraged to write in. ACT

A range of methods are used to obtain written feedback from consumers about services provided and some collate this information on a regular basis:

We send out surveys every time we send the invoice out. We get a lot of surveys back. The survey was kept deliberately short and only address level of satisfaction to increase the likelihood of it being returned. SA.

I do an extensive analysis of my feedback sheets in my annual report every year. NSW

Some issues were raised about the effectiveness and validity of consumer survey methods:

There are some consumer feedback forms that are sent out to a lot of the people who visit and phone enquire. A few of those dribble back in with comments about the service and any problems or complaints so we get a little bit of feedback but there's only a small percentage who do take the time to fill out the form and send it back into us. ACT

Those open-ended questions are not going so well for me. I am learning that I have to be far more detailed about that. You have got to sit down and analyse that material. It is incredibly unscientific. QLD

Some services undertake final site inspections or phone checks for quality control and to ensure consumers are satisfied with the work:

We evaluate the appropriateness of design and satisfaction with the actual process fairly closely, like a month after it has been done. In that process, we go out and visit. VIC

We would phone ten consumers a week. We have a random Excel program. The volunteer rings up the consumer and asks questions, whether they are happy with the service, did they come when you thought they would, would you use the service again ... it raises any issues if there are any. QLD

So we'll ring up and say, 'Have the modifications been done?' and have a chat to them. ACT

Service providers had differing views about the impact that the financial cost borne by the consumer had on their expectations and satisfaction:

... if they're paying full price they expect so much more. SA

So if people are really pleased with the job if they're paying for it, they'll certainly tell you: if they're not happy as well. ACT

When I was working for [a local council service] we had free service and no charge for anything. And we had umpteen complaints about services. SA

Consumer feedback is perceived to be mostly positive. Older people were reported to appreciate the service and the subsidies provided. Home maintenance service providers felt that consumers particularly value having a reliable service through which they could access suitable tradespeople:

All of the feedback we have had has been positive. They love the service. VIC

The first part is that people think, 'Oh, this is a wonderful idea, I wish I'd had one before. It's absolutely what I needed'. But the second thing, which I think is more about the way that the service is delivered, is they are actually really pleasantly surprised and pleased about the quality. SA

They feel secure ... Their life becomes less complicated. QLD

Knowing who to turn to I think is one of the biggest things. So there's someone to contact other than a tradesperson. Because ... [consumers believe] they are going to rip you off. SA

So the feedback that we get is fantastic and we also get a lot of really good feedback about the guys ... 'They were here when they said they were going to be here. They made sure that they cleaned up after themselves'. NSW

Service providers reported that staff and contractors receive a great sense of satisfaction from the appreciation shown by consumers:

It's quite a deep feeling that they do make a difference. SA

I find it is good people that we're attracting to work with the home mod services. They're not your average Joe Blow builders. They are builders and coordinators and administrators and they have a social conscience, so they're there because they care. Often they stay in the industry because of the psychological contract that they have with the consumers and the community but also, too, what they're getting out of it. NSW

... one of the benefits you get personally is seeing the delight you have provided to the consumer. QLD

Generally the service providers felt that complaints were rare:

We don't get many complaints I must admit. We do follow up all of our complaints. ACT

However a number of issues were raised when discussing the nature of complaints. These include the complaint that building contractors are not always responsive, do not always communicate well and sometimes that charge too much. It was felt that some of these issues could be resolved by providing the consumer with better information and a clearer understanding of the building process:

Tradesmen are not necessarily good communicators. We get calls in saying 'Where are they? Did it get done? Is it being followed up?' That ability for contractors to be able to ring and say, 'I can't come for three weeks' is a help. QLD

The complaints that we have coming from the home modifications program come from the relatives or family ... 'You could have done it cheaper'. They

only get involved afterwards. That is the biggest complaint, when the relatives get involved. QLD

Delays in responding to consumer requests appear to be a reason for complaints for providers who lack the staff and financial resources to meet demand:

That would be our major complaint—the time. It's fine if we found some more OTs to work in Canberra and some funding and we'd be right. ACT.

There was some concern that older people are reluctant to complain:

I think people probably don't complain maybe as much as they might like to because I think a lot of people that we provide service to are so grateful to get the service that they don't want to complain. NSW

While complaints were rare, at times service providers encountered consumers who were very unhappy and required active management. It was proposed that providing a quality service and formal complaints mechanism was the best way of ensuring that people received the service they wanted:

I mean, ideally, you don't give them any reason to complain. Ideally, the way you work is you've got processes in place that make everything work without a need for complaint. But nobody is ever perfect and I just think it is important that you get that and you have that avenue for people to complain. NSW

An opportunity to provide feedback was also seen as important in improving service delivery:

But our feedback sheet gives them the opportunity to do that anonymously and ... it gives me the opportunity to look at areas that might need to be improved. So if they do send it back without a name on it then those things are always noted and taken on board at staff meetings or wherever they need to be to change it. NSW

However, some service providers are concerned about lost opportunities for better utilising available information for evaluating consumer outcomes and continuous improvement:

You gather that evidence by asking people. You have no process to collate that information to share with others. It would be good to have the administrative support, to get that information down. QLD

Consumer outcomes

There is a perception that funding programs place too great an emphasis on outputs rather than outcomes and this is reflected in approaches to data collection:

As I said earlier, it's outputs that are measured not outcomes. And it's important ... to start looking at outcomes, what we are actually doing with this service rather than, 'Yep, we're doing it this frequently'. WA

Many participants reported that they had difficulty, due to time and resource pressures, undertaking follow-up assessments to evaluate the longer term impacts of services for consumers:

Certainly the information that we've had back from some of the OTs is that the first thing that drops off when they're under pressure is the follow up visits. ... Yes, they'd love to be able to do it but ... NSW

We've been talking about getting some more rigorous post-[service] evaluations up but the problem, of course, is getting the money to do that because that is not part of what anyone is actually funded to do. NSW

Some consumers receive a repeat visit and this allows service providers an opportunity to talk with consumers about the outcomes from previous work:

Like a year later you'll go back and do something else there. I went to a place yesterday and I put a shower in about a year and a half ago and now he wants [a grab rail] in the toilet. TAS

Some services, in particular those who provide major modifications, often visited when the modification was completed:

The occupational therapist is the one who would be going back to do the longterm visit ... That happens probably more often at a higher level than the minor modifications. To put in a grab rail beside a toilet or in a shower or whatever doesn't necessarily mean the OT is back there to make sure the consumer is using it. NSW

I have done evaluations of services that I provide, getting client feedback 'cos I'm wanting to do research on this ... effectiveness and cost savings overall ... always very positive with the effect that it's had. SA

It was felt by some that the collaboration between the occupational therapist and the older person is the key factor that contributes to positive outcomes:

I think that most of that comes down to the client sitting down with an OT and agreeing what needs to be done and then that's done. WA

Service providers reported that many consumers were positive about the impact of the modifications on their lives:

And out of all the services that were surveyed, home mods and equipment just came out hugely favourably. It was very much about the difference that it made for people. SA.

They say, 'Yes that's great. I feel much happier having a shower now without anyone in the house, or I can get to my letterbox now'. ACT

Yeah, there certainly is a change. Particularly if people can sustain—live in the house and operate independently or with a carer in that house, yeah ... and safely without having falls and ending up in acute hospitals. WA

The modifications address psychological issues which are to do with a sense of security and autonomy, that also address issues related to physical enablement which are basically about reducing care costs and also about reducing care burden on neighbours and friends. NSW

At times the changes brought about by the modifications are perceived as being life changing in a fundamental sense:

... all of a sudden it is like the stress has left. [They say], 'I can now get to the toilet. I can now get to my shower. All I've got to do is just wheel myself in there and it is just so wonderful. It is like my life has changed completely'. TAS

We put in a wheelchair lifter for a woman who hadn't been out of her home for 12 months. ... So for that woman to get the chair lifter so that she could then get out of her home and into a car and just go out was just extraordinary. So what we take for granted is just so precious to some people. NSW

Often the modification replaced a less than ideal situation, which was demeaning to the older person and placed others at risk:

The humility of being carried out of her home like that. That she never had to go through that again and it was also that her neighbour wasn't that young either but it was a very awkward situation for both of them. NSW

Overall, service providers felt that the home maintenance and modification services were fundamental to people being able to remain living in their own homes:

Anecdotally, I'd say most people would say that if services like this weren't around they wouldn't know who to turn to and they would move out. SA

The service providers noted that people generally used the modifications:

But the good thing with hand-rails is if you put them in people do tend to use them. WA

[Consumers say] 'I didn't think I needed that, but now I don't know what I'd do without it'. SA

In particular, the service providers were aware that the modifications enable people to retain their autonomy, identity and lifestyle by remaining in their own home and community:

In doing that, that also has the psychological repercussions in terms of making the person feel that they are still a valued and important member of the community and not a burden. NSW

The capacity of modification to reduce the demands on carers was also evident in the comments of the service providers. This is particularly important as many of the carers are themselves ageing and at risk of serious injury from prolonged stresses on their bodies:

Say you're husband and wife. The husband is the one, say, in a wheelchair. For the wife it just makes her life so much easier in that she does not have to use her body physically to do things that her husband can now do for himself, because it has been made possible for him to circulate in the home. NSW

Modifications were also seen by service providers as reducing the need for other care services:

While it is a big plus for doing the home mods, with the withdrawal of services, if someone is coming and doing the bathing, you can go to the mod service ... cases where services have been able to withdraw completely as a result of that mod. I think if they still come, it is easier or maybe it is quicker. QLD

5.7 Service organisation issues

Most of the data reported in this chapter so far relates to the various stages of provision of HMM services. However, the service providers were also asked about ways in which the wider organisation of services impacted on service provision and on consumers. Their views are reported under the headings of the coordination and integration of services; the availability and expertise of occupational therapists and of building staff and contractors; the involvement of architects in HMM; the role of the market sector; regulatory issues, including building approvals and registrations; managing risk; and capacity for innovation in HMM provision.

Coordination and integration

In all jurisdictions, the responsibility for HMM is distributed between several programs and many government agencies. The providers perceive a lack of coordination among programs and providers as a significant problem: It's very frustrating even having the same minister in some instances but to still have departments stonewalling because they've got their budget to protect. It's only one bucket of money so why can't we work cooperatively rather than each government department protecting their patch. ACT

I don't think there are any links with [name of Department]. They don't work in with anybody. QLD

In some jurisdictions, participants were aware of efforts to strengthen cross-agency policy and program coordination:

It's only been in the last nine months that we've really been starting to try and work through some of the issues. And we're now at a point where ... the ministers are interested in having some sort of policy governing how the state delivers equipment and home mods. SA

[We are] trying to find out what there is in WA exactly to do with home maintenance services and stuff like that. What is there for people to access, how do they access it, is there a way of bringing things together? WA

Some practical examples were identified of links between HMM services and state housing authorities:

We use all their technical staff [the Department of Housing]. NSW

Department of Housing has recently come to State Council to look at Home Modification Services providing modifications for their existing stock. NSW

We raised that at our last forum, whether we could have access to the OTs from the local housing office. The public housing system operates very separately from the rest of the system. QLD

A number of providers identified concerns about the inefficiencies of duplication in service delivery arrangements:

We're all reinventing policies and procedures over and over again for all our different organisations It is ridiculous. It needs to be streamlined. NSW

Many participants commented on the complexity of service delivery arrangements:

They might come though a practice nurse, they might come through a GP, or they might come through a hospice nurse but all requiring one common thing. It is either home maintenance or home modification. At the moment services are in their very nature fragmented, they don't necessarily talk to one another. VIC

Participants in some regions reported they had established networks to build relationships between the various HMM service providers, while others felt their networks were less well developed:

So those relationships between the assessment services and the deliverers and the advice services seem in this region at least to be reasonably well developed. TAS

But no, we are not as networked as ... perhaps we could be. VIC

Occupational therapists in some jurisdictions have developed networks to bring together therapists working in different HMM programs:

... three times a year we have whole of state meetings where the OTs from all the different hospitals and from private [hospitals] and from the different programs [get together]. Because we tend to be put in silos administratively

there's a serious risk that we all head off and we develop our own reporting formats and there's no coordination ... we developed a cross-program working group ... and we also ran the workshop last year just so that everybody could actually meet representatives from housing, etcetera. ACT

NSW is the only jurisdiction with funded state-wide program resourcing coordinating structures:

And that was part of the plan for things like the Clearing House. The Clearing House would be at least a one-stop shop where people could share that stuff. NSW

State Council is the peak organisation for the 106 home modification and maintenance services in New South Wales. State Council looks at the big picture issues for the home mod services. Mainly we advise services on policy and we also look at providing training initiatives and funding to assist the services. NSW

Availability and expertise of occupational therapists

Many programs and agencies require OT assessments as a condition of funding:

The position that the occupation therapists find themselves in is that in order for home help to release the money for those home modifications there needs to be an OT written assessment. It's the same for all public housing tenants who request home modifications—Housing won't budge unless there is an OT assessment. ACT

In some cases, services will install non-structural modifications such as grab rails without an OT assessment:

It raises the question of Home Assist doing grab rails. It does raise issues that you are in an increasingly sensitive environment with safety issues. QLD

However, access to occupational therapists was raised as an issue of concern in all jurisdictions:

... it is almost like we're running around with one arm tied behind our back ... endeavouring to do this service knowing full well that in the background lurking are all of these people whose needs need to be met, but no OTs. NSW

HMM services reported a significant reliance on community health and hospitalemployed occupational therapists. Access to occupational therapy services varied, depending on the supply of occupational therapists in the health system and the priority given to HMM assessments:

We work very closely with community health services to use OTs ... we currently have a nine month waiting list for OTs ... some municipalities won't act unless they do have an OT. VIC

It depends on what area of health you're in. We've got really good OTs ... because we've got three hospitals sort of feeding into us all the time. NSW

We use community health. There is a waiting time. It ranges from one week to six weeks. It depends on how they prioritise. That is the biggest shortage I suppose all of us have. There is a big lack of OTs out there. QLD

Hospital discharge was identified by providers in most jurisdictions as an area that received priority access to occupational therapy services, thus diverting resources from other consumers:

Once they're actually in the hospital, we're a lot quicker, because that's driven by money. We want them out, so the assessments are within a couple of days, and we can prioritise, I suppose, over our community work. TAS

Some participants pointed to the increased workload created by a tendency for occupational therapists to undertake additional tasks such as preparing drawings and building specifications in an effort to ensure the appropriateness of the home modifications:

OTs will, if they think they've got time, actually try and do that handy help report ... they really don't have the time to do it, but they do it anyway because they know really we're flat out. ACT

Increased waiting times for home modifications was identified by the providers as the main impact of a shortage of OTs:

My observation over the last couple of years is that there is certainly a need for more OTs. There is a long waiting list of consumers who are requiring assessment so that we get the flow on with the whole modification. TAS

Providers from rural areas also complained about the challenges they face attracting suitably skilled occupational therapists for home modification work, especially in smaller population centres:

That's because the general supply of OTs is not all that great and, especially if you come from rural areas, if we had a requirement that this assessment needs to be done by an OT who was accredited for that particular area then we would be waiting for ever. So we have to run with the OT that is there. VIC

Service providers identified a range of strategies to obtain OT services:

There is a mixture of private OTs, community health OTs and some on staff. You use different strategies. QLD

We had that wonderful association with [name of University]. Any consumers on sign up could have a full assessment. That was really doing wonders, getting grab rails in early rather than after the event. QLD

In some cases, services implemented alternatives to occupational therapy assessments, especially when assessing for maintenance and minor modifications such as simple ramps and grab rails:

One of the problems I feel is that with community OTs, when they are going out, they have to do a full assessment. All the service we require is service for access, grab rails, things like that. When they go out their assessment is going to take three hours. All the information we require could be done in a risk assessment that would take an hour. All we are looking at is access. QLD

We are not able to recruit [OTs] ... but the [RNAs] who are actually with me are taught how to do the rail measurements and everything, and we are out doing that, not the OTs. SA

Participants in several focus groups discussed the particular training and expertise required by occupational therapists in undertaking HMM work, and the problem of lack of experience:

I think we have some really highly sought [after] OTs in home mods prescription. [However], the rural remote therapists who often are new grads, who haven't had a lot of experience, are expected to be experts in home mods and in anything else anyone throws at them. SA There was widespread agreement amongst participants that many occupational therapists involved in HMM provision are not fully confident and capable:

We provide training extra workshops ... but the level of knowledge out there you [would] probably say ten per cent of therapists in a room at any one time know what they're doing and are confident and comfortable and capable ... VIC

This may relate to an expectation in some situations that occupational therapists project-manage home modifications projects:

There's many of them out there trying to project-manage a building job that I think is outside of their level of skill and certainly something they are not trained to do. It traditionally would be an architect's role or a builder's role. VIC

The participants pointed to the importance of occupational therapists having enough knowledge of building issues to be able to work with a builder to identify the best solution for the consumer or to provide plans and specifications for the builder:

[We are] ... constantly asking for joint visits between the builder and the OT so that they can work it out collectively. Ideally the OT has the expertise to do the visit and then refer to the builder, which saves time and money. NSW

The providers expressed concern that universities did not adequately prepare occupational therapists with the skills required for HMM work:

Like with the new grads, which we tend to get a lot of in our area, it depends on which universities put more emphasis on home modifications than others. NSW

... it does vary across states and how much it's taught, as well. SA

... and I think it is worth pointing out that we don't have OT training in Tassie so how many of Tasmania's OTs were actually born in Tasmania? I think it is probably two. TAS

Availability and skills of building staff and contractors

Finding high quality and experienced contractors is widely seen as important but this was also identified as a problem:

The good contractors have got so much work ahead of them, often you are getting second best. QLD

There's a few really good ones that are worked into the ground and the information [about them] is actually held very close by some people. WA

Service providers across Australia reported difficulties in contracting building work, especially for smaller jobs or specialist trades:

One of the big problems is trying to get a contractor. Trying to get a private person to come in to do [is difficult]. If it is a tiling job they want to know that they'll do your whole bathroom and that's why people go to councils. SA

Look, I suspect that the delays are more in getting trades, because that's the big difficulty in Perth at the moment. WA

We have two tradesmen and a registered builder on the north-west coast ... where it's always been a difficulty to get registered builders. I think they're all up the north-west of Western Australia or somewhere. TAS

They don't want to look at the small jobs. TAS

Some highlighted the impact of changes in the structure of the building industry:

The tradies we could get eight or ten years ago would also do other jobs while they were there. They would see it needed to be done. Now, they will rush in, get their job done and get out. QLD

We would have all had independents, one plumber who worked for himself or one builder. All of those people are retiring. You can't find a plumber by himself. He has got seven workers and the electrician has got eight workers. It has gone up from \$40 an hour up to \$75. QLD

The participants reported the most troublesome area was contracting for specialist trades:

Specialist tilers can be the hardest people to get. Once you've gutted the bathroom out, you've just got to get them back in there to finish it off, but they can be unavailable. NSW

We have a lot of trouble getting tradespeople, especially people like electricians and people qualified in refrigeration. QLD

I think the new rules in relation to who can do what within a home have caused some problems. So you have a builder who builds the infrastructure, you've got other people coming in to do the plastering, someone that's coming to do the plumbing and the electrician. For a plumber you can actually have up to 18 months turnaround. TAS

Many service providers believe that the availability of building contractors is linked to industry market fluctuations:

It's going really slow down here: in other states like Queensland that's not the case. So it's interesting to see that the market fluctuates differently in different locations. VIC

If the housing market decreases then they'll start looking for niche areas. WA

While many services attributed difficulties engaging contractors to market conditions, others believe that the requirements of public funding are a problem:

I went to ... do a presentation at the MBA. Some contractors said things like, 'Oh, we don't want any of your consumers because they're so difficult to deal with'. NSW

You are supposed to get two or three quotes at a time. You will try the patience of the contractors. You can't keep them. QLD

And when [name of agency] wanted to put their service out to tender a few years ago ... very few private builders were really interested in doing that sort of stuff. NSW

The requirements imposed on HMM services for contractors to have insurance cover impacts on the availability of handymen, according to some participants:

We don't have any problem with qualified tradesmen. But try and find a handyman with public liability insurance. I say, 'Can you come and see me tomorrow? Bring me a copy of the public liability.' You never see them. A person who does small handyman jobs is hard to find. QLD

Some services talked about their experiences in attracting and establishing strong relationships with suitably skilled builders and contractors to encourage them to specialise in HMM:

We're very, very fortunate—[name of builder] runs a very efficient service specialising in this sort of work. He's my prime contractor for the majority of work but we also have a couple of back-up contractors. ACT

 \dots somebody in the community group actually knew of a gentleman that had just retired \dots and the guy came out of retirement, did an absolute pristine job. WA

If you can generate that relationship they will stay. We keep the jobs going. We have got three plumbers. Two of them are full-time, nearly, for me. QLD

We just had an instance where we had a workshop in July and some private contractors had received our brochures through some OTs that they knew and they were interested in getting into doing disability access and design. NSW

It was suggested by some providers that more attention could be paid to incorporating disability issues into trades training:

I think not only do you need to build the capacity for OTs but you need builders within the system and they have to know what they're doing and have an understanding of the specifics around home modifications. SA

Some providers believe their contractors are attracted to the intangible benefits of assisting older people:

When it is finished the appreciation of the consumers is amazing. They walk away with all sorts of presents. They don't give me any. Scones, port. QLD

Many HMM services employ builders rather than rely on contractors:

If I didn't have staff on board I wouldn't be able to do half the things we do. SA

However, service providers reported significant difficulties in employing builders:

We have been short-staffed for carpenters. I recently put on a new one, aged 62. We found him through a family friend. It took me six months to find him. QLD

When I first began in May we advertised in the papers for a registered builder. We were willing to pay over and above what the award rate is. We put two ads in and we received no replies. TAS

Some HMM services have considered employing apprentices to address skills shortages:

We went down the process of maybe taking on apprentices. But how do you apprentice someone in the area that we work? It's difficult because there are no training modules. You can't get any recognised competency through the industry. SA

One participant reported on a scheme to employ Indigenous apprentices:

Experience [in HMM services] for an apprentice is fairly limited and very specialised. But because there are two services there working side by side doing the same thing, one for the Indigenous population and one for mainstream, they've been able to share it across the two builders. NSW

Involvement of architects in HMM

Participants were aware of architects with an interest and specialised skills in accessible buildings who are often involved in the design of major modifications, including for public housing:

There is a panel of architects specialising in mobility design and access, basically. Yes it's tendered every five years or so. Effectively these gentlemen specialise in that field. WA

There are three architects who are registered as access consultants so they're there if you want to get their services. There are others that would have done some work for people with disabilities. ACT

The Home Renovation Inspection Service, operated by the Archicentre in Victoria, is one of the few examples of widespread involvement of architects in the delivery of HMM services. Specialist training for architects is a feature of the service:

The fifty or sixty architect members that we have that provide this service, they've all had to be provided with specialist training ... You wouldn't be able to do it without that training. VIC

Market provision of HMM services

Views about the involvement of market operators in provision of HMM varied across the country:

It's pretty small at the moment. I think there is an awareness starting now of ageing in place, to the grey sort of design concept that is just kind of starting to take off. VIC

A couple of years ago, [large plumbing chain] set up an access showroom which is just purely for access fittings for bathrooms and it's got a couple of bar kitchens and bathrooms that are sort of set up there. So they've realised that there is a market there. I mean, it's a small market but nevertheless there is a market and that's good for us. ACT

Yes, there's lots of private [OT] services ... I understand they will certainly do the recommendations and I think probably organise builders. WA

Well a lot of the lawn mowing—I mean we've got the Grey Army in our area and they probably advertise, but the feedback I've got from consumers is that they're actually quite expensive. NSW

Regulatory issues

In most cases, the providers accepted the necessity and value of regulations and standards applying to their services:

There are a whole lot of rules and regulations that we need to work to ... Australian Standards. I don't think they're a bad idea. NSW

I don't have problems with the building regulations that are in place or the enforcement of them. ACT

The location of HMM services at the intersection of housing, health and aged care sectors and the reliance on public funding result in exposure to multiple regulatory regimes:

People who do these programs come from a building background and we are imposing on them a lot of public service administrative and health requirements. I found it refreshing ... they get things done fast. I regretted having to slow them down, having some due process. That is where we could go wrong. QLD

Providers tend to complain most about regulatory imposts where they add costs and delays to projects:

The trouble is, like, if you want to put in a ramp and say you've quoted it out at \$900 you've got to get an engineer's report, you've got to get a draftsman to draw it up so then it is up around \$3000. SA

Several participants noted that private builders undertaking home modifications lacked awareness of disability policies and standards:

An OT doing an assessment and referring to a private builder that may well be licensed but may not have the latest information about modifying for disability. Particularly we used to find this in rural areas. SA

A prominent theme was the importance and impact of complying with asbestos regulations, given that a high proportion of HMM work involves modifying bathrooms in older houses where asbestos sheeting is prevalent:

There's a lot of issues with the asbestos. SA

State Council as a whole has been very proactive on the management of asbestos within our industry. [Name of service] did all the original testing with environmental consultants to provide information for the industry and the management of asbestos. NSW

The primary concern for some services is to comply with occupational health and safety requirements involved in working with asbestos:

I'm talking personally ... exposing myself to that product. But then, being the team leader of a group, I certainly have those issues as well ... making sure that when they do drill that they're protecting themselves properly. SA

...you have got people doing domestic assistance, if they identify that there is a hole in the wall in the laundry, is it asbestos? If it is, they won't go near it. QLD

We used to pull it out ourselves. Now you have got to bring in a specialist contractor. I looked at getting a licence. I thought, I don't need the responsibility. QLD

Requirements to use licensed contractors and recent changes to electrical and plumbing regulations were of concern to many providers:

As in saying they want a licensed plumber to install shower heads. [Names of services] have had letters from the Licensing Board saying that you have to use a licensed plumber. WA

New waterproofing requirements that have added considerably to the cost and complexity of replacing baths with showers were raised in a number of jurisdictions:

With waterproofing, we are able to remove a bath and put in a shower recess. There were some changes with the waterproofing where we had to extend the water proofing outside that. It went from being a cheap alternative to a major modification. QLD

Another commonly raised issue is regulations about the proximity of hand-held showers and electrical fittings:

A few years ago there was a small change to the wiring regulations. The inference was that hand-held showers in a bathroom were going to be a real problem, especially when you take the shower screen off and put a curtain up. We would have to put light switches and power points outside. Then they changed the regulations, fortunately. Then a curtain did become a barrier. That

impacted on the cost of the job for the consumer, what it cost for us as well. QLD

This service provider discussed the challenges faced in managing the responsibilities and risks of regulatory compliance:

Our first response was to actually go to very risk averse—we'd interpreted the Australian Standards very literally. I guess our clinicians were taking on the responsibility of an electrician ... We now know ... if we install a shower hose we are not legally obliged to do the electrical work in the bathroom to make sure that it complies. But our initial interpretation had been that we were. SA

Other participants pointed to the need for some flexibility to consider the context and consumer needs when interpreting standards:

... ramps, for instance. The building regulations are a one in fourteen ramp is a standard, we'll go back to one in twelve if we have to. ACT

The participants expressed concerned that new requirements that have significant implications for practice and costs are sometimes introduced without clear guidelines:

A whole other issue which is bubbling away under the surface is fire egress. There have been no guidelines, there has been very little discussion and nobody wants to talk, basically because it is such a hot potato. NSW

Occupational health and safety regulations (OH & S) were identified by participants as presenting significant challenges, including dilemmas in balancing the interests of staff and the needs of consumers. Some services spent considerable effort developing policies and procedures to meet new OH & S requirements:

... I think we've spent at least six months with some really intense work with the workshop staff, our clinicians, our risk management. SA

Our OH & S guidelines before the Act were probably a two-page document and our induction manual is probably about an eighteen-page document. After the Act the manual that goes to the consumers is now thirty pages and our induction manual for our staff, part one, is fifty pages. I haven't written part two yet. VIC

The services provided examples of strategies to ensure that the homes of consumers are safe when staff visit:

So now we've got the system of a card that we send to people ahead of our home visit ... 'health and safety of our staff is very important, please refrain from smoking in the presence of the therapist, would you please make sure your pets out of the way' VIC

... we are developing a risk assessment for the field officers to assess the workplace that is the home before they enter. QLD

In some cases, participants reported the OH & S regulations constrain the services that can be offered to consumers:

... our people should not be lifting anything above their shoulders—you get caught in a little bit of a conundrum because you want to do the service; climbing up stepladders. I mean, we've got thousands and thousands dollars worth of aluminium ladders. We can't use them, because people aren't allowed to walk up them. VIC

Other providers believed that the impact on consumers could be avoided if new approaches to service delivery are introduced:

OH & S: you've got to look at it as a way of actually changing the work culture rather than actually preventing services to people. VIC

The participants reported some contention about who should be responsible for the costs of work required for OH & S purposes where these are not directly required by the consumer:

Even with the job that I'm working on at the moment, the whole floor is tiled and the OT is arguing that it's a workplace and that the tiles could be slippery [for the support worker] and we need to coat them with the slippery system coating. But then [name of funder] are saying, well we're not paying for that because the consumer's in a wheelchair, they're not going to slip there in the kitchen. VIC

Building approvals and registrations

The services operating across multiple local government areas complained about differences in building and planning requirements:

Some councils have even said, 'Look, anything under \$8000 we don't want to know about'. Then you go to another one and it's 'Anything under \$5000' and then you go to others that would say, 'You've got to give us all of the information or else we will come and stop the work' and they've actually been doing that. TAS

I had a simple one recently; a ramp. One building surveyor said, 'Yes, we need a permit' and we did structural comps and the other one said, 'No, we don't'. VIC

Body corporate approval is also required for external or common area modifications:

... the resident wanted me to modify the front so they could actually get through the front door and the rest of the body corporate members said, 'No, you shall have your ramp out the back', and the back discharged into a bluestone cobbled laneway on a gradient that was totally untraversable by her. VIC

Registration requirements in some jurisdictions are complex for consumers and services:

We've touched on building practitioner registration, but there are various thresholds that come into play with builder's registration at a \$5000 threshold, our warranty of insurance requirements at \$12 000. There's also a requirement in Victoria that a written building contract be in place for works over \$5000, so all of this exists, but is not necessarily widely known. VIC

Some services expressed concern that requirements for police checks encompassed contractors working unsupervised in consumers' homes:

If you deal with children, you have got to have the blue card. If you deal with disabilities you have to have the disability card. It is difficult enough to get tradespeople. Now they have to get the aged care check. If Bill has got seven plumbers working for him, any one of them has to get it themselves. QLD

Managing risk

The participants were very conscious of the need to manage the risks associated with liability:

With continuous improvement, it will end up that nobody will be game to lift a finger. QLD

Public liability and the personal risk ... our insurance bill alone is so excessive it's unbelievable. WA

We get people to sign a deed of release at the outset saying that releases us from all responsibility and this is official ... VIC

Future innovations

Focus group participants also identified a range of ideas for improving the provision of HMM services, including some under active consideration. Improving access and assessment arrangements was a focus in a number of jurisdictions:

There is work in the pipeline generating a single point entry for people to access the system ... Staff have been trained to take the calls and then work with the person to do the referral and to set up the appointments and to take the person from this point to that point and broker a service, if necessary. VIC

We've talked about the access points—the trial access points that are happening at the moment where they're doing comprehensive assessments. NSW

We ... wondered whether it was possible to have someone other than an OT who could address those fairly straightforward issues but still have the knowledge to know when to bring in the OT. That would certainly get rid of half the people on the waiting list. ACT

The participants strongly supported an increased focus on universal design and the incorporation of accessible features in houses:

So, if there was some regulation about universal design or something—that would help us all out I think. SA

The Housing Industry Association ... I've actually just written a universal design module for them. So that will become part of their program. WA

[Name of provider] has been really proactive and passionate about adaptable housing and trying to influence draft local environmental plans so that it does allow for adaptable housing. NSW

One of the problems is that the architectural awards don't include universal design or adaptability. NSW

I would like to see from age sixty on you apply for a small amount, say a \$3000 rebate on a bathroom or stair modification as long as ... we OTs could contribute to establishing the criteria. QLD

I actually think that Home Assist program in Queensland is excellent. Where anybody can ring up, and someone will come out and have a look at safety and other issues and then they might identify that that person does need OT - – that there might be other issues and then can make appropriate referrals on to them. Just the one place the person can go. NSW

5.8 Summary and conclusions

The themes that emerge from the focus groups with service providers present a complementary perspective to that provided by the description of HMM services in chapter 4. The main focus of chapter 4 is the overall organisation of HMM services, including such issues as the policy and funding framework, identity, integration and coordination, levels of provision of services, availability of expertise, and integrated information systems. The perspective of service providers with respect to these issues is also considered in this chapter (section 5.7), but the main focus is on service

provision issues. The chapter examines the main issues of HMM service provision identified in the analytical framework (chapter 3) as viewed by the service providers who participated in the study.

With respect to issues of access to HMM services, the service providers identified a number of issues of concern. In their view, older people's awareness of HMM services is limited due to the complexity of the system and the lack of effective information services. However, there was also a view that older people are becoming more discerning consumers due to new sources of information such as the internet. Referral processes are also a significant concern with key referral agencies, such as the lack of knowledge and understanding of HMM services in hospitals and among GPs. The complexity of program eligibility requirements was also identified as a barrier to access to HMM services, and as resulting in perceptions of inequity between different categories of older people.

The issues associated with client assessment processes were extensively discussed in the focus groups. Currently, the nature and extent of the initial assessment processes vary depending on context and scope. Assessment processes that involve collaboration between occupational therapists and building professionals, and that also involve consultation with consumers, are widely viewed as desirable for home modifications. Considerable skills transfer between professional and occupational groups can take place as they work together over time. In practice, initial assessments may not involve this mix of professional perspectives if occupational therapists are not available and when the time of professionals and tradespeople needs to be rationed. The recommendations arising from an initial assessment process are influenced not only by the assessment of consumer needs but also by the level of public resources available for a modification and the consumer's ability to pay. They are also influenced by the remit of the service providing organisation. In some cases, service providers consider that moving house is the best alternative for consumers. But their mandate and capacity to provide assistance with moving varies from service to service. Other barriers to moving include the lack of suitable alternative housing in many locations, the cost of moving, emotional attachment to the home, and fear of dislocation.

A number of factors impact on their capacity to deliver quality services. Local housing characteristics have a major bearing on the demand for HMM services and the nature of the work required. These factors include the type, age, design, materials, and fittings of the houses, as well as the climate, topography, soil type, size of housing blocks and tenure. Access to informal supports also impacts on demand, and great variations have been observed in the level of assistance provided by family members and friends. The service providers were ambivalent about the involvement of unqualified people in HMM due to concerns about insurance and the duty of care, as well as quality issues. Volunteers play important roles in some organisations, especially in gardening and handyperson services, and community organisations in some places are important in raising funds for home modifications. There are also new and emerging options for self-financing home modifications, including community lending, health insurance and reverse mortgages.

A number of gaps in services were noted by service providers. Preventative and early intervention home modifications were generally viewed as having a low priority, as were specific services such as gardening, home security and preventative maintenance. It was also observed that limited funding is available for major modifications, as most publicly funded programs are capped at a modest level. The shortages of occupational therapists and building contractors with relevant expertise were also viewed as a major concern. Some providers commented that their services

are limited by too narrow a focus on health-related issues, rather than emphasising a broader quality of life.

With respect to consumer outcomes, the service providers made reference to issues of service take-up and consumer satisfaction, as well as specific outcomes. While many older people are more than willing to accept HMM services, there are factors that are barriers to the take up of services for some people, including their reluctance to accept that their abilities are declining, their unwillingness to undergo the disruptions of HMM work, their unease with modifications may be aesthetically unpleasing or create an institutional appearance, and cost considerations. The cost of home modifications is a particular concern. Service providers indicated that there was a widespread unwillingness on the part of older people to borrow money to finance their home modifications, and they identified the low level of subsidy caps and limited funding for structural modifications as significant problems. Some consumers are also concerned that home modifications will impact negatively on the value of their home.

Many service providers have formal or semi-formal mechanisms in place for obtaining short-term feedback from consumers concerning satisfaction with work undertaken. Generally the feedback is positive and complaints are rare, although some providers indicated that their feedback instruments need to be more sophisticated. In most cases, the services do not undertake a long-term evaluation of consumer outcomes and their knowledge of the long-term outcomes of HMM provision is anecdotal. Nevertheless, many providers were convinced about the positive, and sometimes lifechanging, impact of HMM services on the lives of consumers. Certainly, HMM services were viewed as fundamental in allowing many people to remain in their own homes, and the services were also seen as important in reducing demands on carers and the need for other care services.

Service providers also discussed the impact of the overall organisation of HMM services on direct service provision. A number of key themes emerged. The intricacy of the arrangements for HMM service provision was widely viewed as giving rise to a lack of coordination and integration, and as resulting in inefficient and complex service delivery arrangements. A number of initiatives by the services to mitigate the impact of complex funding and service arrangements were identified, including network building among services and professionals. The limited availability of occupational therapists and builders and architects with expertise in HMM were also major concerns. The complexity and diversity of regulations and standards relating to HMM services were identified as factors adding to delays and the cost of projects, and providers faced difficult challenges in managing the responsibilities and risks involved in complying with the regulations. Many service providers were of the view that an increased focus on universal and accessible housing design was integral to a long-term, systematic approach to ensuring an appropriate fit between older people and their dwellings.

In conclusion, the service providers who participated in the focus groups presented a picture of HMM in Australia consistent with the notion of a complex patchwork described in chapter 4. The characteristics of this complex patchwork emphasised by service providers include the limited awareness of the services by consumer; the uneven and complicated requirements for eligibility; a poor understanding of HMM by key referral sources such as hospitals and GPs; under-resourced and circumscribed assessment processes; widely varying needs linked to local housing characteristics; underdeveloped and under-utilised self-financing arrangements; the complex and variable links with services provided by family and friends; a low prioritisation of preventative and early intervention services; shortages of occupational therapists, architects and tradespeople with expertise in HMM; barriers to the take-up of services, particularly cost factors; feedback processes of variable quality; the lack of a long-

term evaluation of consumer outcomes; problems of coordination and integration; and difficulties involving compliance with regulations and standards. This is a picture of a service sector that has developed incrementally in response to diverse pressures and needs that now requires a more comprehensive approach linked to a more sophisticated understanding of consumer needs and outcomes.

6 THE CONSUMER PERSPECTIVE

6.1 Introduction

This chapter presents the findings of the study of the perspectives of consumers of HMM services concerning their need for services, their experience of services and their evaluation of the quality of services they have received and their impact on their lives. The study is based on semi-structured interviews with thirty consumers selected from the clients of three HMM organisations located in Queensland, Victoria and South Australia. The study is designed to complement the investigations of service organisation and service providers' perspectives reported in the previous chapters. There has been little previous research in Australia on consumers' experiences of HMM services and this study is designed to fill this gap and to identify issues that require further research. The findings are reported under the broad headings of 'older people and their homes', 'reluctance to move', difficulties experienced in the home', 'managing difficulties', 'accessing HMM support and services', 'experience of services', 'consumer evaluation of service' and 'outcomes of using HMM services'.

6.2 Methods

The study used a qualitative methodology to explore the experiences of older people who have received HMM services. Semi-structured interviews were conducted in the homes of these consumers to explore their experience of home, their expressed needs, their experience of HMM services and their perceptions of its impact on their lives. The participants were asked a series of open-ended questions from a question outline that allowed a structured conversation to develop. The interviews lasted approximately one hour and were audio-taped and transcribed verbatim. Data collection occurred over a period of six months during 2007 and each participant was interviewed once in their own home. A copy of the consumer interview questions is included as appendix 3.

Qualitative research has been identified as useful in the exploratory phase of research where relatively little is known or understood about people's experiences and their social context (Creswell 1998; Rice and Ezzy 1999). Rich, in-depth knowledge of a person's lived experiences can be gained using qualitative interviews (Cresswell 1998). In this study, thirty people over sixty years of age who had recently received HMM services to their current residence were invited to participate. The consumers were identified via existing services and purposively chosen to represent diverse characteristics, including age, sex, the nature of their ability/disability, the type and level of the service, their dwelling type and tenure, and their location (urban/rural). Particular attention was paid to identifying a variety of dwelling types and tenures in the consumer sample, and drawing participants from a range of service types.

The interviews were conducted across three states, namely, Queensland, South Australia and Victoria, to ensure that a diversity of service delivery arrangements were represented. In Queensland the consumers were recruited via a HAS service (Western Suburbs Home Assist Secure) and a major modification service (St Michael's Home Modification Service). In South Australia the consumers of HMM services were recruited via the Metropolitan Domiciliary Care service, the main provider of these services in that state. In Victoria the consumers were drawn from an HACC-funded local government property maintenance service at Gleneira and via Archicentre, which is funded by the Office of Housing to provide a home renovation service.

The profiles of potential participants were developed and distributed to relevant HMM services in the selected regions. Participant information sheets were distributed to these services for them to forward to potential participants and people interested in the study contacted the researchers directly. Voluntary informed consent was obtained from all the participants and ethical approval was obtained from the University of Queensland. Of the thirty participants interviewed, seven were men and twenty-three were women. Sixteen participants lived alone and eleven of the fourteen couples participated in the interview together. The participants ranged from sixty to ninety years of age, with a mean age of 77.9. A profile of the participants interviewed is shown in appendix 4.

As only thirty consumers were interviewed for this study, their experiences are not likely to be exhaustive and therefore generalisations cannot be made to the whole group of older Australians. The depth and breadth of the responses, however, allow the consumer experience to be explored and understood more fully, in order to inform policy, practice and further research. Although considerable effort was made to recruit a range of consumers, people who had self-selected to be involved in the study may not be representative of the broader community. It should be noted that people from rural or remote communities were not included in the study Only one participant was renting in the private rental market, which is lower than the proportion of older person households using this form of tenure. However, this may be representative of the access that private renters have to HMM services. The consumers were drawn from three states with distinct service delivery systems and, as such, may not reflect the experiences of consumers in other states. The consumers in this study had all accessed an HMM service, and therefore the perceptions of older people who have not used an HMM service or who had utilised other resources, such as the family, have not been captured.

6.3 Older people and their homes

There was a wide variation in the length of time that the consumers had been living in their homes. Approximately half had been living in their home for over thirty years. The others had moved into their homes more recently, including one person who had moved into their current home only six months previously. The participants provided a range of reasons for wishing to continue living in their current home, including an emotional connection with the house, the ambience of the home and its convenience and capacity.

Emotional connection with the house

Those who had built the house themselves had an especially strong attachment to the dwelling.

The best part of the house is here, because Martin did it. (Rose)

Some participants were living in homes in which they raised their own family or that had belonged to their family:

We had our twelve children here. It started as a nothing house—and it became our house ... A home ... We've decided what rooms we'd have and we built them over time. (Lenora)

For some, this history provided rich memories of their past:

Everything is lovely memories ... and I love it. Everything I look at—memories. Happy memories. All happy memories. (Tania)

Many participants commented on the freedom and autonomy they experience in living in their own home:

I have freedom and I don't have to answer to anybody what I want to do in my garden, in my house, when I want to do, what I want to do and all that. (Genevieve)

For one participant, remaining in her own home was central to her sense of independence:

I'll fight till the last for that [to stay here]. (Shirley)

Some of the participants, who cared for their spouses, felt that it was important to remain in the family home as this was important to their spouse and allowed them to care for them in the way they liked:

I can keep an eye on him ... there's no one can do things for him like the wife can. (Malcolm's wife)

Although concerned about what needed to be done to the house, one participant was prepared to stay to ensure her husband was happy:

I wanted to leave because it needed so much doing to the house that I couldn't see us doing it. But when they [the service] said they would do the bathroom ... he got his wish and I got my wish that we do something about the house. (Martin's wife)

Ambience of the home and lifestyle afforded

While some participants appreciated feeling comfortable within the home, others noted the importance of the environment surrounding the house to their experience of home:

The garden, front garden and looking up at the sky and the back garden with the lovely birds ... just sitting at the kitchen table and looking out at the garden at the birds. (Tania)

We've got the greenery. We could sit here and watch hundreds of butterflies going round and round. You don't get that in a small unit: you get traffic noise instead. (Arthur)

The importance of having helpful and friendly neighbours was recognised in many cases:

I've got all my network of friends in the area and I wouldn't like to have to move right away at this stage and sort of make new friends again. I've got all my support group sort of around this area. So that's why I stay really. (Cynthia)

Participants also reported that they valued being close to social networks of friends and family:

I think the main thing I like about it is just, if I need help my family are close. I mean, I think I was lucky to get the situation that I am close to the family because my daughter ... pops in probably every second or third day just for a few minutes because it's not far from, sort of, the main centres. (Shirley)

Safety was also identified by one participant as being important in her decision to live where she did:

I have felt safe in this block of flats since I came here. There's three single older women and a couple. There are five older women including myself and a young Asian couple and I just don't feel threatened by the area. (Janice)

Convenience and capacity of the house

The convenience of the house itself, that is, the location of rooms relative to others, was also an important consideration:

I mean having the carport on the same level I can just bring shopping straight in there. The upstairs laundry—it's part of the house and I haven't got to go downstairs to wash because with the washing machine that means you're going up and down, up and down whereas here I can go on with something else and go back to the laundry again without any trouble. (Cynthia)

For some, the capacity of the home to accommodate visiting family was also highly valued:

We have a proper house here with three bedrooms, which means we can have our grandchildren back here to stay. So the house itself is ideal. (Harriett)

Having a number of bedrooms also provided space for a range of activities:

See, we've got the front bedroom as our main bedroom, the second bedroom's Lara's artist room, the third bedroom is my office ... We're using the whole house ... It's a seven-room house and we're using them all (Alicia).

Having a yard was also important to a number of participants, as it allowed them to garden or to accommodate a much loved pet.

The initial response of many participants as to why they preferred to stay in their current home was that it was close to community services. This included transport, shops and other facilities such as the bowls club, general practitioners, and hydrotherapy pool:

Well the house is central in position: it's very close to the shops and transportation is very good. We have got the railway, of course, there is a good bus service along here. (Peter)

6.4 Reluctance to move

All the participants in this study preferred to make changes to their current residence rather than move. Some were reluctant to surrender the safety of a familiar environment and the security of their investment, while others were not prepared to sacrifice the lifestyle their current home afforded them. Many were concerned about losing their autonomy and independence and feared the alternative options or the enormity of moving. Generally, the participants would not consider moving unless they felt they were no longer able to manage at home, preferring to modify their home rather than relocate:

Definitely, I would sa,y fix your home. Definitely. Just don't go out of your home. (Genevieve)

They reported a number of reasons for wanting to stay.

Fear of alternatives

Some were concerned about the loss of security that results from moving out of a house they own and into an arrangement with an aged care facility. One participant stated her resolve to avoid moving into aged accommodation:

I'll lie down and die before I go there. (Sharon)

Hassle of moving

One participant who had recently moved was reluctant to do so again:

There's no way I'd move again. It's been a big enough hassle as it is. I'm still unloading stuff. (Shirley)

Unable to bear thought of leaving

Many could not bear the thought of leaving:

I just can't bear to think about that ... I just want to stay here. (Alicia)

Another participant articulated her fears about leaving her home and community:

Oh I would miss everything. I would miss all my furniture, all my things and to get away then you would miss your church, you would miss the things that you are in and ... it would be a very big risk. (Carol)

There was a general sentiment amongst many of the participants that they planned to live their remaining life in their own home:

So that's how I feel, you keep struggling until, you know, you can't get up or down. (Alicia)

One participant commented that he has never considered moving, despite having significant limitations to mobility and independence:

They would have to take me out in a box if I had my way. (George)

6.5 Difficulties experienced in the home

While the participants hoped to remain in their home as long as possible, they experienced difficulties with a number of tasks in and around the home that were either health- or environment-related.

Maintenance, repairs and heavy cleaning

The older participants experienced difficulty in maintaining and clearing their gardens, doing the heavy cleaning jobs, maintaining and repairing fixtures and fittings in the home such as lights, stoves and doors, painting the house, and repairing or replacing hot water systems, old plumbing and wiring. Persistent unmet needs included garden maintenance; heavy house maintenance, such as cleaning windows, house painting, clearing clutter and creating more space for storage, for example, building cupboards or reallocating spaces:

The one thing I'll probably have to go through the Council ... is get the windows cleaned because now they're a bit high at the front. The inside's the one we can handle lots of times but the outside is too high off the ground (Martin).

Maintenance and repairs to deteriorating and aging homes was an ongoing issue. Some participants had private contractors that they used regularly for home maintenance tasks such as gardening. However, most found it challenging to find a reliable, affordable, local private contractor to address repair and maintenance issues. The participants frequently had jobs that did not require a qualified contractor:

Little things like cupboard doors, you know; not many people you can get over to help you fix your cupboard door. (Janice)

Often jobs were too small for contractors to be bothered with:

It was too big for [my husband] and not big enough for a contractor. (Martin's wife)

Look, how can you call somebody for little things, you know, to change the locks or something fall down? You can't call a tradesman for these things. (Janet)

Even if they have ready access to a contractor the cost can be prohibitive for a pensioner:

I have a plumber next door but I never ask him to do things because I know he's expensive. (Janet)

The participants were very concerned about the state of their gardens, which required constant tending:

I need a little gardener, please, to do some weeding, just a little bit of weeding to keep it looking nice. But it's very hard to get people to do little things. (Maureen)

Painting was also a concern, as the older participants were no longer able to maintain the interior or exterior of the house:

There is one job that the whole house needs, that needs painting in and out, inside and out but I can't do it and I cant get [the service] to do it. (George)

Similarly, internal fittings deteriorate over time and require cleaning and replacement periodically:

The only sort of changes I'm inclined to are visual sort of comfort ones, rather than sort of infirmity assistance sort of things. I'd love new carpet but that's not a Council thing. (Janice)

Security

Security was also raised as a concern, with a number of participants accessing security assessments and installations or expressing concern about their ability to defend themselves if there was an intruder:

But it's something that we're very aware of, is security because, you know, so many—if somebody broke in—you've probably realised, I've got a walker too—that I wouldn't be able to defend Martin and he couldn't defend me, either. So we're extremely conscious about it. (Lenora)

Managing challenging features in the environment

The participants reported that aspects of their home environment, such as steps, stairs and bathrooms, became an increasingly challenge as they aged:

Upstairs I'm not wrapped in because, like, I've got me poor knees. It sort of basically hurts going up and down. (Janice)

These environmental hazards not only placed the participants at risk of injury but also resulted in older people being fearful and feeling unsafe when navigating their own home. Many participants did not feel that they had enough safety measures in place to prevent accidents:

But if I wake up in the night ... I need to go to the loo and I have to go down those stairs and up again and I sort of feel, and for my husband who is older than I am, um, that it is an accident waiting to happen. (Margaret)

More specifically, some were concerned about having a fall or wanting to prevent a fall, especially if they have had a recent experience or a near miss:

You are always frightened of falling because I keep thinking how simple that was just standing on that bedspread, you know. (Carol)

Environmental features also compromised the independence of participants with acquired impairments or chronic health conditions who were often unable to engage in routine daily tasks. This was particularly evident in getting in and out of the house and managing in the bathroom:

That's my only real concern, is getting Wendy from the street to the house because of the steps. (Harriett)

I can't get to the shower. It's very hard because I have a very big tub and high \dots to get to the shower I have to climb \dots So I have to do something because

... sometimes when it's very bad arthritis I can't even climb this. (Janet)

6.6 Managing difficulties

Generally the older participants were determined to manage their home, valued their independence and did not want to trouble others. Those who lived on their own took special care to ensure they did not expose themselves to unnecessary risk.

Determination

Generally the older participants demonstrated a strong determination to manage their home, whatever the cost. They valued independence and being able to remain in their own home:

And I just work my way around whatever, you get problems everyday and some of the times you think, 'How am I going to do this or how am I going to manage this?' but it's just sheer determination that keeps me going. (Karen, wife of Greg)

I have declared that if it enabled me to stay here alone, I would investigate it. (Rhonda)

When faced with difficulties in managing the steps into the house, one couple commented:

We're still not going to move. We're going to find a way round it. (Harriett)

For some it was a matter of not wanting to trouble anyone:

I hate being a problem to anybody. (Shirley)

Others were keen to remain self-reliant:

I've always coped. I've always looked after myself. (Clarissa)

Those who lived on their own were especially careful not to put themselves at risk unnecessarily:

The thought of having an accident when you're living on your own is always there. I do try to be very careful. (Rhonda)

Deal with things as they arise

By and large, the older participants tended to deal with issues as they arose rather than preparing for future changes. Frequently they persisted with undesirable conditions until an adverse incident occurred. However, mostly they struggled on in inadequate environments because they had never expected to live to this age, were unable to predict how much longer they would live, or were not able to anticipate their capacities in the near future.

Often participants would persist with less than ideal conditions for some time before seeking assistance:

We were thinking about it for quite a while since [name] was unable to go over the side of the bath. Many times she called me in to help her up or pull her round. Yeah, quite a few times until we come up to [the service] and then we said, 'yes, let's go'. (Stephan)

Throughout the interviews there was a general feeling that people would deal with their needs as they arose, rather than prepare for potential issues:

At some stage I might have to leave. I mean, I might not be able to manage on my own, but I'll worry about that when the time comes. (Cynthia)

Some commented that they had not considered making changes until after an incident:

Before the fall, we didn't think about it at all. (Judy)

This was also evident in their choice of home that they intended to age in. One couple commented:

See, that is the trouble when we saw it [the split level house] we were absolutely enchanted and beguiled, almost, by it and not realising that we would get old. It's amazing that it suddenly catches up on you and you are old or geriatric, or whatever you like to call it, and now it is seemingly inappropriate. (Peter)

Uncertainty about their ongoing capacities and how long they would be living in the house made it difficult for some to plan ahead:

I was thinking I can't survive with this bathroom like it is now in the future. God knows, perhaps I live for another two years, three years, or I drop tomorrow. You never know. (Janet)

I'll cross that bridge when I come to it. (Malcolm)

Well, I never thought really I'd get to this age. You don't often think about it. You don't when you're young, you can't. (Maureen)

Some participants felt uncertain about what was possible:

And when you've never had to have anything done, you don't even think about it ... you don't realise what's out there because you've never had to have it. (Charles)

One participant regretted not attending to the maintenance issues earlier:

Yeah, but don't leave it as long as we did, though, because it was really in bad shape by the time we got around to it because Martin didn't think it was ever worthwhile putting the money into it but as it happened we wanted to stay here and you have to do it. (Martin's wife)

Access to family for support

Some participants did not have family nearby to assist them and were consequently mainly reliant on community services. While some families were available and willing to assist the older person to undertake repairs and maintenance, the participants were often reluctant to call on their family. Similarly, older people were reluctant to live with relatives who were willing to provide suitable accommodation, as they felt their independence would be compromised.

If family lived nearby, they often called by to check if anything needed doing:

I've got the two boys. They're going to be 50 next year. Isn't that dreadful? They're getting real old. They'll nearly be as old as me. Yeah, the boys come and they check me out. And my son-in-law. (Clarissa)

Alternatively, the participants would call on them to assist with tasks that formal services were not able to provide:

They come and turn my mattress over on my bed when I need that so I don't have to turn it. One of them will come. (Rose)

In a few situations family were well placed to assist the participant to undertake much needed repairs and maintenance:

The house was let down quite badly because I couldn't do it, my husband couldn't do anything and it needed all sorts of things done. And I said, 'No, we'll stay here'. And slowly, bit by bit, with their help—with my husband, my daughter and son-in-law—we got the house going again and got it painted and I had it rewired. (Genevieve)

However, some participants displayed a reluctance to call on family with tasks that they themselves could not manage:

We like to still think we're a bit independent and not a burden on them. (Douglas)

Concern about the other responsibilities that family members had made the some participants unwilling to call on them for assistance:

I've got two sons who will, you know, if they're down here. they'll say, 'Well, now, is there anything that needs doing?' They're busy themselves. But because they're running their own homes and family and working long hours, I really would have to hate to rely on them. (Rhonda)

Some participants were not always satisfied with the help they received from family. Sometimes the job was not completed well, if at all. One woman commented:

My son-in-law came down to put an antenna on this TV for me and he was having trouble getting the wire down, you see? And he got it down and then he decided he wanted some clips, you see, to hold it back and he said, 'Just leave it like it is, Mum', he said ... That's about two months ago. (Harriett)

Even when family were willing to provide suitable accommodation for their elderly relatives, they were loath to take-up the offer:

My family said they have just partly done under the house, put a shower in and things so that when I can't live here any longer ... but I have got news for them, I won't be living there. (Rose)

Some of the participants, however, did not have family nearby to assist and were mostly reliant on community services:

You see, all my family live out of town and no one could help and they all work. (Karen, wife of Greg)

Use of trusted/familiar service

The older participants largely relied on recommendations from friends to locate suitable services and contractors. Since they were eager to find people who were trustworthy and reliable, they preferred to receive recommendations from people they knew. Once they established contact with a local home maintenance and modification service they tended to depend on them for referrals to reliable and trustworthy tradespeople. Many of the participants were women who felt uncertain about

maintenance and building matters and appreciated having access to a trusted source of information and advice. Many rely on recommendations from friends for quality contractors:

What I seem to do is learn from friends who've recently had [inaudible] and usually they'll say, 'They were good or they were bad, well, I'll give you the phone number.' And that's how I work. I think, you know, if my friends have been happy. (Rhonda)

In all cases, when they were asked what they would do if they identified a problem, the participants' response was that they would call the local home maintenance or modification service first:

And one of the wonderful things about [the service] is that you say, you know, we have a real problem with such and such. They send somebody round and they either do it themselves or they get somebody else to do it. Now, when you are a householder getting somebody to come in and do a small job is extremely difficult. You know. Yes, it is very, very difficult indeed, and so to have somebody reliable like that, to take care of small jobs, you know sort of small difficult jobs, is wonderful. (Margaret)

However, some were still reluctant to trouble the services with the smaller jobs they required doing:

I don't like bothering them [the service] with little things like that. (Harriett)

The participants were confident that the local service staff were trustworthy and reliable:

And also the main thing that I like about [the service] is that you can trust the people they send. These days you've got to be so careful. (Judy)

The participants also reported that they relied on the local home maintenance service to provide them with information on other services or private contractors and felt that these recommendations were more likely to be trustworthy and reliable. One participant commented:

They've got contractors on their books that they know are tried and true. (Cynthia)

The participants expressed their appreciation for the guidance they had been given in all situations. Another commented:

Even if there is something, say, they can't handle, they can put you onto track of where to go or what to do and then it's up to you. (Peter)

This was particularly useful to people who were unfamiliar with building services. One woman stated:

My husband did so many jobs himself we hardly ever had tradesmen in at all, so I've really appreciated their help in that respect. (Cynthia)

6.7 Accessing HMM support and services

The consumers reported how they came to know about the HMM services, including how they make contact with services.

Knowledge of available services

The participants found out about the services in a variety of ways. These included learning about the service through word-of-mouth from friends or family, referral from other services, including the local doctor or hospital, and through circulation mail from

the service informing the community about what they could offer. Some participants did not know about the available services or knew of people who had experienced difficulty accessing them. Prior to finding out about the available services, some participants had not known what was possible and had already paid privately for HMM that could have been accessed through the existing services:

No, no I wasn't aware of [the service], no ... well, I haven't actually paid for it yet because I must admit, I'm paying it off but I've already done it. (Maureen)

It appeared that some people experienced difficulty accessing appropriate services if they did not encounter the right people or did not know how to navigate and utilise the services effectively:

And then one person, I thought, had no knowledge really of handling a situation and I felt she'd gone about it in quite the wrong way ... and she waited ages and then wasn't satisfied and I thought, 'Oh, I think she's hopeless poor thing'. So I do think you've got to, well, think about the contact that you're making with people who are able to help you. (Rhonda)

Those who received in-home assistance would mostly rely on the care providers to advise them on suitable services:

You know, I'm learning as I go along, and I talk to the girls that come here and shower [my husband] and she's marvellous. (Malcolm's wife)

Initiating contact

The participants were more likely to initiate requests for home maintenance or security than for home modifications, which were largely initiated by a health provider through hospital outpatient or community care pathways. Home maintenance and repair services were generally sought out when people were no longer able to undertake these tasks themselves or were unable to locate someone who could undertake them. Security checks and installations often resulted from fear of a home invasion, a specific incident, or hearing about the service via a letter drop or friend.

Health conditions that led to a functional impairment and consequently reduced independence were one of the main reasons for undertaking major and most minor home modifications. Some minor modifications were asked for following an accident, a near miss or the fear of falling as participants began to experience difficulties negotiating their home environment. No modifications were initiated by consumers in anticipation of changes in function with ageing.

Following initial contact about an issue, the service would typically provide information to the consumer, explaining their service and the processes involved or provide information about alternative services. Most participants had difficulty comprehending how and when services were available. There appeared to be variability in the range and quality of services available in some areas:

There are some bad ones around, I hear from my friends. They're in areas where they're probably understaffed; underfinanced and understaffed. (Rhonda)

Generally, if the older person identified an issue, they would tend to contact the local known service to enquire if they could assist in any way:

Yes I think they told us pretty well what they do in every way, really. I think all we would have to do would be to ring [the service] if we wanted anything and [the service] would advise us and he would tell us where to go and how to handle things and so on. (Peter)

Some services would periodically contact the consumer to see how they are going:

She [service employee] phones up for no reason sometimes, just to see how we are. (Tania)

Other services ensured that consumers were regularly informed of the services available or provided them with timely updates on changes to the services provided:

Oh yes, and then, as the things they send you, as things improved and they got more money and they got things, then they circulate you every twelve months; tell you all what they can do: they are wonderful. (Carol)

6.8 Experience of services

The participants accessed a range of services types, including maintenance and modification services. The process was generally similar across all services, mostly involving the service providers and occupational therapists with assessing falls risks or needs for large modifications. Most participants found that the service providers worked well together and were responsive, and that they involved the consumer in decision-making. They generally appreciated the expertise that the service providers brought to the situation. Most found that the work was not disruptive, except for the major modifications.

Nature of services accessed

The participants accessed services ranging from simple maintenance to complex home modifications. They also accessed the services for information on and referral to reliable contractors such as plumbers and electricians, and to ask for subsidies for electrical and contractor services, where these were available. Repairs were also sought, such as fixing doors and roofs and levelling uneven concrete paths. Frequently councils offered free smoke detectors, electricity safety switches and water-saving taps and shower roses. Where these were available, older people also sought security assessments and had locks and security screens installed. Maintenance included a spectrum of services such as replacing light bulbs, seals and cleaning services: pest management; washers: accessing spring carpet maintenance/replacement; general maintenance and carpentry; having gutters cleared; and, in one case, having a dog buried. Garden maintenance was also well utilised, with participants asking for tree branches to be cut and bushes and branches removed to provide a clear path to get to the front door.

In some cases, the participants had access to a falls assessment service which identified and addressed potential hazards in the home. The scope of modifications provided included installing hand-rails on stairs; installing threshold ramps; modifying chairs; and modifying toilet doors to enable them to swing outwards. Other common modifications were installing grab rails in the bathroom and toilet, non-slip shower floors, raised shower floors or accessible shower recesses. In some cases, baths were removed or toilets were repositioned to make the bathroom completely accessible. Ramps or stair lifts were also installed to provide access to the house.

Service processes and integration

The overall process was quite similar in most cases. Firstly, initial contact was made between the service and client about the issue. For simple maintenance or modification requests, information was provided over the phone or a provider visited the person in their home to assess the situation or undertake the work. Once service providers entered the home, they would frequently identify additional maintenance or safety issues that needed to be addressed and then provide advice, undertake the work, or refer the matter to another provider in the service or another service. For larger modifications, an occupational therapist was generally sent out to assess the specific needs of the person. Where required, a plan would be drawn up prior to the work being undertaken by the assigned contactors. By and large, the participants felt the process was straightforward and they did not feel that they had to manage the various parties involved.

At times the service would work directly through a relative who was well placed to support the older person through the experience:

They arranged everything with my eldest daughter. So from there on all contact was made through her, ringing up and saying somebody was coming out to have a look at this and that. (Douglas)

While most felt well informed about the process to unfold, some felt they did not receive adequate information:

Interviewer: Were you told how long the changes would take?

Janice: No, I didn't get told any of that. They just said, you know, they made an appointment and that was that.

Generally, the participants did not have any complaints about the way in which the service unfolded. They perceived that people in the services were working together well:

They all knew what they wanted and they'd all get together. (Douglas)

Responsiveness of the service

Most participants felt the services responded in a timely way to their requests although they were aware that the services were not always in a position to assist them. Mostly, delays were experienced only with the major modifications. The services generally responded quickly to requests for assistance, provided that the person was eligible for the service and they were able to provide the requested intervention:

They sent a man. He measured it and did it, said what we needed and in two days it was in. (Lenora)

Delays were more the exception than the rule. However, some participants felt that it was important to be a gold cardholder or to be 'in the system' in order to receive a timely service.

Some services were, however, limited in what they could offer and consumers utilised the services available in lieu of being able to have their needs fully met. This was particularly evident with gardening services:

They are limited. They can only give you two and a half hours. You can't get any more. You know what I mean? I couldn't have them in here cleaning the whole place up for two days. It's just a short-term thing. But very useful. (Harriett)

For a few participants, poor health contributed to a delay in accessing the service in appropriate time frames. The health conditions of some of the consumers were often complex or unstable which could complicate the normal process of finding out and having work undertaken. This was a particular concern with large home modifications such as total bathroom renovations or room reallocations:

When it was due to be started, that's when he was really ill. I think he even went to hospital if I remember, because he was in hospital five times last year

and I think he was put into hospital then, and you see that's what worried them, too. (Karen, wife of Greg)

Consumer involvement in the process

While many participants were happy with their involvement in decision-making, some were resigned to not having input. Constraints placed on decisions by services sometimes resulted in the consumer's needs not being addressed. People dealt with this by discussing their preferences directly with the contractor when they came to install the modification. The participants who were consulted were able to customise the solution to their specific requirements and also found service providers receptive to their input. Generally, the participants were pleased with the choice and input they had in the process:

I think we had choice all the way through. They didn't say, 'You must get this done because' ... it was 'What we recommend that you need this', you know, suggested strongly that you go ahead and get it done. (Arthur)

And they have such nice people. They don't have people that come in and tell you what you want: 'You'll have this, we'll put this in, we'll put that in'. They talk to you and explain it to you (Doris).

However, some participants felt that they did not have an opportunity to influence decisions. When asked if they had a say in what happened one participant replied:

No, not really. You know, it didn't matter. I said I didn't want that and I got it. (Sharon)

At times solutions were constrained by what the service was prepared or able to provide and this meant that the concerns of the participant could not be addressed:

And it wasn't what you wanted, it was what they would do to make things right ... So they'd do what was needed. (Martin)

One participant, who was unable to influence the decision with the service provider who made the recommendation, subsequently ensured that the contractor installed the item to his liking:

We had a big blue with that [banister rail]. She wanted to put it under the power box. When you open the door, you'd have to walk around the door to get to the rail. She wouldn't—we wanted her to put it over where it is [now]. So I said, 'It's not going there'. But she said, 'I've got certificates to show that it should go there'. ... Stuck to my guns and the chap came when he came to put it on and I said, 'We'll have it there'. And he said, 'That's the only place for it.' I said, 'Oh, no, the physio wanted it along the wall there.' What stupid rot. (Douglas)

However, those who were consulted throughout the process appreciated being able to provide an input and customise solutions to their specific requirements:

They would tell me, 'Now we are going to do this, this and this, is that okay?' Drew the plans, gave me the plans and asked, 'Is that okay? Where would you like your washbasin, where would you like this, is this practical here?' and went through it all. (Margaret)

The collaboration process between the service and consumer to produce the best outcomes efficiently was noted on a number of occasions:

When they took the old bathroom out there was a couple of hand-rails in there and they weren't going to be used and I rang [the therapist] and asked if they

could put them down at the bottom of the stairs for when he gets off the wheelchair to hang onto to get over there. She said 'Oh, good idea'. She came out, checked it all out. They guys put them in straight away. So, they were really, really good. (Karen, wife of Greg)

Expertise

Most people were keen to accept the recommendations of the service provider, as they felt that the service had the expertise in the field:

I left it to them because they are the professionals. (Rose)

The older people felt that the service providers had specialised knowledge in the area being addressed:

They know it all. They have been there before, you know, if we had just got someone else in to come and give us some grab bars or something like this, they wouldn't know. (Margaret)

The service provider was often able to anticipate issues that the participants had not yet considered:

They reversed my [toilet] door. Before it used to push in and he [the service provider] said, 'If you were to take sick in there and you got down on the floor, if you had a fall or whatever' How I'm going to fall off the toilet, I don't know, but they think of these things. I thought, 'God'. I could just imagine myself; here I am on the floor in the toilet. (Clarissa)

Furthermore, the service provider was aware of the range of solutions available:

She [service provider] said, 'Well, first of all, that bathroom—you've got to get something done with that. That thing's got to come out of there and you need a proper shower in there.' And also I was coming out on to tiles and I was slipping and she said, 'Those tiles have got to go' or 'Something's got to be done about those tiles'. So I don't know what they were going to do but they did a wonderful job. Go and have a look. They've put this lovely big shower in now. I could shower with a friend, if I was that way inclined. (Clarissa)

Disruptions

For smaller modifications and maintenance jobs, the service process did not disrupt the consumers significantly, although some participants were conscious of having unfamiliar people in their home:

Oh, no, the changes to the house didn't worry me at all. Having to accept a lot of strange people coming in to do things did. (Lenora)

The experienced service providers were often familiar with specific clients and their particular needs. In one case, a person with breathing difficulties was advised to move to another room whenever he was likely to be at risk:

They would say, 'George, get out of here and go over there' so I would go in there and shut the door. (George)

Larger modifications, however, made it challenging for participants to maintain their normal routines while the modifications were being installed. One commented:

Only thing that was troubling us was whilst he was doing work, we had to have a shower next door. (Maria)

Another participant had to put her husband into respite care for two weeks while the bathroom was remodelled. Some jobs made additional work for the householder:

I had to take all the books and everything off the shelves and store them all away, you know. It was a big job but it was worth it to get it all done. (Cynthia)

Disruptions were particularly notable when additional work had to be undertaken before the modification could take place:

And the worst part about is, they'd come in the shower and they'd take all the tiles off and they found asbestos. Well, then, I couldn't go in there. They took all these air things that they had, testing the air but it'd be a week or so before I could go in. And then they were tiling it, so I couldn't go in. And I went three weeks without having a shower. Which, in the finish, my daughter used to take me up to her house. (Shirley)

Follow up

Generally services made contact by phone or in person to ensure that the work had been properly done. Smaller jobs were not always followed up and the participants indicated that there was an expectation that they would contact the service if there were any problems:

I think they felt quite sure that I would let them know if it wasn't [all right]. (Joyce)

For large modifications a follow up was conducted in most cases by the therapist or manager:

Oh yes, [the therapist] came out to check it all and she did a safety check run through to make sure ... everything was at the right height and then [the manager] came back and checked it all out himself and I think there was something about the floor. (Karen, wife of Greg)

Where consumers were part of the community care system, a provider would periodically make contact to see if they had any further needs. However, most services responded to specific requests.

6.9 Consumer evaluations of the services

The participants were grateful that the services had been available to them and many considered that the services had been critical to their wellbeing. Generally they felt peace of mind knowing that they had access to a quality service. They particularly valued the reliability and dedication of the staff and the relationship that developed with the service. This made them eager to access the service in the future or recommend it to others.

Peace of mind

Knowing that the services were available provided the participants with peace of mind:

I know that if I have something I can ring them up and discuss and ask them to help. And they would do it. (Janet)

The participants were pleased to be able to hand over the responsibility of locating suitable people and managing the work to people who knew what to do:

They do the worrying, everything, for you. (Rose)

The consumers also felt assured that they would receive a quality job. Some consumers had many financial, health and logistical barriers to face with their day-today life and they appreciated not having to worry about the quality of work received from the local service: Well, my state of mind. Yes, it has improved that. I just take it a day at a time because I don't handle stress too good and I get stressed ... So much happens and you get stressed quite a lot, you know ... but [the service] has just taken a heap off my mind. Yeah. (Karen, wife of Greg)

Reliability and dedication

Many consumers held the workers from these services in high regard. Some participants commented that they valued the workers' characteristics, attitude and approach to the jobs as their most important qualities. One couple appreciated their

politeness and promptness. (Maria)

while others appreciated their friendliness:

In fact, we have found them absolutely marvellous. Very nice, very, very good to deal with. You know, they are just extremely amiable people. (Margaret)

Their responsiveness impressed the participants:

Nothing was too much trouble. You know, I would say, 'Do you mind?' 'Course we'll do it'. Yeah, it was the personality and we all sort of—you felt as if you've known them all your life. That's how I feel. That's me, you know? (Cassandra)

Their dedication to the work and willingness to go above and beyond what was expected was also recognised as important:

You couldn't wish for anyone better. They were always asking 'is there anything else you would just like me to do while I am here, doing this bit?' With this drill out, you know. (Karen, wife of Greg)

One participant also commented on their willingness to contain mess and clean up after themselves:

They'd come and they'd put tarpaulins down from the front door right around and in through—no mess whatsoever. (Douglas)

They were here first thing in the morning and were here until five in the afternoon and they vacuumed every day after them, so there was no mess. I thought they were excellent tradespeople. (Rose)

Relationship

The participants also valued the relationship that developed between themselves and the services. Having a consistent person was also important to the participants:

The Council, if they can, give you the same person. And you've got a kind of companionship because you trust them and they know a little about your life and you talk about their life. So it's a good contact. (Maureen)

This allowed the consumers to feel safe in making inquiries and also assisted the service provider in anticipating the needs of the consumers:

And you're not frightened to ask her. And a lot of the time she sort of preempts what you need. And she'll bring it up. (Shirley)

Critical resource

During the interviews there was an outpouring of gratitude and praise for the services:

Well, I was just so glad. Grateful of anything being done that would improve the safety and I knew I wouldn't be able to manage much longer with the stairs and that, you know. (Carol) It was difficult for some to imagine life without the services:

They are very, very good. I think they are excellent. I don't know what people have done without them for so long. (Peter)

The consumers felt that the services were a critical resource:

I think it was the greatest thing since sliced bread, I really do. When you get towards retirement age you have got to think of that and also if you have got bad health you have to think of that and put the two together, and then put pig headedness with that of wanting to stay in your own home and make everything hard for anyone that wants to look after you. If you put all those together, and you suddenly find there is a ray of hope sitting over there waiting to help you, boy, do you appreciate it. (George)

Another participant reported:

At one stage I wrote the Council a letter, commending them on the help that they were giving me. I think very highly of it. I don't really know how I would manage. (Rhonda)

The participants had a strong connection with the services they had utilised. Most reported that they would have no hesitation in contacting the local HMM service should a future need arise. All the participants were willing to, or had already recommended the service to their family or friends after receiving it themselves:

Yes, 'course I would, in fact, I already have. Two of my mates don't belong to this area but they are now getting assistance from [their local service]. (George)

The main recommendation that the participants made was to increase the capacity of the services by providing more funding and staff.

Cost of services

Many of the participants were pensioners and appreciated the subsidies provided by the services. Generally, older people paid for or contributed to the cost of materials and these subsidies were often fundamental to people contemplating modifications. Some participants were not aware that subsidies were available and others were aware that the level of financial support varied across regions. Even with subsidies, some find the costs difficult to meet.

The participants commented on the ongoing cost of maintaining their houses and the challenge this presented to them on their limited incomes:

You have to call somebody every week and you can't pay for it. Because there are plenty of expenses, you know, staying home. All the time you have to repair something ... and that's very expensive ... always something got busted you have to replace something all the time. (Janet)

Many older people find themselves with unexpected increases in expenses as their rates increase over time:

And I have—I'm expecting quite a large bill for Council rates. It was six hundred dollars last year. I think it'll be more, most probably this year. I haven't done anything to the house or to the land. It's the same. But they seem to just keep going up. (Genevieve)

In addition to being pensioners, many participants had additional expenses related to their medical conditions:

I'm paying nearly two hundred dollars a month for my medications. (Alicia)

The recurring costs of a health condition often meant that work was not done on the house:

As you get older you've got the medication. Unfortunately it's the medication that's very expensive ... You forfeit other things. (Maureen)

The participants appeared to prioritise their needs and attend to things that needed to be done urgently, waiting until they had saved enough money for less important modifications:

Well, I've got to pace myself as far as the cost goes. ... I think, well, you know, I'll wait until I've got a bit more money before I can do that sort of thing. (Cynthia)

Although the subsidies were appreciated and very beneficial, the services also were limited in what they were able to fund:

And at the time, see, if it gets near the end of the financial year, when they are running out of money, they might say, 'Look, we are running out of money: we can only give you twenty dollars towards it' or something. You are only allowed so much a year: you can't just come on them every time. (Carol)

In some situations where there was no service charge for the work undertaken, the consumers had to pay for or contribute to the cost of materials. If the projects were large, other subsidies could be negotiated and the service would contribute more towards the project. For one couple who required a major bathroom renovation, the subsidy was increased following a means test:

Yes. I think it was 10 per cent I had to pay because I had to do a ... means test. (Karen, wife of Greg)

The subsidies provided by the service enabled people who would otherwise not contemplate embarking on maintenance or modifications to undertake them:

I feel that with [the service] that I've got somebody assisting me. And when they are able to subsidise the job well I appreciate that very much. (Cynthia)

As many of the participants interviewed were on pensions, the subsidies were reported to make a substantial difference:

And when [the service] did it, it might have been a hundred and that is a lot of difference when you are not earning. (Peter)

The contributions from the service for the projects particularly aided participants who had limited supports and funding:

I would have had to have borrowed money and gone into debt to get the things done that they have done for me, having no family and that. (Carol)

Although most of the participants were aware of these subsidies, one participant found out about them only during the interview, after spending a substantial amount of money on modifications which she was still paying off:

Interviewer: Are you aware, for example, that there is some funding through the government to pay for hand-rails and things like that, and chairs and so forth?

Maureen: No, no I wasn't aware of it, no.

Some people also perceived inconsistencies in subsidies across regions:

The man that was here doing it, he said, 'You're lucky. In Victoria DVA pays: it doesn't in other states.' He said, 'It would have cost you a hundred dollars in other states'. (Martin)

Despite the low cost of some of the subsidised items, some still found recurring costs an ongoing drain on their limited budgets:

Look, I just got the bill for this Council. It was about twenty dollars for coming to change this bulb and something else, which is very reasonable. And even the cleaning lady ... it costs you twenty dollars ... That's forty dollars. How can you stretch a pension so much? (Janet)

In addition, there were sometimes additional costs to the consumer when work was being undertaken in their home. When the consumer did not have the required financial resources to pay for the preliminary work, the modification work could not proceed. Others were able to negotiate with the contractor directly to provide a costefficient option:

So we worked it out ... how much we could afford? If it was any higher than that—I made a few bargains with them; if we did this, they'd have to do that, sort of thing. The price wasn't in the bathroom to have it painted. So I said, 'If we take the indoor painting you must do that bathroom, too' which they did. So we were happy with [him] looking after us rather than bits of this, that and the other, you know? (Martin)

The participants appreciated that the services were being provided by organisations that were not-for-profit, ensuring that they were not making money from people with limited finances:

And that is the lovely feeling you get with [the service] that they are there for you, not to make money. (Margaret)

6.10 Outcomes of using HMM services

Overall, the participants reported positive outcomes from the maintenance and modification work undertaken in their homes. Although many of the participants were initially uncertain of the benefits of undertaking home modifications, once they had been done many realised they were essential in enabling them to remain living in their homes. One participant noted that he would be keen to undertake further modifications should they be required:

If somebody came in and said, 'Well, you're going to have to do so and so' if we could stay in this house, I'd say, 'Be my guest, just do it'. (Lenora)

Both positive and negative unanticipated outcomes were reported by a few participants. While most were not concerned with the look of the modifications, some found the clinical appearance detracted from the home environment and were concerned it might restrict the market appeal.

Modifications a godsend

Generally, the modifications were being used consistently and many participants felt they were fundamental to their capacity to manage in the home:

But since that's [the bathroom] done, it is just so much of a help. It's a godsend to me. (Karen, wife of Greg)

Another noted the importance of being able to get in and out of the home:

It's been a godsend. It was just lovely to get out of the house. (Doris)

Another participant was very clear about the value of her modifications:

Without the rails I wouldn't be able to come home. A shower would be impossible. (Charles) We couldn't cope without it ... it'd be impossible to live here. (Joyce)

While some of the participants were not using their modifications all the time, they were still grateful that they were there to provide support when required:

I use them if I am a little light-headed. I would definitely use them and hang on to them. I couldn't do without them. Let's put it that way. (Rose)

The modifications made tasks easier and reduced the challenges that were preventing them from being independent:

Oh, it's made it a lot better and the house is far more usable, or I am more usable in the house than I was. (George)

One participant in particular noted how pleased she was with the changes that had been made to her bathroom:

The bathroom is just how I want it. (Cassandra)

Consumers reported that they were more confident and felt safer since having the modifications completed:

A lot safer. It gave me more confidence, because I know that, you know, there is not as much risk as what there was before. (Karen, wife of Greg)

The participants testified that the modifications have resulted in them being less fearful of having a fall.

It has been very good that I am not frightened that I will fall because ... I have got the rails and things. (Peter)

Many noted that the modification had prevented them from falling.

There's one [grab rail] just inside the door and then one in the shower itself which I can't do without. If I close my eyes and I didn't have one there, I'd probably fall over. (Harriett)

Ageing in place

One of the major positive outcomes that the service achieved was to help participants stay in their homes:

If I couldn't have had the alterations done well I might have thought more seriously of shifting. (Cynthia)

The modifications frequently made the home more manageable for the older resident and this contributed greatly to their sense of wellbeing:

I'm comfortable, I've got everything I need. (Clarissa)

The participants also commented that the maintenance and modifications service made a difference to their life:

Well, they [the modifications] are helpful and they can improve your life because it's improved ours. (Maria)

The extra security was noted by a number of participants as being essential to their well-being:

Well, I feel a lot happier with the security, because I wasn't real happy about the back door. I wasn't sure just how secure it was and as I said, has made it possible for me to open the windows. (Cynthia)

Impact on others

When asked about whether the home modifications impacted on other people, the general response was that they had had little impact on others living in or visiting the house. There were occasions where modifications made for a particular person would benefit their spouse or another member of the household. One woman reported that even though the grab rails at a doorway had been installed for her husband after a fall, she also used them when moving in and out of the house. In another situation a modification designed for one person was not suitable for the spouse to use. A wife reported that the stair rails installed for her husband were too high for her:

Because I'm smaller than the rails and I keep banging into them, you see. They're made for him and not me. (Jane)

Some participants preferred solutions that were not fixed in place, so that they could be removed when others visited:

No, I've got the toilet and it's just got handles, like a frame that you get in and out ...Yeah, because when we have people I can take it out. (Malcolm)

Unanticipated outcomes

Both positive and negative unanticipated outcomes were reported as a result of maintenance and modification services. One woman was pleased to have increased ventilation after having security screens installed:

So, since I've had those I can open them up and the ventilation's a lot better. (Cynthia)

A number of problems were raised, including one by a participant who found that the frame of the stair lift extended beyond the stairs and created an obstacle in the hallway:

That bit sticking over the end of the stair lift, which is about a foot out into the corridor? ... We all fall over that regularly. Everyone has a kick at it, of course. They forget, they walk past it and kick it. (Joyce)

Another participant who had temperature control put on their hot water to prevent scalding was dissatisfied that the water was always lukewarm. Replacing the back-up batteries in smoke alarms also proved problematic for a few participants, and keeping the ramp free of debris and bird droppings presented another participant with an ongoing challenge.

Aesthetics

Mostly people were not concerned with the impact of the modifications on the look of the home:

You know, like, I'm not a real houseproud person so it didn't worry me. (Harriett)

This was particularly evident with people who prioritised function or comfort over aesthetics:

I didn't care how it looked as long as I could get out. (Doris)

Well, they're serving the purpose ... And that's the main thing, that they are functional. (Alicia)

For some, the modification resulted in an improvement in an area of the home on its previous condition:

I think it looks better at the back than before [the ramp] was there. (Sharon)

It also created spaces the consumers enjoyed being in:

The room's beautiful to go in there [the bathroom] first thing in the morning. (Douglas)

Although they were grateful for the support the modifications provided, other participants were unhappy with the impact on their home:

We've kind of thought about it and were horrified when [the ramp] arrived ... because when you look at it ... it's huge. (Joyce)

A few participants were concerned that the modifications made the house look unappealing:

I didn't like the idea but it was turning into an old people's home and that is just what it is ... From an architectural point of view if the house was tidy, I would have preferred that they were not there. I don't think aesthetically they were ... I think they have done a very good job but I would prefer that it didn't happen but with the kind of house we had it was very good that they did it and they did a good job we don't complain at all. (Peter)

At times this was because the modifications had a clinical look:

Well, it's cold because it's done according to hospital conditions. That's exactly like it was in hospital with all the special materials, you know. (Martin)

Others were grateful that their modification did not look like a typical accessibility feature:

It doesn't look like a wheelchair access. It just looks like a gentle sort of climbing [path]. (Tania)

Some participants took action to make the modifications more acceptable:

They had a sort of pink undercoat thing on which was not very attractive but you know just a couple of coats of paint made all the difference and it looks as if they were designed to be there, doesn't it? (Margaret)

Others were happy to pay themselves for more aesthetically pleasing modifications rather than accept the option provided free of charge by the service:

[The service] would have paid for the rails that they put in but they didn't suit the decor because they were just going to be chrome rails and the decor didn't suit it. So we paid for them ourselves. (Harriett)

Some participants were particularly concerned about what others thought of the modifications to their home:

But I noticed that he [a friend] looks at the ramps. That sort of means—you know, a lot of people look at things and that spells to them old age and they won't admit to that sort of thing. I think that [some friends] are a little bit horrified at the ramps. (Alicia)

Market value of the home

Most participants felt that the home modifications would not make a big difference to the value of their home. Some reasoned that the home modifications could be removed by the next owner or before sale. I mean, if you were selling the home you could—yeah, just remove [the ramp]. It would be quite easily removed and put back the way it was. (Charles)

However, it was acknowledged that permanent modifications might limit the appeal:

Some people have said to me how nice it looked and some had said, 'If you sold the place, people mightn't like that'. (Doris)

Some participants recognised that with the ageing population the home modifications may make the home more appealing:

[Impact on] market value? Probably not. Except if an older couple are going to buy a place it might appeal to them but a younger couple will probably not want them. That's their decision. (Arthur)

Others acknowledged that there might be a specific market for houses with accessibility features:

But it goes with the house when we sell. I mean, I think it will add value to the house if anybody's going to live here ... Because there's not many houses with wheelchair access. (Tania)

6.11 Summary and conclusions

The consumer interviews reported in this chapter provide an insight into the pattern of consumer perspectives on HMM services in Australia. While care must be taken in making generalisations based on this data to all users of HMM services in Australia, it is reasonable to assume that the broad pattern of these responses is an indication of the range of views and experiences of many who need and use HMM services.

The consumer perspective that emerges from this study was strongly supportive of the role of home maintenance and modification services in expanding the housing options of older Australians. The older people interviewed expressed a strong preference for continuing to live in their homes despite the significant difficulties that they were experiencing in the home environment. For all of those interviewed, HMM services played an important and, in some cases, an essential role both in enabling them to remain at home and in enhancing their safety, independence and quality of life. This was achieved by both direct service provision and by the provision of advice, information and referrals to other building and property services. Consumer perceptions of the quality of HMM services were very positive, and focused on the timeliness, reliability, and approachability of the services. Negative perceptions related mainly to the level and cost of services arising from external resource constraints. These findings suggest that higher levels of investment in HMM services may have a significant potential to contribute to the wider goals of ageing policy, including fiscal sustainability, positive ageing and ageing in place.

7 DISCUSSION AND IMPLICATIONS

7.1 Introduction

As stated in chapter 1, the purpose of this report is to provide a theoretical and empirical research foundation for understanding the role of HMM services in achieving health, community care and housing outcomes for later-life Australians. Put another way, the aim is to lay the foundations for an evidence-based approach to HMM policy and service provision in Australia. The need for this task was established in the earlier chapters. The existing Australian research on HMM services is sparse and services have developed in an incremental fashion without a great deal of attention to research evidence. The first contribution of this study was to provide a definition and analytical framework, based on the international literature, to guide research and policy on HMM (chapters 2–3). The second was to present the findings of three foundations studies: an overview of HMM services (chapter 4); a study of the perspectives of service providers (chapter 5); and a consumer study (chapter 6). These three studies aim to provide a sound base for further research and policy development. The study as a whole can be viewed as a step, and, it is hoped, a significant step, in the development of an evidence-based HMM policy in Australia.

The structure of this report enables readers to focus their attention on whichever aspect of the study is most relevant to their concerns. Readers interested in specific topics, such as the definition of HMM services, the analytical framework, the overview of Australian services, the service provider study, or the consumer study can focus their attention on the relevant chapter. However, the study as a whole provides a perspective on the state of play of Australian HMM research and policy, and the purpose of this final chapter is to bring together the main findings from all the parts of the study to present this perspective. This involves some repetition of material summarised in the conclusion sections of earlier chapters. This chapter also explores the implications of the study for future research and policy on HMM. The broad aim of the final chapter is, therefore, to provide a basis for evidence-based policy discussion concerning the future of HMM services in Australia.

7.2 Discussion

In order to bring social science research to bear in a systematic way on the issue of the provision of home maintenance and modification services to Australia's older people, the first step is to establish the parameters of the discussion. These parameters were set out and discussed in chapters 2 and 3 of this report, and can be summarised in the form of a series of research and policy questions. These are:

- 1. How should the field of HMM services be defined?
- 2. What are the nature and level of need and demand for HMM services in Australia?
- 3. How are HMM services in Australia organised and how could this service organisation be improved?
- 4. How are HMM services in Australia provided and how could this service provision be improved?
- 5. How effective, and how potentially effective, are HMM services in achieving positive outcomes for older people and society?

Other than the issue of definition, these questions flow from the needs, services and outcomes framework developed in chapter 3. The discussion of these five questions establishes the evidence base for the analysis of policy implications that follows in section 7.3.

7.2.1 Definition of HMM

The starting point for the analysis of HMM policy is the question of definition. In chapter 2 HMM services are defined as 'services that are designed to modify or maintain the dwellings of older people in order to enhance their safety, independence, identity and lifestyle'. The four main service types identified are: structural modifications, non-structural modifications, repairs and improvements, and maintenance. HMM services are categorised as either direct, involving actual service provision or as indirect, involving such matters as information, advice, referral, assessment, brokerage, project management and financing. This definition is presented as a matrix of goals and interventions in Table 2.

This definition of HMM can be viewed as a heuristic tool designed to provide conceptual clarity around services that have the common goal of making the living environments of people in later life more suited to their needs and aspirations. There is a strong case for viewing HMM services as a distinctive set of services in this way. All of these are services that are involved in changing the domestic living environment in order to maximise the inhabitants' safety, independence and preferred lifestyle. They all require similar professional and occupational expertise, most notably occupational therapy and the building trades. HMM services are distinguishable in these ways from other support services for older people that provide help with the tasks of daily living, or enhance the social environment through social and recreational activities and the support of carers. They are linked to policies designed to facilitate housing pathways and choices in later life as well as to policies designed to enhance the safety and independence of older people.

Defining HMM services in this way provides a somewhat different perspective from the dominant view that has prevailed over the past two decades, namely, that HMM are to be viewed primarily as one of a repertoire of community care services available through the HACC program. Firstly, it provides HMM services with a clear identity that has been absent in the incremental evolution of HMM services over the past twenty years. It provides a conceptual basis for moving from the complex patchwork of HMM services shown in Table 5 towards a set of services with national goals, clear funding and delivery mechanisms, and a set of performance criteria. Secondly, as discussed at length in chapter 2, it draws attention to the multi-sectoral nature of HMM services. HMM services play key roles in the achievement of health and housing goals for older people as well as community care goals, and this diversity of goals ought to be reflected in policy and service arrangements.

7.2.2 Need and demand

The question of the extent and nature of need and demand is fundamental to all areas of social provision, and HMM is no exception. As shown in chapter 3, a number of approaches to estimating the need and demand for HMM services can be identified in the international literature. This literature also indicates the challenges associated with undertaking this task for a group such as older people in Australia. Broadly speaking, a number of approaches are required. These include an analysis of population and dwelling characteristics; understanding the difficulties experienced by older people in their homes and their means of coping with these difficulties; understanding older people's housing aspirations, especially the meaning they ascribe to their existing home; and an analysis of their existing and envisaged usage of HMM services. Studies of each of these aspects of need and demand can contribute to a composite picture of need and demand to underpin the provision of HMM services and HMM policy.

Population and dwelling characteristics

The starting point for research on the need and demand for HMM services is data on the population and dwelling characteristics of older people. Of particular relevance is population data on the number and proportion of older people living in the community with activity limitations, and data of this kind has been used in the USA to estimate the demand for HMM services (Kutty 1999). However, population data needs to be linked to data on the characteristics of the housing of older people. In most countries most older people live in housing that was not designed with their needs for access, safety, independence and location in mind (Stone 1998; Steinfeld, Levine & Shea 1998). Research in the USA and the UK has aimed to quantify the types of structural problems in the homes of older people (Mann et al. 1994; Peace & Holland, 2001), and the prevalence of hazards (Gill et al. 1999a).

In the Australian context there is good data on the prevalence of activity limitations among older people (ABS 2003b). However, there is far more limited data on their tenure or the characteristics of the dwellings of older people. Some data is available from service provider sources (Bridge 2005), and the ALSA identifies the HMM requirements reported by the older people included in that study. However, data linking the characteristics, tenure and suitability of the housing stock of older Australians is limited. The absence of such data represents a significant gap in the evidence base.

Addressing this major gap in research was beyond the scope of this report. However, the service provider study drew attention to the ways that certain housing characteristics in different parts of the country and different local conditions, such as climate and typography, affected demand on and delivery of HMM services. Some housing was particularly challenging and costly to maintain and modify due to their forms of construction and the materials used and were deemed unsuitable for people as they age due to their traditional features and fittings (section 5.5).

Difficulties experienced in the home

In the international literature population and dwelling characteristics have been brought together in studies that examine the specific difficulties experienced by older people in the home, and the types of assistance they required (Mann, et al. 1994; Newman 2003). Similar Australian population data, such as the ABS survey, indicates that 26 per cent of older Australians require assistance with property maintenance (ABS 2003b). Data from the consumer study adds depth to such findings by indicating the diversity of the difficulties faced by some older Australians. These related to both the performance of tasks and more general environmental challenges. The difficulties experienced by the consumers in our study in performing tasks included maintaining and clearing their gardens, doing the heavy cleaning jobs, maintaining and repairing fixtures and fittings in the home such as lights, stoves and doors, cleaning windows, clearing clutter and creating storage space, painting the house, and repairing or replacing hot water systems, old plumbing and wiring. Environmental challenges tended to be focused on steps, stairs and bathrooms, confirming the findings in the international literature (Heywood 2004a; Oldman & Beresford 2000; Stone 1998). A feeling of lack of personal security was also reported by several consumers in the survey.

The consumer study also confirmed the findings of previous international studies concerning the inclination of many older people to cope on their own (Auriemma et al. 1999) and adapt to their environment rather than seeking to change it (Pynoos & Nishita 2003). Indeed, it has been noted that older people are likely to under-report their home maintenance needs (Pynoos et al. 1998; Steinfeld & Shea, 1993) and

under-utilise modifications (Mann et al. 1996). The older people interviewed for this study indicated their great determination to manage their difficulties, if possible independently and without troubling others. There was a strong emphasis on dealing with issues as they arose, rather than on long-term planning. Many had put up with less than ideal circumstances for long periods and it often took a specific incident, such as a fall, to motivate them to seek assistance.

Reliance on family and friends to assist with home maintenance and modification was viewed by several older people in the consumer study as problematic. It is known that family (partners, sons and daughters) and friends are often the main providers of HMM assistance (ABS 2003b), and this was confirmed in this study. Sons and sonsin-law provided help with small maintenance or repair tasks, including tasks that formal service providers do not offer. However, some older people in the consumer study had difficulty accessing the level of support they required from their family due to their unavailability or a reluctance to impose on their time. Some were unable to receive the type of assistance required in a timely way from their busy families, some of whom had relocated to other areas for work. Furthermore, service providers expressed concern about the quality and cost of the work undertaken by unqualified and unskilled friends and relatives in some instances.

In these circumstances the importance of being able to access a trusted and reliable service was highlighted by both the consumers and service providers in the study. Several consumers indicated their difficulties in accessing suitable and affordable providers in the private sector, confirming a finding in the international literature (Pynoos et al. 1998). Older people who feel vulnerable and uninformed about building and maintenance matters were especially keen to access reliable advice. Overwhelmingly, the consumers demonstrated a preference for using trusted and familiar services recommended by friends or the local home maintenance and modification service. Having ready access to a service that can provide information on local providers was particularly valued by older women who were unfamiliar with the building industry, felt ill-equipped to manage private contractors and believed they were vulnerable to exploitation or mistreatment. Furthermore, some older people were reluctant to allow anyone other than a trusted individual into their home.

Older people's housing aspirations

Understanding older people's housing aspirations, especially their emotional attachment to their home, must also be taken into account when considering the need and demand for HMM. There is evidence that a strong focus on safety and independence can lead to an emotional connection with their home by older people and to overlooking their lifestyle choices (Heywood, Oldman & Means 2002; Heywood 2005, Tanner, Tilse & de Jonge, 2007). In the consumer study, most older people interviewed wished to continue living in their homes due to a combination of strong emotional attachments, the presence of important social and family networks in the local area and factors relating to the ambience, convenience and capacity of the house itself. This confirms the findings of previous studies that emphasise the strong personal meaning of the family home, the importance of local connections, and convenience and utility factors (Heywood 2005; Stone 1998).

As a corollary, many consumers interviewed were reluctant to move due to their fear of unknown alternatives, the inconvenience of moving, and their fear of losing their autonomy and independence. Those interviewed would not consider moving unless they felt that they were no longer able to manage at home, preferring to modify their home than relocating. These findings are also supported by previous studies (Heywood, Oldman & Means 2002).

These findings from the consumer interviews were supported by findings from the service provider study. Service providers identified emotional attachment to the home, fear of dislocation, and the cost of moving as key factors encouraging older people to stay put' However, some service providers also noted that in some cases enabling an older person to move to more suitable housing may be the best alternative, and they expressed frustration that they had neither the mandate nor the resources to assist in such transitions. They identified the lack of suitable alternative housing in some locations as the other key factor discouraging housing moves in later life.

Service usage

The final approach to assessing and understanding the need and demand for HMM is via 'expressed need' or service usage. For example, studies in the USA have found that over 40 per cent of the homes of older people have got modifications of some kind (Kutty 1999; Newman 2003). This is far higher than the reported rate in Australia of 16 per cent (AIHW 2003), although the differences may be attributable at least in part to definitional issues. The main sources of data on HMM usage in Australia are the datasets on service usage under the HACC program (DOHA 2004), although these do not indicate the overall need among older people due to the eligibility requirements and funding limitations of this program.

The service provider study found a generally high demand for all forms of HMM services throughout the country. They specifically identified garden maintenance, repairs, preventative home maintenance, security and advice on preparing the house for older age as services in short supply. The service providers noted that private renters faced particular barriers in accessing HMM services. Many providers felt that the limited funding and shortage of professional and trade personnel were major contributors to needs being unmet. Some reported that they rely heavily on volunteers to do work that they are unable to provide, such as gardening and odd jobs. The consumers reported that there were persistent unmet needs in garden maintenance and in heavy house maintenance, such as cleaning windows, house painting, clearing clutter, maintaining and repairing deteriorating and aging homes, and this was exaggerated by the limited availability and affordability of suitable private maintenance providers.

The consumer study illustrates that a wide range of services is covered by HMM providers. Maintenance services sought by older people vary from ongoing household tasks, such as replacing light bulbs and tap washers to annual tasks such as springcleaning. Similarly, older people accessed regular garden maintenance to trim bushes and clear pathways as well as large, infrequent jobs in the garden, such as removing tree branches. The modifications undertaken for the consumers in this study were similar to those identified in the wider literature and common interventions were grab rails, bathroom redesigns and ramps together with other accessibility modifications (Kutty 1999; Newman 2003). Other services included information on and referral to reliable contractors, repairs of many kinds, provision of smoke detectors, electrical safety switches and water saving devices, security assessments and falls assessments.

Summary: need and demand

While a number of the studies referred to in this section provide some indication of the level and nature of need and demand for HMM services in Australia, original research in this country is largely uncharted. Available data sources have not been used to estimate the overall need and demand, and usage data has not been standardised. The consumer and provider studies in this AHURI report confirm previous international findings on the nature of the difficulties experienced by older people in

their home, the tendency of many older people to make do with difficult features in their home, the shortcomings of relying on family and friends, the difficulties faced by private renters in accessing services, and the importance of accessing a trusted service as a source of information and advice. They also confirm the desire of many older people to continue living in their own homes, and the disincentives to relocation.

These shortcomings in our current understanding of need and demand for HMM services could be addressed in a number of ways. Building on this report, existing data sources could be drawn together systematically in the form of an audit of current research knowledge. More detailed analysis of service provider data could also be undertaken. However, for a robust evidence base for this and other areas of housing provision for older people, what is required is a national survey of the housing circumstances of older people, with a focus on the factors linked to need and demand for HMM services.

7.2.3 Service organisation

The term 'service organisation' refers to the policies, structures and processes that shape the provision of HMM services. It includes such issues as the policy framework, the identity of the service system, the coordination of the organisations involved in service provision, the level of availability of the services, the supply of professional and technical expertise and the quality of information systems. These issues of service organisation are widely discussed in the international literature, particularly the literature on HMM organisation in the USA. However, in the Australian context they have received far less attention. Indeed, the description of HMM services in Australia in chapter 4 of this AHURI report is the only such overview in recent years.

The complex patchwork of services

HMM services in Australia are described in chapter 4 as a complex patchwork comprising the programs and organisations listed in Table 5. This term has been borrowed from John Pynoos, a leading scholar on housing for older people in the USA, and used in this report as a catchphrase to describe the somewhat messy nature of the organisation of HMM services in Australia. While a large number of HMM programs and organisations are well established, the overall organisation of HMM services is weak relative to many other service types. The characteristics identified in chapter 4 (and discussed further below) include a lack of clear national policies on HMM provision, the somewhat unclear links with health and housing policies for older people, the looseness of links among HMM organisations, the uneven level of provision throughout the country, the lack of a clear identity for HMM services in some states, the complexity and diversity of funding arrangements from place to place, the lack of uniform terminology, and the lack of research.

This situation mirrors to a large degree the organisation of HMM services in the USA and, to a lesser extent, the UK, as reported in the policy and academic research literature. Themes in the USA literature concerning the organisation of services include the low priority accorded to HMM compared with other community care services, the reactive rather than proactive and preventative approach, the complexity and limitations of funding arrangements, the uneven availability of services across geographical areas, the lack of well-defined and integrated service systems and the limited supply of occupational therapists and building tradespeople with expertise in HMM.

The Australian patchwork can be viewed mainly as a consequence of the incremental evolution of HMM services both within and outside the HACC program. Within HACC, HMM services have developed in distinct and different ways in each jurisdiction. There are large variations in the funding priority given to HMM relative to other

community care services, as well as disparities in the emphasis given to each of the four major types of HMM services. In some states and territories HMM services are mainly delivered through specialised HMM organisations, while in others generic community care providers or the local governments play a central role. Boundaries with cognate programs such as aids and equipment programs are delineated differently from state to state, and links between HACC-funded HMM services and related organisations such as community health services and hospitals are managed differently in each state.

Outside HACC, HMM services have developed in a somewhat haphazard way, resulting in even more accentuated interstate differences. The most standardised HMM services are those provided to two specific groups, veterans and their families and social housing tenants. These are the only programs with a degree of similarity across the country. In one state, Queensland, there is a state-wide policy to provide HMM services to older people, but this is not replicated in any other state. The other main state-based HMM programs are specific initiatives, such as the Archicentre Home Renovation Service in Victoria and the NSW Research and Resource Centre. Four states provide HMM loan programs. The other programs are mainly small-scale information and advice programs, volunteer programs, or small funding programs for a particular service type. The net effect is a collection of services that includes a number of interesting and important innovations, but that falls far short of a systematic national approach to organising and providing HMM services linked to wider national goals for an ageing society.

To add to the complexity, this disparate collage of publicly funded programs, services and organisations exists alongside a private market of building tradespeople and home and garden maintenance providers who can undertake home maintenance and modification tasks for older people. There appears to be the beginnings of a niche group of such providers (together with a small number of occupational therapists and architects) who specialise in home maintenance and modifications for older people. As noted earlier, many home maintenance and modification tasks are also undertaken by the family and friends of older people, and by older people themselves. Indeed, families and friends are the main providers of assistance with home maintenance and minor modifications (ABS 2003b). There is some evidence that service clubs and community volunteer organisations play a small role in providing maintenance services and funding modifications for older people, especially in rural areas.

A number of aspects of the complex patchwork of HMM services require further discussion. These include the absence of a clear policy framework for HMM provision; the lack of a clear identity for HMM services in some states and nationally; the uneven levels of provision of services across the country; shortfalls in professional and technical expertise; and lack of a sector-wide standardised information system.

Policy

As noted in chapter 4, there are no clearly articulated policies for the provision of HMM services to older people in either the Australian Government or most states and territories. Australia lacks the sort of legislative frameworks for ensuring access to services that are evident in some overseas countries. Most forms of HMM provision are subsumed under programs with broader goals. Nationally, HMM services are included within HACC and arrangements for the support and care of veterans. At the state and territory level HMM is mainly provided as part of the social housing system and, in some jurisdictions, as a small component of equipment and aids programs. It is only in states where housing departments have become involved in HMM as a housing measure that there is a distinctive or stand-alone approach to HMM provision. The stand-out case is Queensland, where there is there a policy of state-wide

provision of HMM services to general older people through the Queensland DOH's HAS program, which is coordinated with HACC home modification services. Other stand-alone initiatives are the various state housing department loan programs and the Victorian DOH's Home Renovation Service.

The absence of explicit national, state and territory HMM policies has two main consequences. Firstly, the links between HMM programs and wider policy goals are not well developed. HMM services potentially contribute to a range of community care, health and housing outcomes for older people, as well as to wider national goals for an ageing society. However, these links are not explicit in current arrangements. Secondly, there are no policies concerning service organisation matters such as levels of service provision, the repertoire of HMM services to be provided, the development of a skilled workforce, links to other sectors and national data collection. The net effect is a collage of services that falls far short of a systematic national or state-level approach to provision of HMM services.

It is useful to speculate on what a national or state policy on HMM provision would look like, and how it might differ from the current situation. Viewed from a housing perspective, HMM provision could be seen as part of a wider policy approach to the housing of older people helping older people to make the housing adjustments or transitions that reflect their changing circumstances (see section 2.3.3). From this point of view, HMM could be viewed as one of a series of programs to facilitate the housing pathways of older people. Other initiatives might include deliberate attempts to increase the variety of housing supply appropriate for older people, reducing transaction costs for older people wishing to move house, improving housing information services, and encouraging adaptable and accessible design. Given the multidisciplinary nature of HMM, close and explicit links would also need to be made to health and community care goals such as prevention (e.g., falls), improved hospital discharge arrangements and reduced demand for entry to residential aged care homes. Policies with respect to the organisation of services would reflect these wider goals and could include one-stop information services, benchmarks for levels of service provision, a standardised approach to user charges, close links to health, community care and other housing services and an emphasis on development of professional and technical expertise.

With respect to policy settings, a key issue arising from the multi-sectoral nature of HMM services is that of policy leadership. If HMM is viewed from a housing perspective, as discussed above, this raises the issue of an increased role for housing authorities in HMM policy. This might lead to an approach similar to the one that that has developed in Queensland, where a housing authority takes responsibility for the state-wide provision of HMM services, including some HMM services funded through other programs, such as HACC. An alternatively is the Victorian approach where a partnership between the housing, health, disability and community care programs in the Department of Human Services is being developed. This approach involves the housing authority in administering programs providing advice and information services to consumers and the building industry and offering home inspection and project management services, information and technical resources for HMM providers and loan products. Examples of varying levels of involvement in HMM initiatives by housing authorities are to be found across states and territories.

Identity

One consequence of the absence of explicit HMM policies and the incremental evolution of HMM services over the past twenty years is the somewhat low-key identity of HMM services in several states and territories, as well as nationally. As discussed in chapter 4, the service delivery arrangements for HACC-funded HMM

services differ widely from state to state, and in some states and territories services are widely perceived as being simply a small element of the HACC program. HMM services have the greatest visibility in states and territories such as Queensland and NSW that have an identifiable network of specialised HMM organisations. Only a limited number of programs have been clearly designated to provide HMM. One of these is Queensland's HAS program. The State Council of HMM services in NSW, combined with the Research and Resource Centre at the University of Sydney, is the only formal and funded infrastructure to support state-wide networking, capacity building and research and development. Other HMM-specific initiatives, such as the Archicentre Home Renovation Service, also give identity and visibility to HMM, including the recognition of HMM-specific professional and technical expertise. However, no national organisation represents the interests of HMM organisations and professionals.

A corollary of this lack of clear identity is the lack, raised in the service provider interviews, of effective linkages among organisations and professionals involved in HMM provision in certain states and localities. While informal linkages were quite well developed in some places, in others the networks were reported as being weak, and a number of attempts to strengthen cross-agency linkages were reported.

Availability of services

As reported in chapter 4, in the absence of national goals, standards or benchmarks for HMM service provision, a diverse pattern of service provision has emerged with great variations among the states and territories in their level of provision of HMM services. It is difficult to collate reliable information on service levels or service adequacy, due to the lack of both cross-program data and standard service definitions, and the absence of benchmarks for HMM service provision. However, the data reported in chapter 4 shows that there are widely varying levels of provision for each of the four main HMM service types: structural modifications; non-structural modifications; repairs and improvements; and maintenance.

These differences are in large part a consequence of the HACC planning process which has emphasised state and regional priority-setting rather than national uniformity. There are great differences from state to state in the proportion of HACC funds spent on HMM services and in the relative weight given to different types of HMM services. Different policy emphases from state to state in non-HACC programs add to the pattern of diversity in level of provision. Queensland is the only state with a network of HMM service providers for older people who are not eligible for HACC, and an advisory service for builders and consumers. Victoria is the only state with a free home inspection service for older people. Only four states and territories have loan products for HMM. Some, but not all, state-based equipment and aids programs make provision for non-structural modifications, with varying eligibility and entitlement provisions. State health agencies, such as community health centres, are involved to varying degrees in HMM provision. The only HMM programs available on a nationally uniform basis are those provided to veterans and their families by the DVA.

Availability of expertise

HMM services involve two main types of professional expertise: occupational therapists who understand the fit between older people and their dwellings; and building and property professionals, including architects and builders who can design and undertake modifications to dwellings. It is evident from the data reported in chapter 4 and 5 that the availability of appropriate expertise at each stage of HMM service delivery can be problematic, and that there are variations in the pattern of availability from state to state and in different places in the same state. For example,

some SHAs, such as Queensland, employ occupational therapists in all service centres to undertake HMM assessments, while other SHAs rely on the availability of occupational therapists through state community health centres. Only Victoria has a funded service that makes architects available to older people for assessments of building condition and maintenance and modification needs.

HMM service providers reported it was difficult to access occupational therapists in all states and territories, especially in rural areas, and many rely on community health and hospital occupational therapists to undertake HMM assessments. Access to these occupational therapists varied, depending on the priority given to HMM assessments. Concerns were raised about the level of specialist knowledge of HMM of some occupational therapists, particularly their knowledge of building issues and solutions and their capacity to work with building contractors. This echoed similar concerns expressed in the international literature (Duncan 1998a; Pynoos et al, 1998). Paradoxically, concerns were also raised about the amount of time that occupational therapists in some locations spent on preparing drawings, building specifications and managing projects to ensure that the work was undertaken appropriately, in the absence of suitable architects or builders. Some service providers expressed the view that the demands on occupational therapists could be reduced if other workers could be trained to undertake straightforward home modification assessments. However, others stressed that service failures could occur when people with appropriate experience or expertise were not available; a position that has some support in the professional literature (Heywood, Oldman & Means 2002). Overall, the need to improve the supply of occupational therapists was a consistent theme in the service provider focus groups.

HMM service providers across Australia also reported difficulties in contracting out their building work, especially for smaller jobs and projects involving specialist trades. These difficulties appear to be partly linked to industry market fluctuations. However, the view was also expressed that better recognition for tradespeople employed in HMM services might make this work more attractive. Some emphasised the personal satisfaction that some of their tradespeople gained in working with older people, and some had developed close links with building contractors interested in home modification work. Others suggested that builders would benefit from the inclusion of disability awareness in their training. Generally, the literature indicates that building contractors are not well informed about the needs of older people, few have developed specialised skills in home modification, and there is a need for greater industry attention to education in this area (Auriemma et al. 1999; Duncan 1998a; Pynoos et al. 1998; Steinfeld, Levine & Shea 1998). Service providers were also aware of architects with an interest in accessible residential design but to date, widespread involvement of architects in HMM is limited, other than the Home Renovations Inspection Service in Victoria which provides specialist training for architects.

Research and information

As indicated in chapter 4, the availability of information on HMM service provision in Australia is limited by the fragmented nature of HMM services and the absence of cross-program information systems. Data on provision and usage is available on HACC-funded HMM services and programs such as HAS in Queensland, the DVA HMM programs, and SHA loan programs also collect service data. However, there is no composite picture of the extent of HMM provision based on all these sources. Looking beyond the formal services, there is little data on the extent of HMM service provision on a fee-for-service basis by private sector tradespeople, or on an informal basis by family and friends.

The main impediment to the development of an HMM data system is the lack of recognition of HMM as a policy field and sector in its own right. Other impediments are the absence of uniform service definitions and information gaps. These were discussed in chapter 4. For example, in the HACC minimum dataset, 'minor modifications' appear to be treated as home maintenance in some jurisdictions, leading to the under-reporting of home modifications in some states. HMM services provided through aids and equipment programs do not appear to use standard categories across states in reporting. Data on public housing modifications is not readily available in some states and territories because it is not separately reported in maintenance and upgrade budgets. Very little data is publicly available about the home modifications provision in the health system. These gaps and inconsistencies make it difficult to build a clear picture of HMM services as a whole.

Other sources of data on HMM are also limited. Some services undertake formal client surveys but this information is not usually publicly available. Recent reviews of HMM and related services include a review of the HMM service delivery model in NSW (DADHC 2006; KPMG 2006a, 2006b); a review of the HAS program in Queensland (DOH 2002) followed by a client satisfaction survey (Johnson 2005) and a review of the aids and equipment scheme in Victoria (KPMG 2007). These reviews drew attention to a number of the themes raised in this chapter, including the need for professional expertise to be more widely available, problems of lack of integration and coordination, and the need for improved data systems.

Summary: service organisation

Prior to this AHURI report, little research attention has been paid to the organisation of HMM services in Australia. The description of HMM services in chapter 4 of this report is the only such overview in recent years. This report characterises HMM services in Australia as a complex patchwork of services, like HMM services in the USA. This patchwork reflects the incremental evolution of HMM services in Australia, both within and outside the HACC program. The key factor underpinning this patchwork is the absence of a clear policy framework for HMM provision, either at the national or at the state and territory level (with the exception of Queensland). This means that HMM provision is not closely linked to wider ageing policy goals, especially goals relating to the housing of older Australians. It has also resulted in a low-key identity for HMM services in most states and territories, in great variations in levels of service around the country, in shortfalls of expertise, and in fragmented service data.

Further research on the organisation of HMM services is required in order sharpen the description and analysis presented in this report. In particular, a more detailed picture of the funding and availability of services, and of the availability of expertise, is required. However, the broad picture is clear. It raises the issue of whether HMM provision in Australia should remain a patchwork of programs, services and organisations or whether a more proactive policy approach is required. It also raises the issue of the involvement of housing departments in providing leadership in HMM and related areas of the housing of older people at national and state levels.

7.2.4 Service provision

The term 'service provision' refers to the actual provision of services to consumers rather than the broader issues of service policy and organisation discussed in the previous section, although service organisation impacts on and serves to enhance the quality of service provision. The provision of HMM services comprises four stages: access to services, consumer assessment processes, delivery of services to consumers, and review and evaluation. Both the studies of service providers and consumers above focus on these issues of service provision. The international literature also focuses quite sharply on service delivery issues, making many suggestions for good practice in service access, assessment, delivery and evaluation. The main findings of the service provider and consumer studies as they bear on service provision, and key issues from the international literature, are reported below.

Access

The factors impacting on access to services are central concerns in all forms of human service provision. Gaining access to services can be viewed as a series of hurdles. Potential consumers must be aware of services either by receiving information or being referred by other providers. They must then meet eligibility and priority requirements and be able to afford the cost, if any, of the service. If services are in short supply, as is the case with HMM services in many parts of Australia, the hurdles to access are more difficult to negotiate. Providers ration their services by raising the hurdles: restricting access to information; being less responsive to referrals; tightening eligibility and priority requirements; reducing service levels; and increasing user charges. Each of these aspects of access to HMM is considered below.

Information

Many service providers who took part in the focus groups for this study expressed a concern that older people often have limited or no information about HMM services. despite the information services that are available in most states and territories as well as nationally. They also felt that this lack of awareness of HMM services was shared by many human service agencies and the community generally. A problem mentioned by many was the complexity and variability of HMM provision from place to place, which poses challenges for both consumers and service providers seeking to be referred to HMM organisations. A further factor was the ambivalence about advertising felt by some HMM services due to their concerns about their capacity to handle increased demand, or their lack of resources to engage in service promotion. It seems that many services do not widely advertise their work for these reasons, although one service reported that it conducted a regular letterbox drop of information in its local area. A widespread belief amongst service providers was that informal sources of information, such as word-of-mouth, are the main source of information for many older people. Some providers felt that generational changes mean that consumers are gradually becoming more knowledgeable and discerning about HMM and other human services, and that this is likely to increase demand in the future.

The importance of word-of-mouth referrals, noted by service providers, was supported by the finding of a survey of HAS recipients in Queensland that other older people were the main source of information about the service. This has given rise to concerns that isolated older people without a well-established social network may be less likely to gain access to HMM services (Johnson 2005).

The service providers' concerns about poor consumer information reflect similar concerns expressed in other countries. Observers of HMM services in both the USA and the UK have commented on the limited information available on HMM services (Pynoos et al. 1998; Heywood, Oldman & Means 2002; Picking & Pain 2003; Tinker et al. 2004). There is particular concern that the benefits of undertaking modifications, and the options and services available, are not widely understood (Duncan 1998a; Pynoos 2004; Steinfeld, Levine & Shea 1998). Numerous schemes have been proposed to improve access to HMM information for consumers and service providers, including directories, information and referral centres, toll-free telephone services and proactive advertising (Pynoos & Nishita 2003; Department for Communities and Local Government 2006). Particular attention has been paid to the

information deficits of consumers with lower levels of education and members of minority groups who have been found to underuse HMM services relative to other groups (Kutty 1999).

In considering the most effective information dissemination strategies, the role of local HMM providers should not be overlooked. Many local HMM services play important information roles, providing advice and referrals to private sector building contractors and tradespeople, as well as to related services such as falls assessment programs. Many local HMM organisations felt that their information provision role was of central importance and depended very greatly on the trust that consumers had in the service. It was reported that once this was established, HMM services were used repeatedly by older people for HMM information and referral. This suggests that local, relationship-based information services may be of central importance to information dissemination strategies.

The consumer study suggests that the role of general consumer information in providing access to services may be more significant for home maintenance than for home modifications. In the consumer study most requests for home maintenance and repair services were initiated by older people themselves, whereas requests for home modifications tended to be made via referral from a health or community care service. This was also the pattern found in Johnson's study of HAS consumers (Johnson 2005). Referrals for home modification were often made as part of a more general treatment plan for a health condition or as a response to an accident or a near miss. It may be these referral processes, rather than information availability more generally, that determine consumers' access to home modification services.

Referral

The service providers in the study expressed concern not only about the shortcomings of general consumer and community information but also about the quality of referral processes to HMM services, especially from hospitals, health services and GPs. These were viewed as particularly problematic with respect to home modifications. Some service providers highlighted the valuable role that GPs could play in referring patients to appropriate HMM services, and expressed disappointment at the current low level of knowledge of HMM services among many GPs and aged care services. Concern was also expressed about the lack of interest in HMM, and inappropriate referrals. However, these concerns were not universal and some providers reported excellent relations with local GPs. The importance of such links has been stressed in the international literature, particularly the role of an early liaison between health and home modification services in reducing the length of stay of people in hospital and facilitating their early return to home (Hakim & Bakeit 1998). Training GPs and hospital employees on how to identify a need for a modification and make a referral to an appropriate service has been identified as an important strategy to improve service delivery (Liebig & Sheets 1998).

Strong linkages and creative cross-referrals among HMM services were reported to be common by several service providers, especially in areas where programs had different funding and eligibility criteria and provided a different set of services. The importance of connectivity amongst HMM service providers has been noted in overseas studies, which stress the importance of these linkages in enhancing access to services in situations where no one organisation can provide a comprehensive range of HMM services (Pynoos 2004; Pynoos et al. 1998).

Eligibility and priority

Another area of access difficulty identified by many service providers was the determination of eligibility and priority. Providers reported widespread consumer

concern about a perceived inequity of eligibility and subsidy arrangements, given the different treatment of older people according to categories such as the level of client incapacity, their veteran status, age, place of residence and income. These concerns were shared by many service providers. HACC and DVA programs have national eligibility guidelines for access to services and cost subsidies. However, eligibility for state-based programs, including aids and equipment programs and public housing modifications, are more variable. Some eligibility criteria are set by program guidelines or by individual services to ration demand. Age eligibility limits, often set at seventy years of age, are sometimes used as a convenient proxy for incapacity by some services. In some states older people with disabilities are eligible for services provided through disability programs including home modifications, while in others anyone over sixty-five is automatically ineligible. Residents of public housing or senior-specific housing, such as retirement villages, are excluded by some services on the assumption that such accommodation should be accessible and designed to meet the needs of older people.

User charges

Service providers also reported difficulty in administering eligibility criteria due to 'grey areas' requiring the exercise of discretion in a context of limited resources. An issue that appeared to cause particular difficulty for providers was the assessment of user charges. Eligibility for subsidies and the level of subsidy is in most cases linked to income or means tests, with program guidelines often setting out broad policies leaving considerable discretion to service providers. Various approaches to setting user charges were reported in different organisations. For maintenance, repairs and non-structural modifications some required the consumer to pay for materials only, others required a proportion of the total cost, and others still charged on a sliding scale linked to the recipient's income.

The processes for determining the level of financial assistance for the costs of major modifications varies widely between programs and between jurisdictions, and different eligibility requirements, subsidy levels and caps are applied. Those ineligible for a public subsidy may, in some limited instances, be entitled to insurance or compensation payouts, and assistance is occasionally provided to individuals through service clubs and other community organisations. Many older people are fully or partially dependant on personal savings, assistance from family or borrowings to fund the full cost of undertaking structural modifications. Service providers reported a small but increasing incidence of older people taking out reverse mortgage loans to fund modifications. They also reported that older people commonly do not take up the modifications recommended because they are unable to afford them or are reluctant to spend their limited savings. Similar findings concerning a lack of ability to pay as a deterrent to home modification can be found in the US literature (Bayer & Harper 2000; Gosselin et al. 1993; Trickey et al. 1993; Pynoos & Nishita 2003).

The deterrent impact of user charges on the take-up of home modifications by some older people was confirmed by the consumer study. Many of the consumers interviewed made reference to their difficult financial circumstances. Ongoing health expenses were a concern for a number of consumers, which meant that they were able to undertake only essential maintenance and modification work. Subsidised HMM services certainly enabled the consumers in this study to undertake modifications they would otherwise not have considered. However, some found the recurring costs associated with maintaining their home an ongoing drain on their limited budgets. These findings are consistent with recent Australian studies that have found that the cost of modifications is a major deterrent for older people on a limited income or a government pension (Smith et al. 2002; Dewey et al. 2004).

Tenure

It should also be noted that service providers reported that older people living in private rental housing faced considerable barriers in accessing home modifications compared to home owners and social housing tenants. Private renters comprise less than 7 per cent of older person households, while 83 per cent are home owners and about 6 per cent are public housing tenants. The providers indicated that renters were reluctant to undertake major modifications unless they had a long-term lease, and indicated that they had encountered opposition from landlords to both major and minor modifications if these were seen to be permanent. They also noted that tight rental markets make it difficult for older renters to negotiate modifications with landlords or to consider relocating. In recent Australian survey, it was found that the incidence of modifications is lower in rental dwellings that in privately owned dwellings (AIHW 2003).

Assessment

Once an older person has made contact with an HMM provider, the next stage of service provision is to assess the consumer's needs. For the consumers in the study the process of initiating the service was similar in most cases. For maintenance, repairs and some minor modifications, information was usually provided over the phone, or a service provider visited the home to further assess the situation or to undertake the work. Quite commonly, in the course of this visit other maintenance or safety tasks were identified and addressed or referrals were made. For major modifications, an assessment by an occupational therapist was usually required, and a plan for the work drawn up. With only one or two exceptions, most consumers felt that they received adequate information about what was proposed.

Typical assessment processes were also described in the focus group interviews with service providers. Usually, on receipt of a referral or on contact from an older person, HMM services undertake an assessment of the recipient's eligibility and their need for subsidies. The initial assessment also identifies the urgency of need for assistance, and whether the consumer should be referred to other services. If a consumer is deemed eligible and a priority, a more thorough assessment of their needs and circumstances is undertaken. This determines the nature of the HMM work required and the best solution, given the client's circumstances, the characteristics of their home, the services and funding available through the organisation, and considerations of the cost to the consumer.

Assessments for relatively straightforward maintenance, repairs, and non-structural modifications are commonly undertaken by HMM field officers who usually have a background in the building industry. Non-structural modifications may require a recommendation from an occupational therapist. Structural modifications and major home repairs usually require a full clinical assessment by an occupational therapist, and architects or builders may be involved in advising on the construction aspects of a proposed modification. There is wide agreement amongst practitioners that a collaborative approach involving occupational therapists and building professionals is beneficial to achieving the best outcome. Considerable skills transfer between professional and occupational groups can take place as they work together over time. There is also agreement that fully involving the consumer in the decision-making process is vital in order to take into account individual preferences and the consumer's ability to accept changes to their routines and environment. Service coordinators usually have responsibility for final approval of the modification.

The role of occupational therapists in assessments for home modifications is an issue of central importance that was discussed extensively in the focus groups.

Occupational therapists are widely viewed as a key resource in home modification consumer assessment (Department for Communities and Local Government 2006). The profession uses a framework for assessment that emphasises the fit between the person, tasks and the environment, and the need to understand the impact of ageing and specific health conditions on the individual's capacity to function in the home environment (Law et al. 1996). Occupational therapists also emphasise the importance of the personal nature of the home environment and the need to minimise disruption to the meaning of household space (Lund & Nygard 2004; Steward 2000). Many of the HMM services in this study used occupational therapists to undertake modification assessments, sometimes relying on their own occupational therapists and sometimes using therapists employed by other organisations. However, the lack of suitably trained occupational therapists to undertake assessment was commonly reported. In some locations there are long waiting lists for occupational therapy assessments, which often result in priority being given to situations involving an immediate problem or crisis, rather than preventative modifications.

In some generic community care services, initial assessments for HMM are undertaken by home care services or community nurses as part of a broader clinical or aged care needs assessment. Service providers reported that home maintenance assessments are often more comprehensive for clients who receive other aged care, home care and health services, and that in these cases initial assessments typically have a strong health and safety focus. Service providers also emphasised the important role of ongoing assessments of many older people who are clients of community care services to monitor changes in their needs and circumstances. Often when service providers enter the home of an older person they identify HMM issues in addition to those that prompted the older person to approach the service. Service providers who visit the homes of older people are often well placed to identify potential hazards and can use this opportunity to draw such risks to the attention of the householder or a close relative. It has been proposed that service providers undertaking assessments for other home-based services could be used more widely to assess minor modifications. However, there is a need for specialised training to be provided (Department for Communities and Local Government 2006). There is evidence that the nature of HMM assessments undertaken varies depending on the professional or occupational background of the person undertaking the assessment (Pynoos et al. 1998).

A factor emphasised by many service providers is the impact of organisational mandate on the scope of the assessments that HMM organisations can provide. Several providers drew attention to situations in which their assessment of the best solution for a client was to move to a different dwelling. However, in many cases both their mandate to make this recommendation and their capacity to provide assistance with moving were limited. There were often major barriers to moving, including the lack of suitable alternative housing in many locations, the cost of moving, and the consumer's emotional attachment to the home and fear of dislocation. The implication is that there may be a case for HMM organisations to have a wider responsibility to assist older people to make suitable housing transitions and adjustments, rather than solely focusing on home modification and maintenance.

Delivery

Both the service provider focus groups and the consumer interviews explored the actual process of delivery of services, with a focus on the quality of service delivery. Themes raised included timeliness; reliability; the impact of limited funding; coordination of the home modification process; consumer involvement, disruption, and the impact of the regulatory environment.

Timeliness

Most of the consumers who were interviewed reported that HMM organisations responded in a timely way to service requests, and that delays were experienced only with major modifications. According to the consumers interviewed, delays were more the exception than the rule. Reported delays were related in some instances to the unstable health of the consumer, which made it difficult to assess need and coordinate the start of work. In fact, delays were viewed more commonly as a problem by the providers, who reported that a recurring complaint from consumers was the time taken to address their concerns. The providers were particularly concerned about delays in home modifications caused by lack of funding, and limited availability of occupational therapists and tradespeople. They indicated that these factors often resulted in a focus on high priority cases, leading to delays in situations where modifications were viewed as less urgent.

In the international literature, delays in delivery of home modifications have been identified as a major concern, particularly in situations involving discharge of patients from hospital to unsuitable homes (Heywood, Oldman & Means 2002). Such delays have been found to unnecessarily prolong hospital stays (Hakim & Bakeit 1998). In some cases it appears that older people are being discharged with assistive devices or social supports in lieu of unavailable home modifications (Pynoos et al. 1998; Steinfeld, Levine & Shea 1998). The impact of delays in availability of home modification in the Australian context is a topic requiring further examination.

Reliability

Consumers consistently expressed the view that services were reliable and trusted, and that a quality job was assured. In most cases, they were pleased to be able to hand over responsibility to the service for managing the work to be done. These workers were widely viewed as dedicated and polite, and in many cases a good relationship was build up between the consumer and the service which was viewed as a critical resource in their lives.

Limited funding

While consumers were generally very appreciative of the service they received, both consumers and providers were aware of the limitations to the services resulting from cost considerations. The consumers were aware that the services had limited budgets and therefore had to ration the nature or frequency of the services provided. The providers were particularly aware of the limited funding available for major modifications and more expensive equipment, and the need in many instances to restrict the scope of modifications to the level of the subsidy available and the consumer's capacity to pay. The service providers reported that for these reasons they generally recommended the least costly options. This is consistent with other findings that the modifications of the subsidising organisation (Rousseau et al. 2001). While the reasons for this are entirely understandable, it has been observed that interventions that do not fully meet the current and anticipated needs of the household may result in wasted expenditure (Department for Communities and Local Government 2006).

Coordination

An important aspect of the provision of home modifications is the coordination of the various organisations and individuals involved including occupational therapists, installers, suppliers and other service agencies (Pynoos & Nishita 2003). This can be a difficult task for older people and their families, and there are risks of

miscommunication and confusion. Most consumers felt that the home modification process went smoothly and they were content to leave project management to the HMM agency. However, not all of them felt they were well informed and most could not remember the details or roles of those involved.

Consumer involvement

Most consumers emphasised their appreciation of the expertise of the service providers involved in the home modifications. This enabled them to explore and anticipate issues and investigate the suitability of a range of options. However, their views concerning the opportunities that they had to be involved in the process varied. Most felt that they were offered choices throughout the process and thus were able to customise solutions to their specific requirements to some degree. However, others felt that they had limited options to influence decisions that were constrained by what the service was prepared or able to provide. Some described the process in terms that suggested collaboration with the service provider, while others emphasised that the process involved negotiation with the various service providers involved. The service providers described their relations with consumers in some cases as finding solutions that matched consumer preferences, but in other cases as persuading consumers of the value of a modification and doing a 'sales pitch'.

The issue of consumer participation is a central issues in HMM provision and some studies have found that many older people feel that they have limited influence on home modification decisions (Auriemma et al. 1999; Hawkins & Stewart 2002; Nocon & Pleace 1997). The professional literature emphasises the importance of a collaborative approach that takes into account the personal, social and cultural dimensions of the home, as well as its physical characteristics (Harrison 2004; Hawkins & Stewart 2002). This literature stresses that modifications must be viewed by older people as viable solutions to the problems they themselves identify as important, and that the solution's perceived usefulness has a significant impact on outcomes (Department for Communities and Local Government 2006; Wylde 1998).

Disruption

The potential disruptiveness of the modification process has been cited as a significant impediment to the take-up of home modification services (Ohta & Ohta 1997; Steinfeld & Shea 1993). The consumer interviews found that smaller modifications did not result in significant disruption, other than the short-term presence of strangers in the home. However, larger modifications, in particular bathroom modifications, were often more problematic, with older people having to make alternative arrangements with neighbours or access respite services for the duration of the work. In some cases, major modifications also resulted in additional work being needed, either in the form of clearing things out of the way prior to the work, the removal of asbestos, or the installation of new electrical fittings resulted in unanticipated disruption as well as unexpected costs. Service providers confirmed that fear of disruption did on occasions result in older people putting off modifications or settling for less disruptive solutions. They confirmed that these were factors to be taken into account in planning and costing modifications.

The regulatory environment

A central concern expressed in the service provider focus groups was the impact of the increasingly complex and demanding regulatory environment on the delivery of HMM services in Australia. These factors included building regulations and standards, especially those that apply those to people with a disability; occupational health and safety requirements, including issues related to removal of asbestos; the requirement to use licensed contractors for particular tasks or parts of a job; fire regulations; body corporate requirements; legal requirements pertaining to building contracts; police checks for unsupervised contractors working in consumers' homes; and the lack of uniformity in building and planning requirements. While there was widespread acceptance by the service providers of the need for many of these systems and provisions, their cumulative impact on the operations of HMM services was considerable. Their impacts include delays, cost increases, greater complexity in the management of home modifications, more difficult risk management and dilemmas in balancing the interests of staff and consumers. Similar issues and concerns have been noted in the international literature (Steinfeld, Levine & Shea 1998; Pynoos 2004), and finding solutions that meet the requirements of both the regulators and the householder requires considerable creativity on the part of the HMM provider (Tanner, Tilse & de Jonge 2007).

Review

Both service providers and consumers were asked about follow-up and review processes; the final stage of service provision. Consumers who had received major modifications reported that follow-up processes conducted by the service manager or a therapist were undertaken in order to check that work had been undertaken satisfactorily. Smaller jobs were followed up less commonly, although some consumers indicated that they felt there was an expectation that they would contact the service if there were difficulties. The service providers indicated that they were keen to receive feedback, and that unsolicited feedback was common. Many services have standardised feedback forms and regularly undertake final site inspections or phone checks for quality control, although they reported experiencing difficulty following up on the work due to time pressures. Consumer feedback was reported to be generally positive and grievances were few, although it was noted that many older people appear to be reluctant to complain. The importance of follow up has been noted in the literature, to check the impact of the modification as well as to identify unexpected difficulties (Gitlin Miller & Boyce 1999; Klein, Rosage & Shaw 1999).

Summary: service provision

The data obtained through the consumer and service provider studies presents a general picture of the provision of HMM services in the contemporary Australian context that includes all four stages of the service provision process: access, assessment, delivery and review. Access to HMM services in Australia has a number of dimensions, including issues of public awareness, referral arrangements, standardisation of eligibility and priority determination, cost to consumers and overall availability. With respect to assessments, the major difficulty appears to be the lack of suitably trained occupational therapists. Key issues relating to the quality of service delivery include timeliness, limited funding, the involvement of consumers, the impact of multiple forms of regulation, and the need for review and feedback processes. Many of these issues have been identified in the international literature on HMM service provision, which is an important source of ideas for service enhancement. There is a need for the general picture of HMM provision provided here to be supplemented by research studies examining the issues identified in greater detail in specific localities and organisations.

7.2.5 Service outcomes

In chapter 3 the outcomes of HMM services are divided into two broad groups: direct consumer outcomes and societal outcomes. Following the definition of HMM in chapter 2, three broad sets of client outcomes can be distinguished: safety; independence; and lifestyle and identity. Societal outcomes are classified in section

3.5 into three sets: fiscal sustainability: positive ageing; and ageing in place. These two sets of outcomes of HMM services are the focus of this final section of the discussion of study findings.

Client outcomes

The small, but growing, international literature on the client outcomes of HMM services was summarised in section 3.4. Subjective outcome measures of HMM are consistently positive. Studies report that recipients believe that the services have improved their safety, reduced their risk of accidents, reduced the strain on carers, increased their levels of independence and control over day-to-day activities, restored their dignity, helped them to avoid hospitalisation, improved their peace of mind, and increased their capacity for social interaction. Major modifications, in particular, are perceived as having transformed people's lives (Heywood 2001).

Studies aiming to measure or observe outcomes of HMM through more objective means are somewhat more restrained in their findings but are, nevertheless, highly positive overall. For example, home modifications have not been found to independently reduce falls but, in conjunction with a comprehensive home visit, they significantly reduce the risk of falling for frail older people who have previously fallen (Close et al. 1999; Cumming et al. 1999). In a randomised control trial, frail elderly people systematically provided with home modifications and assistive technologies had reduced rates of morbidity (Mann et al. 1999). A study found that home modifications have enabled people to undertake activities they had become unable to engage in and restored access to certain areas of the home (Heywood 2005). Another study found that introducing home modifications to functionally vulnerable people aged over seventy years of age reduced mortality (Gitlin et al. 2006).

The findings of the service provider and consumer studies are broadly consistent with this positive picture of the outcomes of HMM services. HMM organisations in Australia have not undertaken a long-term evaluation of consumer outcomes and thus our knowledge of the long-term outcomes of HMM provision is anecdotal. However, most providers who participated in the study focus groups were convinced of the positive, and sometimes life-changing, impact of HMM services on the lives of consumers. HMM services were viewed by service providers as fundamental to many the ability of people to remain in their own homes, and as important in reducing their demands on carers and other care services.

A similarly positive view of the outcomes of HMM services emerges from the consumer interviews. Most of those interviewed reported positive outcomes from their access to HMM services, including some who reported that home modifications had been life-transforming and a godsend. The positive outcomes noted included greater independence, improved ease to undertake tasks, heightened confidence, a sense of safety, greater security, prevention of accidents and increased feelings of wellbeing. Several reported that HMM services had been decisive in enabling them to remain in their homes.

Societal outcomes

As reported in section 3.5 there has been very little systematic research on the impact of HMM services at a societal rather than a client level. To the extent that HMM services have positive outcomes on the safety, independence and wellbeing of consumers it can be assumed that HMM services are contributing to the goal of positive ageing, and to the extent that these services are widening the housing choices of older people it can be assumed that they are contributing to ageing in place. However, the impact of HMM services on fiscal sustainability, understood as the capacity of the state to meet the financial challenges posed by older people, has not been researched in Australia. In theory, improved HMM services may reduce levels of hospitalisation by preventing accidents, and reduce the length of hospital stays by increasing the capacity of older people to live at home following their discharge from hospital. Improved HMM services may also enhance our capacity to care for individuals with chronic conditions in the community and reduce or delay their entry to residential care services. Data on the impact of HMM relative to other forms of community care provision, and on the cumulative impact of HMM and other services, is required for a more rigorous approach to the funding of environmental support services. A strong intuitive case can be made for investing in HMM as a proactive and preventative environmental measure to reduce expenditure on health services and the provision of care in residential aged care homes. However, the research evidence on which to base this case is lacking.

7.3 Implications for policy and research

The central message of this report is that there is a case for reconsidering the current approach to the organisation and provision of HMM services for older Australians. These services have developed incrementally over the past two decades, primarily as a minor component of the HACC program. In various parts of the country a number of other HMM programs and initiatives have been developed, particularly by state and territory housing departments and also by health agencies and the Commonwealth DVA. The outcome is the complex patchwork of services described in this report. This complex patchwork comprises many organisations that have built considerable expertise in HMM provision, and the evidence of this study is that HMM services are highly regarded by their consumers. However, the overall organisation of services has a number of shortcomings. There are no explicit policy goals, no benchmarks for levels of service provision, and great disparities in the level of service provision across the country. HMM services have a somewhat low-key identity, and links with the health system are under-developed. There are widespread shortfalls of professional and technical expertise across the sector and no sector-wide information systems. The system as a whole appears to be grossly underfunded, although it is difficult to verify this, given the lack of clarity around the objectives and benchmarks for levels of service provision.

These shortcomings, together with the anticipated increase in demand for HMM resulting from the growth in the number of older Australians in the years ahead, suggest a need to review policy settings for HMM provision. Indeed, there is an argument to develop a new vision for HMM that recognises these services as an important element of a national approach to ensuring that the housing of older Australians is suited to their changing needs and circumstances. HMM services lie at the intersection of health, community care and housing policies for older Australians, contributing to their safety, independence, and lifestyle. Rather than being viewed primarily as a component of community care provision, HMM services could be conceived as a major contributor to assisting older people to make housing adjustments as their needs and personal circumstances change. HMM programs could be explicitly designed to contribute to a range of housing, health and community care objectives, including improved safety in the home (especially the prevention of falls) and the reduction of hospital admissions; a reduction in the length of hospital stays as improvements in the home environment enable older people to return home earlier; assisting older people with a range of chronic health conditions to remain living in the community; improving the working and home environment of formal and informal carers; and reducing or delaying admissions to residential aged care homes. As such they could be viewed as pursuing both shelter and non-shelter outcomes.

Greater recognition of the housing policy outcomes of HMM has a number of advantages. Firstly, it focuses attention on the role of HMM in improving the lifestyles of older people, including their need for safety and independence. It also highlights the need for tenure-neutral outcomes. HMM services are required by many older people, not only those who are eligible for community care programs such as HACC. A housing perspective opens up a more universal approach to the ways in which HMM services are viewed. Secondly, it links the provision of HMM services to the wider issue of designing housing according to accessible and adaptable building standards, and to wider strategies to achieve age-friendly housing. Thirdly, it acknowledges that HMM services are based on the professional and technical expertise of the building industry, including architects, and occupational therapists with a particular interest in the living environments of older people. Many of the capabilities involved in HMM provision are more directly linked to housing as a field of policy and practice than to any other field.

The broad form of such a national approach to HMM provision can be deduced from the findings of this report. It would comprise a national program with a set of objectives for housing, health and community care outcomes, linked to a national strategy for housing older people and a whole-of government ageing policy. It would involve a lead agency at the Commonwealth and state and territory levels, and a collaborate approach to policy and service provision between the two levels of government. There is a strong case for lead agency responsibility at state and territory levels resting with housing departments, although the administrative arrangements are less important than ensuring close policy and operational links between housing, health and community care departments and programs. Within each state a network of local and regional HMM organisations similar to those that exist now in NSW and Queensland, would be responsible for providing HMM services locally, linked to wider advice, information and referral services. These organisations could be responsible for HMM services funded by HACC, DVA and health organisations, as well as services provided through the new national program. Service provision arrangements might vary from place to place but would address the issues of access, assessment, delivery and review raised in this report. There would be a national approach to benchmarks for the levels of services to be provided, terms of eligibility and user charges, and the development of professional and technical expertise. The new service arrangements would build on existing services and seek to incorporate some of the best features of current services, such as the Victorian Archicentre Home Renovations Service, the NSW Research and Resource Centre, and the Queensland Smart Housing and Home Access initiatives. Local services would draw funding from the new national program, the HACC program and other sources in a manner similar to the way that the Queensland HAS program now draws funding from both housing and community care sources.

Based on the findings of this report, a strong case can be made for rethinking HMM in this way. This would be the first major change to structuring HMM services since the beginning of the HACC program in the 1980s. However, if such a broad reengineering of HMM is not feasible, numerous specific issues should be addressed in the existing service system, at national, state and local levels. The key issues identified in this report are:

- → Objectives. There is a case for clearer articulation of the desired health, community care and housing outcomes of HMM services, linking these outcomes and provision of services.
- → Information and awareness. HMM services in some parts of the country have a low profile and appear to be not widely known or understood by potential

consumers. There is a need for improved public awareness of HMM services and the range of services they can offer to contribute to the wellbeing of older people.

- → Referrals. Improved linkages at the local level between hospitals and primary health care providers such as GPs and HMM services are required in some places. These links could be facilitated if there were clearer linkages at the policy or program levels between health and community care providers.
- → Eligibility, priority and user charges. The range of funding programs through which HMM services are provided, and the high level of local discretion in determining eligibility and charges, has resulted in a perception among some consumers of inequities in access to services as well as the complexity of the processes of determining eligibility, priority and cost. Improved information on the rationale for eligibility, priority and charging decisions appears to be required, and there may be a case for greater standardisation of these.
- → Assessment services. An improved capacity for assessing HMM requirements, especially with respect to major modifications, is needed. In part this is a matter of the availability of suitably trained occupational therapists to undertake this role. However, it also raises the issue of whether services such as the free home inspection service provided by the Victorian Archicentre Home Renovation Service or the information services provided through the Queensland Government's Smart Housing and Home Access initiatives should be made more widely available.
- → Benchmarks. The level of provision of all types of HMM services varies widely from state to state and between different localities within states. While some variation to take account of local differences is appropriate, there are currently no benchmarks for levels of provision of HMM service to older people. There appear to be shortfalls of most types of HMM services in most places, and thus extensive service rationing is in place, suggesting the need for significantly higher levels of funding of HMM services.
- → Services beyond HACC. Other than the HAS program in Queensland, services to public housing tenants and veterans and their families, and some specific services in other states, no publicly funded HMM services are available to older Australians who are not eligible for HACC. Consideration needs to be given to the extension of HMM services to the wider group of older Australians.
- → Professional and technical expertise. There appears to be a major shortfall in occupational therapists and builders with expertise in HMM, which impacts negatively on all stages of providing HMM services, especially assessment and service delivery. Planning to address this issue at state and national levels, including working with the relevant professional bodies, is required.
- → Impact of regulation. The delivery of HMM services is hampered by the cumulative impact of numerous building, health, disability and legal requirements. There is a need for HMM organisations to collectively address the issues involved and attempt to find solutions that go some way towards meeting the requirements of regulators, consumers and HMM service providers.
- → Service provision data. Steps should be taken to find better ways to measure levels of provision of HMM services, starting with standardising definitions of service types. Ideally, data would be drawn from all HMM programs to draw a national picture of HMM provision.

While these policy implications are well supported by the research evidence presented in this report, a strong case can be made for developing the research evidence base to underpin HMM policies and services in Australia. As already noted several times in this report, the paucity of the current evidence base is a continuing

impediment to further policy development. Building on the foundation of this report and the small number of other Australian studies pertaining to HMM policy, six areas for further research can be identified. These are:

- → Need and demand. The level and nature of current and anticipated need and demand for HMM services in Australia is largely unknown, and there are no studies similar to those conducted in the USA (and to a lesser extent the UK) that estimate need based on national data on the dwelling characteristics of older people, the difficulties they experience in the home, older people's housing aspirations and HMM service usage. There is a need to review and collate all existing data from official sources such as ABS and AIHW, academic studies such as the ALSA, and consumer data such as the HACC dataset and the review of the HAS program. While such a review may be valuable, a more robust evidence base for this and other areas of housing provision for older people may be required. For example, a national survey of the housing circumstances of older people, including a focus on HMM issues, may be required to provide a foundation for evidence-based policy.
- → Evaluation of key initiatives. One advantage of the incremental policy approach of the past two decades is that there have been a number of different approaches to HMM provision that should now be evaluated with a view to policy and program development. As indicated in the report, some programs have been evaluated in recent years but the scope of these evaluations has sometimes been limited. Examples of evaluations that would add to the evidence base for policy and program development are: an evaluation of the Queensland HAS program, to explore the issues involved in developing a statewide HMM system that includes but goes beyond the parameters of the HACC program; an evaluation of the Victorian Archicentre's free home inspection service for older people, to explore the issues involved in developing a national approach to assessing and improving the quality of housing for older people; and a comparative evaluation of the loan products provided by state housing authorities for HMM major modifications, to explore the potential of a national approach.
- → Pilot projects. Given the importance of a creative, innovative and outcome-driven approach to HMM provision, sponsoring a number of pilot projects with a strong research component would provide much needed data on the potential of HMM services to achieve particular health, community care or housing outcomes. For example, local pilot projects specifically designed to assess the impact of environmental modifications on the prevention of falls, or to assess the impact of close collaboration between a local hospital and an HMM provider on hospital discharge processes, would contribute to the development of an evidence base for the efficacy of HMM services.
- → Practice. This report has drawn attention to the significant body of international literature on the actual provision of HMM services, including organisational and professional practice relating to access, assessment, delivery and review of services. While this study has examined these practices at a general level, closer examination of the actual practices of Australian HMM providers designed to understand the factors impacting on the provision of services and outcomes, would significantly strengthen the evidence base.
- → Labour market. Labour market issues, especially the supply of occupational therapists, architects and building tradespersons with an expertise in HMM, have been identified in this report as factors constraining the development of HMM provision in Australia. Studies of the factors impacting on supply and the strategies that have been effective in addressing supply problems are required.

→ Outcome and cost-effectiveness studies. Most importantly, there is a need for studies that examine the safety, independence and lifestyle outcomes for older people of HMM and related services. Studies that examine the cost of services, relate these to subjective and objective measures of outcomes over time, and make comparisons with the costs and benefits of alternatives, such as hospitalisation and other forms of aged care provision, are needed to provide a comprehensive evidence base for the public policy issues raised in this report.

In short, the evidence presented in this study suggests that there is a strong case for expanding and re-organising HMM services to promote the safety, independence and life preferences of older people. A wider research program covering the areas listed above would add depth to the research evidence base on which to build HMM policies and programs for an aging Australian population.

7.4 Conclusion

The findings of this study strongly confirm the hypothesis that generated the study, that is, that the potential role of HMM services to achieve health, community care and housing outcomes for older Australians is yet to be realised. The study has presented evidence concerning the strengths and shortcomings of HMM policy and provision, considered the policy implications of the study findings, and proposed a program of research to further strengthen the evidence base. The report provides a research foundation for a policy discussion concerning HMM provision and the authors look forward to engaging in this conversation with the policy community.

This discussion should locate HMM policies in the wider dialogue concerning the housing options and choices available to older Australians. The provision of HMM services is but one component of a repertoire of policies that Commonwealth, state and territory governments might undertake to expand these choices, including promoting accessible housing design; encouraging a variety of suitable housing by the private and community sectors, including age-specific and non-age-specific housing; protecting older people as consumers of housing; and providing or subsidising housing or housing costs for those older people who are unable to access an acceptable level of housing older people is fundamental to policies designed to meet the challenges of an ageing population, and HMM services are part of that approach.

REFERENCES

- ABS 2003a. *Disability, ageing and carers, Australia. (4430.0* Australian Bureau of Statistics, Canberra.
- ABS 2003b. *Ageing in Australia*, Catalogue No. 2048.0. ABS. Australian Bureau of Statistics, Canberra.
- AIHW 2002. Older Australia at a glance. Australian Institute of Health and Welfare, Canberra.
- AIHW 2003. *Disability: the use of aids and the role of the environment.* Australian Institute of Health and Welfare, Canberra.
- Andrews, G & Carr, S 1990. Health care for the aged. In H Kendig & J McCallum (eds), *Grey policy: Australian policies for an ageing society.* Allen & Unwin, Sydney.
- Auriemma, D, Faust, S, Sibrian, K & Jimenez, J 1999. Home modifications for the elderly: implications for the occupational therapist. *Physical and Occupational Therapy in Geriatrics*, 16(2–4), 135–44.
- Australia 2002. Intergenerational report 2002–03, 2002–03. Budget Paper No. 5. Canberra.
- Australia 2007. Intergenerational report 2007, Canberra. Available at <u>http://www.treasury.gov.au/igr</u> Accessed 2 April 2007.
- Australian Local Government Association 2006. *Age-friendly built environments: opportunities for local government.* Australian Local Government Association, Canberra.
- Awang, D 2002. Older people and participation within disabled facilities grant processes. British Journal of Occupational Therapy, 65(6) 261–8.
- Bartlett, H & Peel, N 2005. Healthy ageing in the community. In GJ Andrews & DR Phillips (eds) *Ageing and place: perspectives, policies, practice.* Routledge Press, London.
- Bayer, A & Harper, L 2000. *Fixing to stay: a national survey on housing and home modification issues.* American Association of Retired Persons, Washington, DC.
- Beer, A, Faulkner, D & Gabriel, M 2006. 21st century housing careers and Australia's housing future: literature review. Research Paper. AHURI, Melbourne.
- Borowski, A. Encel, S & Ozanne, E 1997. Introduction. In A Borowski, S Encel & E Ozanne (eds), *Ageing and Social Policy in Australia*. Cambridge University Press, Melbourne.
- Borowski, A. & Hugo, G. (1997). Demographic trends and policy implications. In A. Borowski, S. Encel & E. Ozanne (Eds.), *Ageing and Social Policy in Australia*. Melbourne: Cambridge University Press.
- Bridge, C. 2005. Retrofitting, A response to lack of diversity: an analysis of community provider data, *National Housing Conference 2005*. Perth, WA.
- Bridge, C, Parsons, A, Quine, S & Kendig, H. 2002. *Housing and Care for Older and Younger adults with disabilities: positioning paper.* Australian Housing and Urban Research Institute, Melbourne.

Carter, SE Campbell, EM, Sanason-Fisher, RW & Gillespie, WJ 2000. Accidents in older people living at home: a community-based study assessing prevalence, type, location and injuries. *Australian and New Zealand Journal of Public Health*, 24(6) 633–36.

Clapham, D 2005. The meaning of housing. Policy Press, Bristol.

- Clare, R & Tulpule, A 1994. *Australia's ageing society*, EPAC Background Paper No. 37. Economic Planning Advisory Council, Canberra.
- Clemson, L & Martin, R 1996. Usage and effectiveness of rail, bathing and toileting aids. *Occupational Therapy in Health Care,* 9, 41–58.
- Clemson, L, Roland, M & Cumming, R. 1992. Occupational therapy assessment of potential hazards in the homes of elderly people: An inter-rater reliability study. *Australian Occupational Therapy Journal*, 39(2) 23-26.
- Clemson, L, Roland, M & Cumming, RG 1997. Types of hazards in the homes of elderly people. *Occupational Therapy Journal of Research*, 17(3) 200–13.
- Close, J, Ellis, M, Hooper, R, Glucksman, E, Jackson, S & Swift, C 1999. Prevention of falls in the elderly trial (PROFET): a randomised controlled trial. *Lancet*, 353(9147) 93–7.
- Clough, R, Leamy, M, Miller, V & Bright, L 2004. *Housing decisions in later life,* Palgrave Macmillan, New York.
- Colombo, M, Vitali, S, Molla, G, Gioia, P & Milani, M 1998. The home environment modification program in the care of demented elderly: some examples. *Archives of Gerontology and Geriatrics*, 27(6) 83–90.
- Connell, BR & Wolf, SL 1997. Environmental and behavioural circumstances associated with falls at home among healthy elderly individuals. *Archives of Physical Medicine*, 78 (February), 179–86.
- Cowan, D & Turner-Smith, A 1999. *The role of assistive technology in alternative models of care for older people*. The Royal Commission on Long Term Care, London.
- Cresswell, JW 1998. *Qualitative Inquiry and research design: choosing among five traditions*. Sage, Thousand Oaks, CA.
- Cumming, RG Thomas, M, Szonyi, G, Salkeld, G, O' Neill, E, Westbury, C, 1999. Home visits by an occupational therapist for assessment and modification of environmental hazards: a randomized trial of falls prevention. *Journal of American Geriatric Society*, 47(12) 1397–1402.
- DADHC 2006. HACC Home modifications: service type review feedback and directions, presentation to the Home Modification and Maintenance Services Biennial State Conference, September. NSW.
- Davison, B, Kendig, H, Stephens, F & Merrill, V 1993. *It's my place: older people talk about their homes*. AGPS, Canberra.
- Day, L, Fildes, B, Gordon, I, Fitzharris, M, Flamer, H & Lord, S 2002. Randomised factorial trial of falls prevention among older people living in their own homes. *British Medical Journal Clinical Research*, 325.
- de Jonge, D, Ainsworth, E & Tanner, B 2006. Home modifications down under. In WC Mann & A Halal (eds), *Promoting independence for older persons with disabilities: selected papers from the 2006 International Conference on Aging, Disability and Independence*, pp. 155–68. IOS Press, Washington, DC.

- Department for Communities and Local Government. 2006. *Delivering housing adaptations for disabled people: a good practice guide*. Department for Communities and Local Government, London.
- Department of Housing (DOH) 2002. *Home Assist secure review,* Department of Housing, Brisbane, Qld.
- Department of Housing (DOH) 2006. Annual report 2005–2006. Department of Housing, Sydney, NSW.
- Dewey, HM, Thrift, AG Mihalopoulos, C, Carter, R, Macdonell, RA, McNeil, JJ and Doonan, GA 2004. 'Out of pocket' costs to stroke patients during the first year after stroke—results from the North East Melbourne Stroke Incidence Study. *Journal of Clinical Neuroscience*, 11(2) 134–7.
- Department of Health and Human Services (DHHS) 1999. *Tasmanian plan for positive ageing 2000–2005*, Department of Health and Human Services, Hobart, Tas.
- Department of Health and Human Services (DHHS) 2005. *Tasmanian annual plan home and community care program 2005–06.* Department of Health and Human Services, Hobart, Tas.
- Department of Health and Ageing (DOHA) 2003. *Home and community care program minimum data set 2002–2003 Annual Bulletin*. Available at <u>http://www.health.gov.au/internet/wcms/Publishing.nsf/</u> Accessed 28 September 2005.
- DOHA 2004. *Home and community care program minimum data set 2003–2004 Annual Bulletin*. Department of Health and Ageing, Canberra. Available at <u>http://www.health.gov.au/internet/wcms/Publishing.nsf/</u> Accessed 28 September, 2005.
- DOHA 2006. *Home and community care program minimum data set 2004–05 Annual Bulletin*. Department of Health and Ageing, Canberra.
- DOHAC 1999. Ageing gracefully: an overview of the economic implications of Australia's ageing population profile. Occasional Papers New Series No. 10 (prepared by ACIL Consulting). Commonwealth Department of Health and Aged Care, Canberra.
- DOHAC 2000. Commonwealth, state and territory strategy on healthy ageing, prepared by the Healthy Ageing Task Force, Commonwealth, States and Territories of Australia. Department of Health and Aged Care, Canberra.
- Duncan, R 1998a. Blueprint for action: the National Home Modifications Action Coalition. *Technology and Disability*, 8(1–2) 85–9.
- Duncan, R 1998b. Funding, financing and other resources for home modifications. *Technology and Disability*, 8(1–2) 37–50.
- DVA 2006. *Department of Veterans' Affairs annual report 2005–06*. Department of Veterans' Affairs, Canberra.
- Edgington, A 1984. Survey of major adaptations. *British Journal of Occupational Therapy*, 47(2) 46–9.
- Fange, A. & Iwarsson, S 2007. Challenges in the development of strategies for housing adaptation evaluations, *Scandinavian Journal of Occupational Therapy.* 2007; 14: 140149

- Fange, A. & Iwarsson, S 2005. Changes in ADL dependence and aspects of usability following housing adaptation--a longitudinal perspective, *American Journal Occupational Therapy*, 2005,59(3):296-304.
- Faulkner, D & Bennett, K 2002. Linkages among housing assistance, residential (re) location and the use of community health and social care by old-old adults: shelter and non-shelter implications for housing policy development. Australian Housing and Urban Research Institute, Melbourne.
- Filion, P, Wister, A & Coblentz, EJ 1992. Subjective dimensions of environmental adaptation among the elderly: a challenge to models of housing policy. *Journal of Housing for the Elderly*, 10(1-2) 3–27.
- Fisher, AG 1998. Uniting practice and theory in an occupational framework. *The American Journal of Occupational Therapy*, 52(7) 509–20.
- Frain, JP & Carr, PH 1996. Is the typical modern house designed for future adaptation for disabled older people? *Age and Ageing*, 25(5) 398.
- Gibson, D 1998. *Aged care: old policies, new problems*. Cambridge University Press, Melbourne.
- Gilderbloom, JI & Markham, JP 1996. Housing modification needs of the disabled elderly: what really matters? *Environment and Behaviour*, 28(4) 512–35.
- Gill, TM, Williams, CS, Robinson, JT & Tinetti, ME 1999a. A population-based study of environmental hazard in homes of older persons. *American Journal of Public Health*, 89(4) 553–54.
- Gill, TM, Robinson, JT, Williams, CS & Tinetti, ME 1999b. Mismatches between the home environment and physical capabilities among community living older persons. *American Geriatrics Society*, *47*(1), 88–92.
- Gillespie, LD, Gillespie, WJ, Cumming, RG, Lamb, SH & Rower, BH 2001. Interventions for preventing falls in the elderly. The Cochrane Library, Oxford.
- Gitlin, LN 2003. Conducting research on home environments: lessons learned and new directions. *Gerontologist*, 43(5) 628–37.
- Gitlin, LN & Corcoran, M 2000. Making home safer: environmental adaptations for people with dementia. *Alzheimer Care Quarterly*, 1(1) 50–8.
- Gitlin, L. N., Corcoran, M., Winter, L., Boyce, A., and Hauck, W. W. (2001). A randomized, controlled trial of a home environmental intervention: Effect on efficacy and upset in caregivers and on daily function of persons with dementia. *Gerontologist* 41(1-14).
- Gitlin, LN, Hauck, WW, Loraine, W, Dennis, M & Schulz, R 2006. Effect of an in-home occupational and physical therapy intervention on reducing mortality in functionally vulnerable older people: preliminary findings. *Journal of American Geriatric Society*, 54 950–55.
- Gitlin, LN, Luborsky, MR & Schemm, RL 1998. Emerging concerns of older stroke patients about assistive devices. *The Gerontologist*, 38(2) 169–80.
- Gitlin, LN, Miller, KS & Boyce, A 1999. Bathroom modifications for frail elderly renters: outcomes of a community-based program. *Technology and Disability*, 10(3) 141–9.
- Gosselin, C, Robitaille, Y, Trickey, F & Maltais, D 1993. Factors predicting the implementation of home modifications among elderly people with loss of independence. *Physical and Occupational Therapy in Geriatrics*, 12(1) 15–27.

- Greenwald, M & Barrett, L 2003. *These four walls … Americans 45+ talk about home and community*. American Association of Retired Persons, Washington, DC.
- Hakim, E & Bakeit, A 1998. A study of the factors which influence the length of hospital stay of stroke patients. *Clinical Rehabilitation*, 12(2) 151-156.
- Hanson, J 2001. From 'special needs' to 'lifestyle choices': articulating the demand for 'third age' housing. In S Peace & C Holland (eds), *Inclusive housing in an ageing society*. Policy Press, Bristol.
- Harrison, M 2004. Defining housing quality and environment: disability, standards and social factors. *Housing Studies*, 2004, 19(5) 691–708.
- Hawkins, R & Stewart, S. 2002. Changing rooms: the impact of adaptations on the meaning of home for a disabled person and the role of occupational therapists in the process. *British Journal of Occupational Therapy*, 65(2) 81–7.
- Healy, J 1988. Home care before HACC. Australian Journal on Ageing, 7(4) 31-5.
- Healy, J 1990. Community services: long-term care at home? In H Kendig & J McCallum (eds) *Grey policy: Australian policies for an ageing society.* Allen & Unwin, Sydney.
- Heywood, F 2001. *Money well spent: the effectiveness and value of housing adaptations*. Policy Press. Bristol.
- Heywood, F 2004a. The health outcomes of housing adaptations. *Disability and Society*, 19(2) 129–43.
- Heywood, F 2004b. Understanding needs: a starting point for quality. *Housing Studies*, 19(5) 709–26.
- Heywood, F 2005. Adaptation: altering the house to restore the home. *Housing Studies*, 20(4) 531–47.
- Heywood, F, Oldman, C & Means, R 2002. *Housing and home in later life*. Open University Press, Buckingham.
- Howe, A 1997. The aged care reform strategy: a decade of changing momentum and margins for reform. In A Borowski, S Encel & E Ozanne (eds), *Ageing and Social Policy in Australia*. Cambridge University Press, Melbourne.
- Howe, A. 2003. Housing an older Australia: more of the same or something different? Keynote Address, *Housing Futures in an Ageing Australia Conference*, 10 November, 2003. Melbourne. Available online at <u>http://www.homemods.info/files/HACCServReviewFeedbackDirection_JudyHa</u> <u>rwood 0.pdf</u> Accessed 4 September 2008.
- Johnson, M 2005. *Home Assist secure client satisfaction research*. Colmar Brunton Intelligence, Brisbane.
- Jones, A, de Jonge, D & Phillips, R 2008. *The impact of home maintenance and modification services on health, community care and housing outcomes in later life,* Positioning Paper. Australian Housing and Urban Research Institute, Melbourne.
- Kendig, H 1984. Housing careers, life cycle and residential mobility: implications for the housing market, *Urban Studies*, 21(3) 271–83.
- Klein, SI, Rosage, L & Shaw, G 1999. The role of occupational therapists in home modification programs at an area agency on aging. *Physical and Occupational Therapy in Geriatrics*, 16(3–4) 19–37.

- KPMG 2006a. *Report on existing HACC service models in NSW home modifications and maintenance*. Department of Ageing, Disability, and Home Care, Sydney.
- KPMG 2006b. Alternative models for home modifications discussion paper. Department of Ageing, Disability and Home Care, Sydney.
- KPMG 2007. *Final report of the review of the aids and equipment program.* Melbourne: Department of Human Services.
- Krefting, LH & Krefting, DV. 1991. Cultural influences on performance. In C Christiansen & C Baum (eds), Occupational Therapy: overcoming human performance deficits. Slack, Thorofare, NJ.
- Kutty, NK 1999. Demand for home modifications: A household production function approach. *Applied Economics*, 31(10) 1273-1281.
- Lansley, P, McCreadie, C, Tinker, A, Flanagan, S, Goodacre, K & Turner-Smith, A. 2004. Adapting the homes of older people: a case study of costs and savings. *Building Research and Information*, 32(6) 468–83.
- Law, M, Baptiste, S, Carswell, AM, Polatajko, H & Pollock, N 1994. Canadian occupational performance measure, 2nd edn.Canadian Association of Occupational Therapy, Toronto.
- Law, M, Cooper, B, Strong, S, Stewart, D, Rigby, P & Letts, L 1996. The personenvironment-occupation model: a transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*, 6 9–23.
- Lawton, MP & Nahemow, L 1973. Ecology and the aging process. In C Eisdorfer & MP Lawton (eds), *Psychology of adult development and aging*. American Psychological Association, Washington, DC.
- Liebig, PS & Sheets, DJ 1998. Ageism, disability and access to environmental interventions. *Technology and Disability*, 8(1) 69–84.
- Lilja, M., Mansson, Jahlenius, L. & Sacco-Peterson, M. 2003. Disaiblity Policy in Sweden: Policies concerning Assistive Technology and Home mOdification Services *Journal of Disabilit Policy Studies*, 14 (3) 130-135.
- Lund, ML & Nygard, L 2004. Occupational life in the home environment: the experiences of people with disabilities. *Canadian Journal of Occupational Therapy*, 71(4) 243–51.
- Lysack, CL & Neufeld, S 2003. Occupational therapist home evaluations: inequalities, but doing the best we can? *American Journal of Occupational Therapy*, 57(4) 369–79.
- McCallum, J 1997. Health and ageing: the last phase of epidemiological transition. In A Borowski, S Encel & E Ozanne (eds), *Ageing and social policy in Australia*. Cambridge University Press, Melbourne.
- McCreadie, C & Tinker, A 2005. The acceptability of assistance technology to older people. *Ageing and Society*, 25(1) 91–110.
- Mackenzie, L, Byles, J & Higginbotham, N 2002. A prospective community-based study of falls among older people in Australia: frequency, circumstances, and consequences. *OTJR Occupation Participation and Health*, 22(4) 143–52.
- McLean, D & Lord, S. 1996. Falling in older people at home: transfer limitations and environmental risk factors. *Australian Occupational Therapy Journal*, 43(1) 13– 18Mann, WC, Hurren, D, Tomita, M, Bengali, M & Steinfeld, E 1994.

Environmental problems in homes of elders with disabilities. *The Occupational Therapy Journal of Research*, 14(3) 191–211.

- Mann, WC, Hurren, D, Tomika, M & Charvat, B 1996. Use of assistive devices for bathing by elderly who are not institutionalized. *Occupational Therapy Journal of Research*, 16, 261–286.
- Mann, WC, Ottenbacher, KJ, Fraas, L, Tomita, M & Granger, CV 1999. Effectiveness of assistive technology and environmental interventions in maintaining and reducing home care costs for the frail elderly: a randomized control trial. *Archives of Family Medicine*, *8* 210–17.
- Messecar, DC, Archbold, PG, Stewart, BJ & Kirschling, J 2002. Home environmental modification strategies used by caregivers of elders. *Research in Nursing and Health*, *25*, 357–70.
- National Commission of Audit 1996. *Report to the Commonwealth Government*. AGPS, Canberra.
- National Resource Center on Supportive Housing and Home Modification (n.d.).HomeModification.Availableonlineathttp://www.homemods.org/pages/various/homemods.htmAccessed18December 2006.December 2006.December 2006.December 2006.
- Newman, S 2003. The living conditions of elderly Americans. *The Gerontologist,* 43(1) 99–109.
- Nikolaus, T & Bach, M 2003. Preventing falls in community-dwelling frail older people using a home intervention team (HIT): results from the randomized falls-HIT trial. *Journal of the American Geriatrics Society*, 51(3) 300–05.
- Nocon, A & Pleace, N 1997. 'Until disabled people get consulted ...': the role of occupational therapy in meeting housing needs. *British Journal of Occupational Therapy*, 60(3) 115–22.
- Ohta, RJ & Ohta, BM 1997. The elderly consumer's decision to accept or reject home adaptations: issues and perspectives. In S Lanspery & J Hyde (eds), *Staying put: adapting the places instead of the people.* Baywood Publishing Company, Amityville, NY.
- Oldman, C & Beresford, B 2000. Home sick home: using housing experiences of disabled children to suggest a new theoretical framework. *Housing Studies*, 15(3) 429–42.
- Olsberg, D & Winters, M 2005. Ageing-in-place? Intergenerational and intra-familial housing transfers and shifts in later life, Final Report, Melbourne.
- Parker, J, Allen, C, Franklin, B & Clapham, D 1998. *The right home: assessing housing needs in community care*. Centre for Housing Management and Development, University of Wales, Cardiff.
- Parliament, House of Representatives 2005. *Inquiry into long-term strategies to address the ageing of the Australian population over the next 40 Years*, Report of the House of Representatives Standing Committee on Health and Ageing, Canberra.
- Peace, SM & Holland, C 2001. *Inclusive housing in an ageing society: innovative approaches*. Policy Press, Bristol.

- Peel, N, Steinberg, M & Williams, G 2000. Home safety assessment in the prevention of falls among older people. *Australian and New Zealand Journal of Public Health*, 24(5) 536–39.
- Phillipson, C 1998. *Reconstructing old age: new agendas in social theory and practice*. Sage, London.
- Picking, C & Pain, H 2003. Home adaptations: user perspectives on the role of professionals. *British Journal of Occupational Therapy*, 66(1) 2–8.
- Powell, L 1992. Successful ageing, our common future? *Australian Journal on Ageing*, 11(1) 36–41.
- Productivity Commission 2005. *Economic implications of an ageing Australia*, Research Report, Canberra.
- Pynoos, J 1993. Toward a national policy on home modification. *Technology and Disability*, 2(4) 1–8.
- Pynoos, J 2001. *Meeting the needs of older people to age in place: findings and recommendations for action*. The National Resource Centre for Supportive Housing and Home Modification, San Diego, CA.
- Pynoos, J 2004. On the forefront of the ever-changing field of home modification. *Rehabilitation Management,* 17(3) 34–35, 50.
- Pynoos, J & Nishita, CM 2003. The cost and financing of home modifications in the United States. *Journal of Disability Policy Studies*, 14(2) 68-73.
- Pynoos, J & Regnier, V 1997. Chapter 3: Design directives in home adaptation. In S Lanspery & J Hyde (eds), *Staying put: adapting the places instead of the people*. Baywood, Amityville, NY.
- Pynoos, J, Liebig, P, Alley, D & Nishita, CM 2004. Homes of choice: towards more effective linkages between housing and services. *Journal of Housing for the Elderly*, *18*(3–4), 5–39.
- Pynoos, J, Liebig, P, Overton, J & Calvert, E 1997. The delivery of home modification and repair services. In S Lanspery & J Hyde (eds), *Staying put: adapting the places instead of the people*. Baywood, Amityville, NY.
- Pynoos, J, Tabbarah, M, Angelelli, J & Demiere, M 1998. Improving the delivery of home modifications. *Technology and Disability*, 8 3–14.
- Ranzin, R & Grbich, C 2001. Qualitative aspects of productive ageing, *Australasian Journal of Ageing*, 20(2) 62–6.
- Renforth, P, Yapa, RS & Forster, DP 2004. Occupational therapy predischarge home visits: a study from a community hospital. *British Journal of Occupational Therapy*, 67(11) 488–94.
- Rice, PL & Ezzy, D 1999. *Qualitative research methods: a health focus.* Oxford University Press, Melbourne.
- Rogers, ME, Rogers, NL, Takeshima, N & Mohammod, MI 2004. Reducing the risk for falls in the homes of older adults. *Journal of Housing for the Elderly, 18*(2) 29–39.
- Rojo-Perez, F, Fernandez-Mayoralas, G, Pozo-Rivera, FE & Rojo-Abuin, JM 2001. Ageing in place: predictors of the residential satisfaction of the elderly. *Social Indicators Research*, 54(2) 173–208.

- Rousseau, J, Potvin, L, Dutil, E & Falta, P 2001. A critical review of assessment tools related to home adaptation issues. *Occupational Therapy in Health Care*, 14(3–4) 93–104.
- Rousseau, J, Potvin, L, Dutil, E & Falta, P 2002. Model of competence: a conceptual framework for understanding the person-environment interaction for persons with motor disabilities. *Occupational Therapy in Health Care*, 16(1) 15–36.
- Rubenstein, LZ, Kenny, RA, Eccles, M, Martin, F & Tinetti, ME 2002. Evidence-based guideline for falls prevention: summary of the bi-national panel. *Generations*, 26(4) 38–41.
- SFS 1992 The Housing Adaptation Act 1992:1574 Stockholm: Riksdagstryck.
- SFS 1987 The Planning and Building Act 1987:10. Stockholm: Riksdagstryck.
- Sanford, J, Follette, SM & Jones, ML 1997. An analysis of the effects of ramp slope on people with mobility impairments. *Assistive Technology*, *9* 22–33.
- Sanford, JA, Echt, K & Malassigne, P 1999. An E for ADAAG: The case for ADA accessibility guidelines for the elderly based on three studies of toilet transfer. *Physical and Occupational Therapy in Geriatrics, 16* 3–4.
- Sapey, B 1995. Disabling homes: a study of the housing needs of disabled people in Cornwall. *Disability and Society*, 10(1) 71–85.
- Silverstein, NM & Hyde, J 1997. The importance of a consumer perspective in home adaptation of Alzheimer's households. In S Lanspery & J Hyde (eds), *Staying put: adapting places instead of people,* Vol. 2. Baywood, Amityville, NY.
- Silverstein, NM, Hyde, J & Ohta, R 1993. Home adaptation for Alzheimer's households: factors related to implementation and outcomes of recommendations. *Technology and Disability*, *2*(4), 58–68.
- Smith, E 2003. Visitability defined 2003. Available at <u>http://www.concretechange.org/Definition_of_Visitability.htm</u> Accessed 21 March 2007.
- Smith, R, Quine, S, Anderson, J & Black, K 2002. Assistive devices: self-reported use by older people in Victoria. *Australian Health Review*, 25(4) 169–77.
- Stark, S 2003. Home modifications that enable occupational performance. In L Letts, P Rigby, & D Stewart (eds), Using environments to enable occupational performance. Slack, Thorofare, NJ.
- Steinberg, M, Cartwright, C, Peel, N & Williams, G 2000. A sustainable programme to prevent falls and near falls in community dwelling older people: results of a randomised trial. *Journal of Epidemiology and Community Health*, 54(3) 227–32.
- Steinfeld, E & Shea, S 1993. Enabling home environments: identifying barriers to independence. *Technology and Disability*, 2(4) 69–79.
- Steinfeld, E, Levine, D & Shea, S 1998. Home modifications and the fair housing law. *Technology and Disability, 8* 15–35.
- Stevens, M. Holman, CD, Bennett, N. & de Klerk, N 2001. Preventing falls in older people: outcome evaluation of a randomized controlled trial. *Journal of the American Geriatrics Society*, 49(11) 1448–55.
- Steward, B 2000. Living space: the changing meaning of home. *British Journal of Occupational Therapy*, 63(3) 105–10.

- Stone, JH 1998. Housing for older persons: an international overview. *Technology and Disability*, 8(1–2), 91–7.
- Struyk, R 1987. Housing adaptations—needs and practices. In V Regnier & J Pynoos (eds), *Housing the aged: design directives and policy considerations*. Elsevier, New York.
- Swedish Institute 2007. Disability Policies in Sweden (Fact sheets on Sweden). Stockholm
- Tabbarah, M, Silverstein, M & Seeman, T 2000. A health and demographic profile of non-institutionalized older Americans residing in environments with home modifications. *Journal of Aging and Health*, 12(2) 204–28.
- Tanner, B 2005. The impact of home modifications on the meaning of home for older people living in the community. Masters thesis: The University of Queensland, St Lucia, Qld.
- Tanner, B, Tilse, C & de Jonge, D 2007. Restoring and sustaining home: the impact of home modifications on the meaning of home for older people. *The Journal for Housing for the Elderly*.
- Thompson, PG 1996. Preventing falls in the elderly at home: a community-based program. *Medical Journal of Australia*, 64(9) 530–32.
- Tinker, A 1999. *Ageing in place: what can we learn from each other?* The Sixth F. Oswald Barnett Oration, Melbourne.
- Trickey, F, Maltais, D, Gosslein, C & Robitaille, Y 1993. Adapting older persons' homes to promote independence. *Physical and Occupational Therapy in Geriatrics*, 12(1) 1–14.
- World Health Organization 2001. *International classification of function, disability and health.* World Health Organization, Geneva.
- Wylde, MA 1998. Consumer knowledge of home modifications. *Technology and Disability*, 8(1–2) 51–68.

APPENDICES

Appendix 1: Service provider focus group interview questions

Introduction

Please describe your organisation, the geographic area you target and what types of HMM services your organisation provides?

Information; Advice; Assessment; Design/project management; Grants; Falls assessments; Security services; Maintenance provision; Public housing modifications; Loans?

Need and demand

What are the characteristics of the consumers who use your service?

Age, gender, disability, circumstances, type of housing, tenure, etc

Which of the services you provide are most often requested by your consumers?

Are you able to meet the demand within your existing resources?

What is the extent of the shortfall, if any?

For what types of services do you have most difficulty meeting demand?

Do older people make requests for services that are outside your brief? What kind of requests do they make?

How do you assess the type of assistance consumers need?

Are some consumers ever reluctant to undertake the work recommended? Why or why not?

How do you prioritise the provision of services and allocation of subsidies?

Restricting eligibility?

Prioritising particular needs?

Limiting levels of assistance?

Do you use any other strategies to manage demand? (e.g. limit publicity?)

To what extent do potential consumers know about available services in their local area?

Thinking about the list of HMM services (as per above), which of these types of services are not readily available to your consumers? Why?

No funding/program in this state/territory?

No local service providers for that type of service?

Too difficult for consumers to access?

Too expensive?

What do you think are the most critical unmet HMM needs and gaps in services? types of services, quantity of services, geographic coverage

If more resources were to be put into HMM services what should be the highest priorities?

Service system

Service Delivery Challenges and Strategies

Are funding arrangements for HMM services adequate and equitable?

Do they support efficient and effective services or hinder service delivery? How?

What role do user charges play in funding services?

Do you have any trouble accessing the expertise you need to provide HMM services? eg occupational therapists; builders.

To what extent are consumers able to obtain assistance from family, friends or volunteer services? What sorts of assistance/services do they provide and how effective are they?

Is your HMM service impacted on negatively or positively by any legislation, building codes or other regulatory requirements?

What sorts of service and consumer data do you collect? Is it reported to funding bodies? Is this data collected in a consistent format?

How does your agency ensure service quality?

Are there any other issues that impact positively or negatively on your HMM service delivery?

Program / services linkages

Are you aware of any coordination between government HMM programs in the way they are funded and delivered? Eg Health, Housing, Community Care linkages.

What is the nature of service delivery linkages at the local level between HMM services and with the aged care, health and housing service systems? Which services do you have most and least contact with? Why?

How are consumers referred to your service? Where do they come from? Do you refer consumers to other aged care services? Which ones and how does this occur?

What is the nature of the relationships between HMM services? Are there networks between services or peak bodies representing services?

How involved is the private sector in provision of HMM services? What sorts of services are provided in the private sector? What sort of relationships exist between public, community and private sectors in provision of HMM services?

In terms of coordination and linkages, what works well? How could it be improved?

What are the main policy impacts on your work and HMM services? What wider public policies are your services linked to?

Consumer outcomes

Do you follow up to obtain feedback form consumers? How satisfied are consumers with your service?

What do consumers value most about the service? What are the things about the services that consumers most complain about?

In what ways do you think the lives of consumers are enhanced as a result of accessing HMM services?

Do you have any brochures, information material, annual reports, websites, etc that will give us more information about your service? How can we obtain these?

Jurisdiction	Participants	Sectors	Programs	Roles
Queensland		NGO Community	HAS	- Occupational
 Focus group Teleconference 	10 16	NGO Church Local Government Private sector State Government	HACC Home Modifications Public Housing Public Hospital	Therapist - Service Coordinator / Manager
NSW	16	NGO Community University State Government Local Government NGO peak body	HACC HMM ILC	Service Coordinator/Manager Builder Academic Researcher
Australian Capital Territory	5	NGO Private sector State Government	HACC HMM Falls Prevention ILC Disability Services	Occupational Therapist Builder Service Coordinator/Manager
Victoria	10	NGO Private sector State Government Local Government	HACC HMM Home Renovations Service Aids and Equipment Community Health	Architect Occupational Therapist Policy and Program Manager Service Coordinator/Manager
Tasmania	10	NGO State Government	Public Hospital HACC HMM ILC Community Health Public Hospital	Occupational Therapist Service coordinator/Manager Policy and Program Manager
Western Australia	16	Private sector State Government NGO (including volunteer service)	HACC HMM DVA HMM Aids and Equipment Hospital Public Housing Home lending Disability Services	Occupational Therapist Policy and Program Manager Service Coordinator/Manager
South Australia	9	State Government NGO Private sector	HACC HMM Aids and Equipment Public Hospital	Occupational Therapist Service Coordinator/Manager Policy and Program Manager Builder

Appendix 2: Focus group participants

Appendix 3: Consumer interview questions

Experience of home How long have you lived here? Who lives here with you? What is important to you about this home? What do you like about living here? Have you considered moving? If you were to move: What would you miss most about living here?

What would be important to you when looking for somewhere to live?

Why did you choose to stay and make changes?

How do you mostly spend you time at home?

Need

Are you happy with your house at the moment? If no, what are your major concerns?

Are there any activities you have difficulty managing around the home?

Can you manage? Do you have any concerns?

Managing your home -

Safety issues

Security issues

Your ability to function within and around the home

Your independence and autonomy

Your access to areas of the home, yard, neighbourhood

Pursuing interests and activities

Have you had a fall or accident?

What are your main health concerns at this point in time?

In what way do they impact on you in the home?

Quality of life

Pain/discomfort/danger

Carer physical strain

How do you generally deal with difficulties you experience in and around the home?

Are there any things you would like to improve or change?

Knowledge

You recently accessed [name of service].

How did you find out about this service?

What did it offer you?

Do you know if it offers other services? If so, what else does it offer?

Were you provided with information about:

- What they offer
- How they work
- How much it would cost you
- How long the changes would take

Was this enough information to help you decide to use this service?

Do you believe that you were provided with enough information about the service to make an informed decision about whether:

To have the changes or improvements

What type of changes or improvements to make

Do you know of any other services that can assist you with maintaining / making changes or improvements to your home?

- Names of services
- How did you find out about them
- Do you know how to contact them

Do you know what they offer

Who can use them

How much it may cost you

How long it takes

Have you accessed any of these services

Experience

For those who have had changes and improvements:

Have you had any changes or improvements made recently? What were they?

What was the main reason for making these changes or improvements?

How did you determine what needed to be done?

Did you have any concerns about making changes?

Finding out about the process

Tell me about the process you went through to decide on and make the changes to your home?

How did you come in contact with the service? How did you find out about it?

Once you made contact what happened?

Was the process explained to you?

Were you happy with the process?

How long did it take for someone to come out and discuss your needs?

Who was involved e.g. health care professionals, builders, service, contractors?

What did they do?

What role did they play in the process?

What involvement did you have in the process?

Once the recommendations had been identified how did it take for the work to begin?

Do you feel that all the people involved (e.g. health care professionals, builders, service) worked together well? i.e. they communicated with each other and you in a timely and appropriate way?

Did you need to do anything to progress things?

Did you feel that the process was complicated in any way?

If you could suggest any changes to the process, what would they be?

Contractor

Tell me about how the work was done-what happened?

Once the work began, how long did it take for the mods to be completed?

Did the work impact on you in any way? If so, in what way?

Was it disruptive?

Were design standards a problem?

Consumer involvement

Do you feel the service acknowledged your concerns?

Did you feel you had choice and control during the process?

How much input did you have into the planned changes? Was there enough communication and/or involvement? Feel like a partner in the process?

Expenses

Did the service contribute to the cost of the changes?

How much did it cost you?

Do you think you got value for money? Was it worth the money you spent?

Was there any follow up?

What was the follow up process like?

Perceptions of the Service

How do you feel about the services offered to you by [name of service]

How happy are you with the service you received?

What do you believe is the best thing about the service?

Can you offer any suggestions to improve the service in any way?

If you needed more modifications, would you go through the program again?

Would you recommend the service to others and why/why not?

What else would be helpful to you in assisting you to continue living in your home?

Thinking about the changes you have made to your home...

What do you think about making further changes to your home?

What have you learned from this experience that would assist you with making future changes?

What did you think about having modifications done before you used this service?

Has your attitude towards modifications changed since having them? In what way?

Outcomes

Looking back on why you contacted the service:

Have the changes addressed your initial concerns?

Are you using the modifications?

Are you happy with the look of it?

Has it made a difference to you ? In what way?

Has it changed the feel or look of the home?

Has it changed the value of the home?

Has it changed the memories you have of the home?

Has it made it possible for you to continue living here?

Is it what you expected/wanted?

How have these services/changes made a difference for you in terms of:

Managing your home -

Safety

Security

Ability to Function within and around the home / Independence/ Ease/restoration of autonomy

Access to areas of the home, yard, neighbourhood

Pursues interests and activities /Allow you to do more

Confidence

Preventing falls or accidents

Considering a move

Quality of life? Identity / lifestyle?

How have they impacted on your health? Have they made any difference in terms of

Health - pain physical /mental health ; health of others

Are there any unexpected things that have changed since your had the modifications?

Have the changes made any things easier?

Have the changes made any things more difficult?

Have the changes impacted on other people who live here or visit?

What would you do to make the change better?

Would you recommend others make changes to their home why/why not?

Do you have any further concerns you need addressed? If so move onto barriers questions.

Barriers

For those with an unmet need:

What has prevented you from making (further) changes or improvements or accessing someone to assist you with maintenance?

Did you have any concerns about making changes?

Being too costly

Being too disruptive

Not likely to make a big difference to you

Change/affect the feel or look of the home

Attachment to your home

Control over home environment

Comfort/Space

Privacy

Change in roles at home

Being unsightly or embarrassing

Devaluing the home

Destroy the memories in the home

Change the function of your home

Too disruptive to other people in the home

Ability to foster relationships with other people

Respect from others

Uncertain about having strangers in the house

Compromise security

Impact on the future of your living situation

Person	Gender	Age	Living situation	Nature of disability	Nature of services	Dwelling type and location
Janice	F	56	Alone	Visual Problems; Osteo- arthritis (knees)	Replace light globes, fix cupboard doors	Unit – Melbourne Rented, first floor.
Karen	F	60	With spouse (carer)	General medical; Heart/respiratory; Frail old /faller; Musculoskeletal; Dementia	Bathroom redone, wheelchair accessible stair lift	House – Brisbane Two storey, 14 steps up, level access inside.
Harriett	F	69	With spouse (carer)	Parkinson's Disease	Handrails, small ramp	House – Adelaide Single level 4 bedroom.
Stephan and Maria	F	72	With spouse	General medical; Heart/respiratory; Musculoskeletal	Bath removed, shower installed, smoke alarms, referral to plumber	House – Brisbane Single storey, level block, brick.
Shirley	F	72	Alone	Epilepsy; Osteo-arthritis (knees); Decreased vision; Chronic obstructive Airways Disease	Ramps, handrails	Unit – Adelaide 1 bedroom attached
Tania	F	74	With spouse	Hypertension; Anxiety; Ataxia; Arthritis; Faller; Cared for by Husband	Ramps at front door, grab rails in bathroom, threshold ramps inside	House – Adelaide Low set.
Cynthia	F	76	Alone	General medical; Heart/respiratory; Musculoskeletal	Security doors, screens, general maintenance, consult and subsidy for other services (e.g. plumbing, electricity and handrail etc), carpentry, fix roof	House – Brisbane Two storey, lives upstairs, shower over bath, level entry from street and carport, laundry upstairs.
Margaret	F	77	With spouse	General medical; Heart/respiratory; Musculoskeletal	Rails in bathroom, toilet and staircase, bath board, door relatch outwards, smoke alarm, referral to plumber	House – Brisbane Two storey, lives with husbanc downstairs, son lives upstairs, 4 steps from bedroom to bathroom.

Person	Gender	Age	Living situation	Nature of disability	Nature of services	Dwelling type and location
Clarissa	F	77	Alone	Osteoporosis; Osteo-arthritis, Falls; Stroke; Right shoulder	Stair rail, stepless shower recess, shower hose	House – Melbourne Low set slab on ground.
Harriett	F	77	Alone	Osteo-arthritis (back) Emphysema, Heart disease	Ramp rails	Unit - Adelaide
Arthur	Μ	78	With spouse	General medical; Heart/respiratory	Grab rails in bathroom and toilet, non-slip in shower, modification to chair, extra rail on stairs	House – Brisbane Highset at back, low at front, 2 steps down into lounge and sunroom, 10 steps back entrance.
Joyce	F	78	With spouse (carer)	Wife has Alzheimer's	Ramp to front door, raised shower floor, stair lift, double glazing	Town House – Adelaide 2 storey, 3 bedroom.
Lenora	F	78	With spouse (carer)	Osteo-Arthritis (back, knees hips); Cares for Husband (Stroke)	Grab rails and shower hose in bathroom, ramp	House – Adelaide Low set.
Charles	Μ	78	With spouse	Renal Failure; Amputation; Stroke	Ramp at front door, grab rails (bathroom, toilet), back door, raised chair	House – Adelaide Single level brick.
George	Μ	79	Alone	General medical; Heart/respiratory; Frail old /faller	Lights replaced, shower modification, grab rails, smoke detectors, falls assessment, pest management	House – Brisbane Single storey, brick house acreage, level access from all sides.
Peter and Francis	Μ	79	With spouse	Musculoskeletal; Mental illness	Handrails up stairs, fixed seals of sunroof and sky light, removed wood, base for chair, mortaring,	House – Brisbane Three storey house on steep rising slope. 15 steps to back entrance, cluttered.
Rose	F	79	Alone	General medical; Heart/respiratory	Rails in bathroom, bath removed, washers, shower, step, lighting, smoke detectors, electricity safety switch, rails on stairs outside, louvers on windows.	Unit – Brisbane Ground floor one bedroom unit, 4 steps with rail to entrance.

Person	Gender	Age	Living situation	Nature of disability	Nature of services	Dwelling type and location
Janet	F	79	Alone	Arthritis in the knees	Replace light globes, clean gutters, cutting tree branches, bury the dog, install handrails	House – Melbourne Low set.
Judy	F	80	With spouse	General medical; Heart/respiratory: Frail old /faller	Repairs, shower hose, falls assessment, grab rails, security screens, step to house, handrails at entrances, fix cupboard doors	House – Brisbane One storey, gently rising slope 3 bedroom, rail at the front yard.
Rhonda	F	80	Alone	General debility	Regular spring clean, doors mended replace shower rose with a water saving one, unable to fix cavity slider	Unit - Melbourne Low set.
Genevieve	F	81	Alone	Arthritis	Ramps, handrails	House – Adelaide Low set.
Malcolm	Μ	81	With spouse	Parkinsons' (cared for by wife)	Grab rails, shower hose chair raiser	Unit – Adelaide Concrete slab
Maureen	F	82	Alone	Musculoskeletal issues; History of back surgery resulting in chronic pain	Doors fixed, locks installed, handrails installed and light globes replaced	Unit – Melbourne Slab on ground.
Martin	Μ	83	With spouse	Right hip; Stroke; General medical	Accessible bathroom plus repair and renovation	House - Melbourne High set single storey weatherboard.
Cassandra	F	83	Alone	Arthritis	Shower hose, grab rails, shower screen removed, bed/chair raisers	Unit - Adelaide
Alicia	F	83	With spouse	Arthritis	Ramp, rails	House - Adelaide
Michelle	F	84	Alone	Frail; Cardiovascular and musculoskeletal problems	Garden maintenance, remove bushes to provide clear path of travel to front door, handrails	Unit - Melbourne High set.
Margaret	F	86	Alone	General medical; Heart/respiratory; Frail old	Rails front and back, rails in bathroom, locks on windows,	House – Brisbane Double storey, all rooms

Person	Gender	Age	Living situation	Nature of disability	Nature of services	Dwelling type and location
				/faller; Musculoskeletal	security screens, grind uneven concrete, plumbing referral, carpet maintenance, electricity meter subsidy, carpet replacement subsidy,	upstairs, show over bath, toilet in bathroom, over toilet frame.
Sharon	F	89	Alone	Falls; Cardiac; General medical	Ramp at rear, shower modifications	House – Melbourne Low set Single storey weatherboard.
Doris	F	90	Alone	Arthritis; Osteoporosis; Limited vision	Ramp, handrails	House - Melbourne Low set slab on ground.
Douglas	Μ	90	With spouse	Circulatory condition; Falls	Remove bath and replace with stepless shower, door swing, handrails, reposition toilet	House - Melbourne Low set Single storey.

AHURI Research Centres

Queensland Research Centre RMIT-NATSEM Research Centre Southern Research Centre Swinburne-Monash Research Centre Sydney Research Centre UNSW-UWS Research Centre Western Australia Research Centre



Australian Housing and Urban Research Institute Level 1 114 Flinders Street, Melbourne Victoria 3000 Phone +61 3 9660 2300 Fax +61 3 9663 5488 Email information@ahuri.edu.au Web www.ahuri.edu.au