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introduction

SECTION 1

1 INTRODUCTION

Welcome to the 2019/2020 Annual Report for the Home Modification Information Clearinghouse (HMinfo). Established in 2002, HMinfo is an information service tasked with collating, reviewing, developing and disseminating evidence-based home modification knowledge, in order to enhance the independence and wellbeing of older people and younger people with disability; provide safe working environments for their carers and case worker's; and promote evidence-based best practice among home modification practitioners and prescribers.

In this report you will find:

- An explanation of the work we do and the online information that we provide.
- Our goals and objectives.
- An introduction to our people.
- A statement from our Director summarising the team's key achievements from the last financial year, including research output, keynote presentations, international collaborations and media involvement.
- Website Statistics: these are compiled from Google Analytics and our website's inbuilt reporting capabilities. The data is analysed to identify areas which need optimisation or changes in order to adapt to user trends, and to measure the effectiveness of our online strategy.
- A look into what the next year holds for us and what we plan to achieve.

For further information, visit the HMinfo website: www.homemods.info. It is free to register as a user and you may choose to receive regular updates from us.

To get more information, discuss issues or ask for assistance from our team, please email us at: hminfo@unsw.edu.au or call us directly on 1800 305 486 (free call).

For quick updates, join us on [Twitter@HM_Info](#), 'like' us on [Facebook](#) by entering "Home Modification Information Clearinghouse (UNSW)" into the search engine, connect with us on [LinkedIn](#), or follow us on [Pinterest](#).



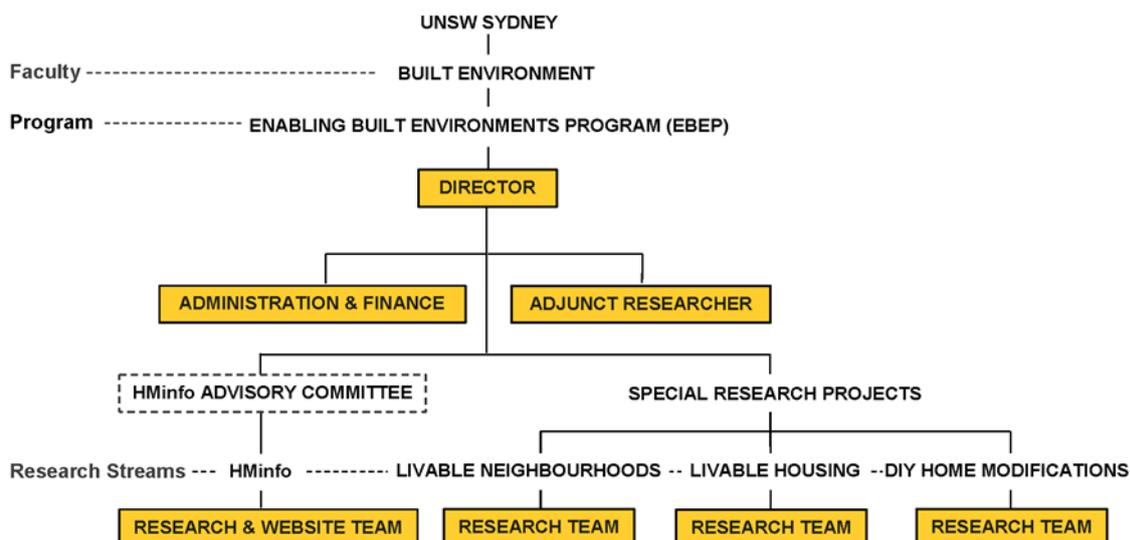
1.1 Enabling Built Environments Program (EBEP)



The Enabling Built Environments Program (EBEP) is an initiative of the Built Environment faculty at UNSW. EBEP's research is concerned with how the built environment, from home to town centre design level, impacts human function, quality of life and health / care costs for older people, young people with disability, and carers. Funded projects range from the macro level e.g. the performance of town centres and housing supply, to the micro level e.g. temperature regulation valves, smoke detectors, etc.

As shown in the chart below, EBEP currently comprises the Home Modification Information Clearinghouse (HMinfo), and associated Special Research Projects which currently have three research streams:

1. Liveable Neighbourhoods
2. Liveable Housing
3. DIY Home Modifications



The Special Research Projects complement and inform the work undertaken by HMinfo. The broad scope of EBEP research projects ensures that HMinfo's home modification research is suitably placed within the scope of current research and practice in the built environment for carers, older people and people with disability.

For the financial year 2019-2020, HMinfo is funded by the Australian Government Department of Health, under their Commonwealth Home Support Program (CHSP).

The EBEP Special Research Projects' three streams of research are funded by a range of government and non-government organisations. In 2019-2020, these included: ****list of funders go here****.

With the global advent of population ageing and the ongoing transition of young people with disability to living in the community, understanding the complex transactions between the built environment and humans, has become an increasingly critical factor in creating and maintaining sustainable informal and self-care systems for all nations.

EBEP benefits from its contract and casual research staff having a diverse skill set that includes: Industrial Design, Architecture, Engineering, Occupational Therapy, Health Sciences, Social Sciences, Biomechanics and Architecture.

1.1.1 EBEP Objectives

Our objectives continue to be:

- to build information and knowledge capacity within the residential and public construction sectors in order to improve design standards and to provide evidence for the effectiveness of special features to better the living environments of older and/or people with disabilities, and their carers;
- integrate diverse knowledge and cross-disciplinary research;
- develop a leading-edge enabling environments research cluster that will be accessible to the full range of industry and consumer target groups;
- facilitate home and community care outcomes, focusing on residential and town centre design strategies;
- promote innovative residential models for older people and people with disabilities within the building and development industry;
- develop Factsheets detailing best practice principles for assessment and the setting of priorities for planning and intervention services;
- promote the benefits and products of more enabling design to the broader community through mainstream media;
- share information at international, national, state and regional industry forums and liaise with peak regional providers and consumers;
- ensure that there are effective links between built environment service providers and their end users.

1.1.2 EBEP Special Research Projects

EBEP Special Research Projects undertaken alongside the Home Modification Information Clearinghouse (HMinfo) during 2019-2020, spanned the three research streams. An overview of the projects in each research stream are provided below.

LIVEABLE NEIGHBOURHOODS

Performance Based Access Design

Completion of Stage 2 of Performance Based Access Design for the Australian Building Codes Board to assist with the use of Verification Method DV2 in NCC 2019 Amendment 1. Offers the opportunity for innovative access design from first principles.

DV2 Verification Method Handbook and Ramps

Completed public submissions on behalf of EBEP to ABCB on active fire protection in Class 2 and 3 buildings, Accessible Adult Change Facilities, DV2 Verification Method Handbook.

Design Development Phase of Stadium Australia

Through Unisearch awarded and completed the Design Development Phase of Stadium Australia prior to the project being shelved by the NSW Government. Many interesting wayfinding solutions were developed for both the seating bowl and undercroft areas. The spiral ramps were unsuitable in their form for compliance with Part D3 of the NCC due to an unsuitable gradient and length of journey. A design solution was developed that was documented by the architect and verified by MacLennan using the research from the ABCB Ramps Project and addressing various user phobias associated with heights and open space.

Safe Movement Performance Based Access design

Through Unisearch was awarded the Safe Movement Performance Based Access design for the seating bowl areas of the Sydney Football Stadium. At present Design Briefs have been prepared for Suicide-jumping issues, barrier heights, stepped aisle lengths and gradients, emergency lighting for various stadium use scenarios.

Risk Impact Statement for Accessible Housing.

Preparation of Tender for ABCB concerning the preparation of a Risk Impact Statement for Accessible Housing. EBEP had assembled a highly qualified team which included Economists from the NAB. The tender was not successful, but Prof. Bridge was able to prepare a robust response as part of the public comment process on behalf of EBEP and her network.

LIVEABLE HOUSING

Washbasin Project

Text In early 2018 a new project was commenced in partnership with Caroma (GWA International – Bathrooms and Kitchen) to investigate the under-basin clearances and associated space requirements of washbasins in public accessible bathrooms. The focus of the research is wheelchair users, including those who may not always need to use a wheelchair. This year we were able to bring people into the lab for test sessions, completing 8 sessions before the lab unfortunately needed to be closed due to COVID-19. Participants relayed their experiences with public bathrooms to researchers, had their anthropometrics measured (body size characteristics), and completed a series of simulated tasks in their sessions. The simulated tasks were completed in 3D motion capture suits and looked at participant reach and how they used different basin configurations. While testing has been put on hold, data is being processed and preliminary reports prepared for Standards Australia regarding the basin dimensions.

Impacts of new and emerging Assistive Technologies for ageing and disabled housing

Text, etc This Australian This Australian Housing and Urban Research Institute (AHURI) funded project commenced in 2019 and comprised a stand-alone ‘first of its kind’ exploration of the potential for smart home Assistive Technology (AT) to reduce the need for support services, and it set out to measure in economic terms if so, how and to what extent.

The research approach was framed by a review of the literature and by a mix of qualitative explorations that aimed to identify the social and economic benefits and opportunities that AT does and can play in supporting independent living and the ability for people to age at home. The research undertaken used a National Survey, five focus groups and four case studies to explore how housing providers and older people and those with disabilities perceive AT and what they view as incentives and disincentives to invest therein; and what drives or does not encourage better AT policy. Overall a high degree of satisfaction with most smart home AT was reported by our respondents. However, satisfaction was higher for the Devices whilst lower satisfaction scores were associated with Services.

Australia’s smart home assistive technology (AT) uptake is still emerging and to date is mostly self-funded. The lack of clear policy frameworks and insufficient co-ordination has resulted in an ad-hoc and piecemeal implementation practice with many older and disabled people who could potentially benefit not having the skill, knowledge or financial ability to confidently invest in these types of products. The final report has now been peer reviewed and will be published by AHURI on its website in early 2021. For more information see <https://www.ahuri.edu.au/housing/research-in-progress/ahuri-research-projects/impacts-of-new-and-emerging-assistive-technologies-for-ageing-and-disabled-housing>

DIY HOME MODIFICATIONS

DIY Liveability App

The Liveability app for Android was rebuilt to comply with changes to Google Play policies. The original version was developed in 2012 and thus used processes that Google has since deprecated. The app can run on the latest Android-based phones and tablets, as well as older devices running Android 4.4 KitKat operating system and above.

DIY Modify App

The DIYmodify App was upgraded to comply with changes to Google Play policies. In addition, the upgrade served to increase its compatibility with newer Android-based devices. In order to remain compliant with changes to Google Play policies, a yearly review of Google Play policies was established.

1.2 Home Modification Information Clearinghouse (HMinfo)

The Home Modification Information Clearinghouse (HMinfo) was established in 2002. Its mission is:

To collate, review, develop and disseminate evidence-based home modification knowledge in order to enhance the independence and wellbeing of older people and younger people with disability, provide a safe working environment for their carers and careworkers, and promote evidence-based best practice among home modification practitioners and prescribers.

1.2.1 HMinfo Key Tasks

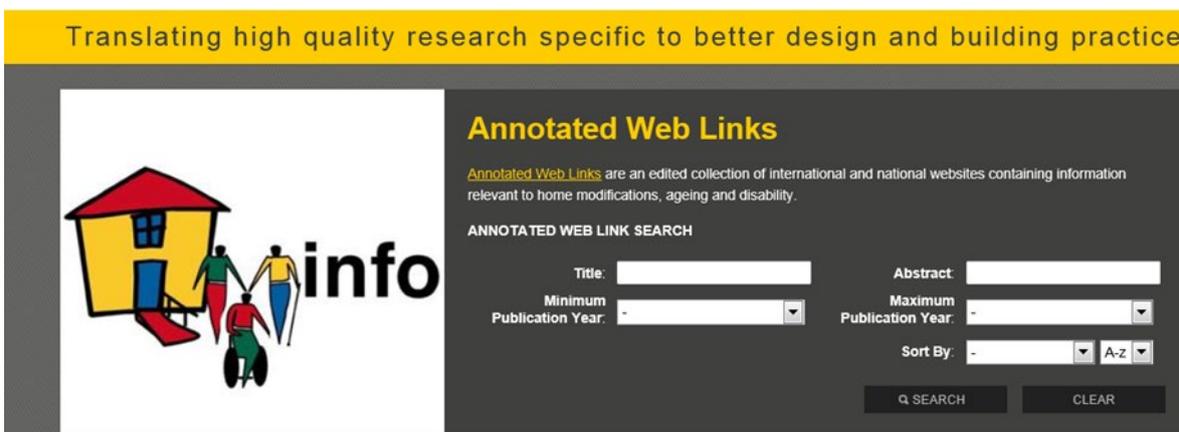
HMinfo's key tasks are:

- The collection and critical review of relevant national and international literature.
- The dissemination of findings in accessible and multiple formats, including knowledge translation, to the community, industry and other key stakeholders, to enable consumers and their carers to make informed choices and access evidence-based interventions.

1.2.2 HMinfo Home Modification Research Publications

HMinfo produce academically rigorous research-based documents on Home Modification policy and practice. Prior to publication, these documents are reviewed by Specialist Review Panels, comprising academic peer reviewers; expert practitioners in the fields of design, architecture, building, and occupational therapy; and consumer representatives for older people, people with disability, and carers.

Translating high quality research specific to better design and building practice



Annotated Web Links

Annotated Web Links are an edited collection of international and national websites containing information relevant to home modifications, ageing and disability.

ANNOTATED WEB LINK SEARCH

Title:

Abstract:

Minimum Publication Year:

Maximum Publication Year:

Sort By: A-z

SEARCH CLEAR

The list of available online publications produced by our team includes the following:

Home Modification Evidence Based Practice Reviews

HMinfo [Evidence Based Practice Reviews](#) investigate the existing research evidence for the effectiveness of particular home modification design and building practices. Following a systematic review methodology, published literature on the design or building practice is examined. The literature search includes: databases of research studies in books and academic journals; legislation, Building Codes and Standards; Government, industry and consumer group websites; the HMinfo library collection of home modification publications and materials; grey literature documents, including industry guides and manufacturers' specifications; and anecdotal evidence from listservs, online forums, consumer peak bodies, and service providers.

Through evaluation of this published evidence, strategies most likely to achieve best practice home modification outcomes can be identified.

Home Modification Consumer Factsheets

HMinfo [Consumer Factsheets](#) translate research evidence for home modification design and building practices into concise information for consumers. This information is designed to assist older people, people with disability, and carers, when planning and undertaking home modifications.

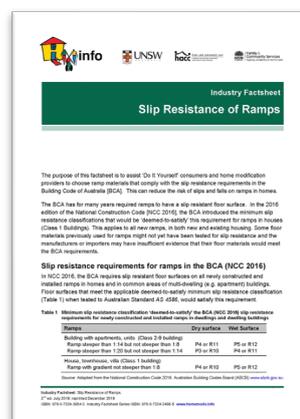
Most Consumer Factsheets are derived from Home Modification Evidence Based Practice Reviews, Occasional Papers or Summary Bulletins. Other Consumer Factsheets are developed in direct response to the need for a concise guide to arranging home modifications, or undertaking a particular type of modification.



Home Modification Industry Factsheets and Checklists

HMinfo [Industry Factsheets and Checklists](#) translate research evidence for home modification design and building practices into information that will assist home modification prescribers and practitioners.

Industry Factsheets and Checklists are derived from Home Modification Evidence Based Practice Reviews, Occasional Papers and Summary Bulletins, or developed when concise guidance on a particular type of home modification is needed by industry.



Home Modification Occasional Research Papers

HMinfo [Occasional Research Papers](#) are individually commissioned research papers on existing or emerging issues in home design and home modifications for older people, for people

with disability, or for carers. These policy and practice issues are identified by Government, Industry and Consumer stakeholders.

Occasional Research Papers include a systematic review of literature on the issues, and examine the policy impact and practice concerns. Many papers also report an original research study that is undertaken in response to the issue. Common types of study are design analyses, cost-benefit analyses, and consumer and industry surveys.

Home Modification Summary Bulletins

HMinfo [Summary Bulletins](#) provide a concise overview of the important issues relating to a particular home modification topic. These home modification topics are selected in response to an industry-identified concern or risk in home modification practices.

Summary Bulletins identify the applicable regulations, standards, industry and fair trading specifications and guidelines, for the home modification topic. A range of home modification approaches are then reviewed, with a comparison of their advantages and disadvantages for various housing and personal circumstances.

Summary Bulletins are intended to guide older people, people with disability, carers, and home modification prescribers and practitioners, in making home modification decisions. The information assists in determining the most appropriate home modification approach for each person, in the context of their home environment and care service mix.

1.2.3 HMinfo Home Modification Resources

HMinfo provides resources to support aged care and disability providers, and consumers. These include:

Home Modification Research Library

HMinfo edits and maintains an electronic [Research Library](#) database with over 3,500 online and hardcopy materials relevant to the home modification sector. The collection can be searched using our indexed lists, or by an open search using our tailored [search engine](#).

Home Modification Subject Bibliographies

As a by-product of our research, HMinfo produces [Subject Bibliographies](#) of the best references for particular topics of interest to industry and other researchers.

Annotated Web Links

HMinfo [Annotated Web Links](#) are an edited collection of international and national websites containing information relevant to home modification decisions.

Block Library

The HMinfo [Block Library](#) is a collection of Computer Aided Drafting (CAD) assets developed specifically to provide freely available Universal Design tools for both commercial and non-commercial stakeholders so that all can create spaces which take into account the size and movement restrictions of accessible mobility products. The Block Library is an essential step to facilitating the participation and social inclusion of the aged and people with disabilities in both private and public space design and redesign. These simple but significant downloadable drawings and models will provide all with the knowledge of space and other environmental requirements for the safe and effective access of a range of mobility products.

Case Study Library

The HMinfo [Case Study Library](#) showcases actual home modification cases submitted by website users so they can be reused for problem sensing and problem solving. The aim of sharing home modification problems and solutions is to better assist in more effective practical outcomes.

Forums

HMinfo hosts three [Forums](#): the Home Modifications Discussion Group, Home Modifications Professionals Forum, and Occupational Therapists Forum. The forums provide an opportunity for subscribers to exchange ideas and information relating to home modification for older people and people with disability, and are a useful and dynamic method for keeping up-to-date with developments in the field.

Events Calendar

HMinfo maintains an [Events Calendar](#) with Training and Events related to Home Modifications.

Newsletter

HMinfo produces a quarterly [Newsletter](#) containing information relating to home modification and maintenance issues and disability. Each publication contains an article, book review, and a website review, as well as upcoming publications, training and events.

1.2.4 HMinfo Research Projects

Three key Home Modification issues were addressed in HMinfo research Projects. These were related to home environments for people who experience problems with cognition and who display aggressive or self-injurious behaviours, COVID – 19 information for professionals and Home lighting for people with disabilities and older people. Moreover, the Consumer Factsheet: Arranging home modifications was updated to ensure the latest information for consumers is included.

Evidence Based Practice Review: Designing home environments for people who experience problems with cognition and who display aggressive or self-injurious behaviour. Ed. 2

People who experience problems with cognition have many adverse behavioural symptoms. Incidences of aggressive or self-injurious behaviours can occur and environmental factors seem to affect these behaviours. The objective of this publication is to determine the physical design features of a home environment that would impact aggressive or self-injurious behaviour in people with cognitive deficits.

This study showed that little specific information pertaining to the design requirements of the physical home environment for people who experience problems with cognition who display aggressive or self-injurious behaviour exists. Nine guidelines have been highlighted to assist in the design of optimum home environments. Further research in the home environment is clearly needed. The HMinfo Evidence Based Practice Review: Designing home environments for people who experience problems with cognition and who display aggressive or self-injurious behaviour. Ed. 2 was published in June 2019.

The Evidence based Review was followed by the respective Industry (Industry Factsheet: Designing home environments for people with problems with cognition who display aggressive or self-injurious behaviour, Ed. 2) and Consumer Factsheets (Consumer Factsheet: Designing home environments for people who experience problems with cognition and who display aggressive or self-injurious behaviour. Ed. 2).

Consumer Factsheet: Arranging Home Modifications, Ed. 2

This publication is the most popular HMinfo document. It assists older people and people with disability to arrange modifications that will enable them to be safer and more comfortable in their home. This Factsheet provides answers to the following questions:

- What is a home modification?
- What home modifications will help me to be more independent?
- Who do I contact if I want to modify my home?
- How do I arrange an Occupational Therapist assessment?
- Selecting your home modifications
- Equipment (assistive technology) to help at home.

Industry Factsheet: COVID- 19

Text This factsheet aims to give information on how health professionals and service providers working with older people and people with disability can protect themselves and their clients during the COVID-19 outbreak. It includes the latest information about Telehealth, PPE, home visits, etc, as provided by the Australian government and the World Health Organisation. The Factsheet is updated frequently during the COVID-19 outbreak.

Consumer Factsheet: Home Lighting

This factsheet aims to inform older people, people with disability and their carers about the properties of the most common household lights and assist them choose the right light bulb for their needs. Lighting is an important parameter in home design, enabling safety and comfort for the performance of everyday tasks, such as walking, reading, cooking, etc.

1.2.5 HMinfo Website Upgrades

Website development during 2019-2020 was exclusively aimed at developing a “Multi Peer Review” Drupal module under the ARC LIEF project which adds new functionality designed to assist entities/organisations (including HMinfo) in conducting the peer review process that is uniquely practiced by HMinfo.

HMinfo’s unique approach to peer review involves using multiple reviewers assigned to different panels known as Specialist Review Panels. At least one reviewer from each panel reviews papers before they are published on the HMinfo website.

The Multi Peer Review module facilitates the peer review process by:

- Providing a list of known reviewers for a given panel and allowing staff to search for new reviewers.
- Sending and tracking invitations to review papers.
- Allowing reviewers to submit their review by uploading documents via an online form.
- Notifying staff and reviewers of deadlines and sending follow-up emails.
- Monitoring the status of papers until they are considered peer reviewed and ready for publication.

In order to reduce barriers to entry, the module allows reviewers to interact with it via email links. Reviewers can accept/decline invitations and submit or cancel their reviews without registering an account on the website. Given that stakeholders differ at every organisation who may download and install the module on their website, the module allows organisations to change various settings such as email footers, templates and peer review panels to suit their structure. The module will be tested by HMinfo staff in early September 2020. Following staff tests and any adjustments to issues discovered during testing, the module will be submitted to the Drupal website and deployed on the HMinfo website.

Linked Semantic Platforms for Policy and Practice

This very large, multi-state, multi-disciplinary Australian Research Council funded Linkage Infrastructure, Equipment and Facilities project seeks to develop the next generation of decision tools for interdisciplinary research on critical public policy issues. The project leverages expertise from HMinfo, Analysis & Policy Observatory (APO), Australian Urban Research Infrastructure Network (AURIN) and the Australian Data Archive (ADA) to improve inter-operability across major social science databases and to develop new analytical tools that can transform the research capabilities for evidence-based policy making. Our focus is digital inclusion and we are responsible for two projects in this area the first commenced in 2019. Due to the nature of the research conducted at these organisations it is imperative that all demographics can access the data contained, be they academics, government officials, general public, the elderly or those with disabilities.

We are aiming to develop guidelines and tools that not only improve HMinfo's capabilities but work for all the linked social sciences online platforms. Our goal is to:

- Increase functionality and accessibility of websites on mobile devices, or other non-computer device.
- Make websites more accessible to all users – “break the habit of prioritising aesthetics over accessibility”.
- Provide guidelines for accessibility and inclusivity that includes app user interfaces.
- Improve the representation of end-user stakeholders in the peer review process.

All websites included on the platform should be accessible and inclusive environments to minimise and where possible eliminate any features which may disadvantage a subset of users. For example, plain language on the website even if the articles are academic in nature, or accessible features for those who may have an impairment. Accessibility guidelines already exist (i.e. W3C), to ensure website accessibility, however, these are not always implemented appropriately. For example, scrolling background images, mouseover buttons/menus and progressively loading results can cause confusion and may not read on a screen reader for someone with a visual impairment.

To facilitate the inclusiveness of the websites and any PDF documents on them we undertook an audit of the websites included on the platform to highlight any existing issues and are providing separate guides on how to address these issues. These four documents are designed to be readable by everyone from managers and website owners to web developers/designers and document creators. The documents are nearing completion and will be uploaded for use by anyone seeking to improve their web and PDF accessibility.

Another aspect of inclusivity that we considered was the representation of end-user stakeholders during peer review. Conventionally, the peer review process strongly focuses on selecting reviewers for their expertise. This norm has largely overshadowed the notion of

obtaining contributions from potential end-user stakeholders who in some cases may be severely impacted by the outcomes of the work.

An inclusive peer review process should involve a diverse range of stakeholders without diminishing the important role that expert reviewers fulfil. By providing paper authors feedback from multiple perspectives, the author may improve their work in areas that are commonly afforded less audit by expert reviewers yet are a priority to stakeholders who may be intricately familiar with practical applications of the subject matter.

HMinfo has long practiced inclusivity via its unique peer review process by inviting reviewers who represent consumers to review research papers prior to publication. HMinfo recognises that valuable contributions can be gathered from consumers which include people with disability, older people and their carers, as well as industry stakeholders which include occupational therapists, designers, architects and builders.

To promote the implementation of HMinfo's peer review process within other organisations, and thus potentially improve the representation of end-user stakeholders in future outcomes, we aim to develop and share software that will automate a significant portion of our process.

The software will operate as a Drupal module and be named "Multi Peer Review" to denote its capability of managing multiple reviews per paper. Its automated functions will assist organisations in implementing, practicing and maintaining multi peer reviews.

In order to encourage its adoption, the software will be customisable, accessible, work on existing information and communication technology infrastructure, support standalone deployment and be available at no cost.

our people

SECTION 2

2 OUR PEOPLE

2.1 HMinfo Team

The HMinfo team is led by Director, Professor Catherine Bridge. HMinfo team members combine experience from a range of design and health disciplines, including architecture, industrial design, occupational therapy, and health science.

2.1.1 Director

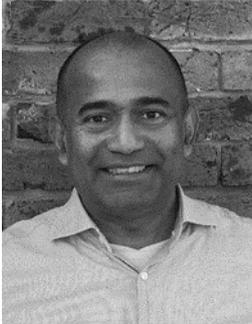


Professor Catherine Bridge has an international reputation in the area of research concerning housing, disability, ageing and care. Catherine directs the Enabling Built Environments Program (EBEP) within UNSW Built Environment, which comprises the Home Modification Information Clearinghouse (HMinfo). As the Founder and Director of the Home Modification Information Clearinghouse, running continuously since 2002, her research has helped improve the quality of life of many thousands of people with disability in 190 countries around the world. Catherine works for improved processes and outcomes for society bringing an evidence-based perspective. Her research passion concerns enabling design. She investigates how our assumptions and knowledge about built environments impact disabled people. Whether they enable movement and independence or disable people further.

Catherine has led innovative research projects that have provided the evidence needed to directly influence national policy and standards, including the National Construction Code. Recently she has been instrumental in assisting in the establishment of a cross-faculty Disability Institute in due for commencement in late 2017 and in co-chairing the Assistive Technology and Environment group a part of the Clinical Academic Group on Ageing a collaboration of the Sydney Partnership for Health, Education, Research and Enterprise (SPHERE).

BAppSc (OT) Cumb, MCogSc UNSW, Phd (Architecture) USyd

2.1.2 Research and Website Team



Vincent Dacruz joined the EBEP team in May 2018 as the Research Program Administrator, to oversee the administration support for the Enabling Built Environments Program. Vincent has ten years working experience in the tertiary education sector in the areas of research support, finance, human resources, operations, projects and workplace health safety. Vincent has attained an MBA (General) from the University of Birmingham and a Bachelor of Science (Honours) in Building and Estate Management from the National University of Singapore.



Hamish MacLennan is an acknowledged international expert in performance based safe human circulation design based on real world evidence. He completed a “case study” based PhD in inclusive design at the University of Salford in the UK looking at the performance and capability of building occupants traversing stairs in high rise buildings along with an extensive study of the movement of older people outdoors. Hamish was the founding Principal of what is now the largest specialist fire engineering practice in Australasia after being involved as one of the leading international players in the development of risk- based fire engineering between 1979 and 1994.



Konstantina Vasilakopoulou is an Architect with a Master's in Light and Lighting and is in the process of finalising her PhD at the Environmental Engineering Department of the Technical University of Crete in Greece. Her PhD Thesis subject: "Smart natural lighting systems. Development/optimization of light pipes with integrated low energy consumption artificial lighting, managed by smart controls". Konstantina's research interests focus on lighting, inclusive design, sustainable and energy efficient building design.



Kim Andersen started as a research officer at HMinfo in 2018, managing the Liveability Lab and conducting user-based research. Kim is an engineer, experienced in biomechanics and human movement analysis techniques. She has a Bachelor of Engineering (Mechanical and Sports) and is undergoing a PhD in Mechanical Engineering, both through the University of Adelaide. Her PhD thesis concerns the mechanical testing of combat boots and their applicability to real-world use. Kim's research interests are in inclusive and universal design, and in disability care.



Helmut Hoss has been assisting HMinfo with website development and maintenance, since 2011. Helmut is a website and software developer with system administration, computer hardware, security and networking skills. An autodidact in electronics and programming since childhood, Helmut began developing corporate IT systems during high school and training computer science interns from the University of Technology, Sydney while completing his HSC. He currently develops antivirus utilities, computer vision applications and automated financial instrument trading robots.

2.2 HMinfo Advisory Committee

The HMinfo Advisory Committee represents a wide cross-section of stakeholders, including industry, aged and disability peaks, and government. Our Advisory Committee meetings are held at the Faculty of Built Environment at the University of NSW Sydney.

2.2.1 Advisory Committee Members – Industry



ASSISTIVE TECHNOLOGY AUSTRALIA

Robyn Chapman is the CEO, Assistive Technology Australia and President-Elect Coalition for Rehabilitation Engineering and Assistive Technology, Asia. Assistive Technology Australia (AT Aust) is a leading information and advisory service on assistive technologies and the built environment. AT Aust operates an access consultancy and is a Registered Training Organisation. AT Aust is the only training provider delivering the two nationally recognised competencies in complex Home Modifications.



DEPARTMENT OF VETERAN AFFAIRS

Susan Dinley is an Occupational Therapist, has had extensive clinical experience in many clinical areas since 1984. Within the occupational therapy profession, she has received recognition for her contribution on present and future issues pertinent to the profession. Susan is an honorary committee member on many government and private enterprise working parties, providing feedback on proposed policy initiatives and the impact on occupational therapy services.



iCARE

Lyndal Millikan currently holds the position of Senior Home Modifications Advisor at icare NSW (Lifetime Care and Workers Care) with the NSW State Government. Lyndal teaches the Home Modifications and Community Access subject at Southern Cross University and is a member of the Southern Cross University Occupational Therapy Course Advisory Committee. Lyndal has held a number of senior clinical and management positions across both the public and private sector, and also been a past researcher at the Home Modification Information Clearinghouse.



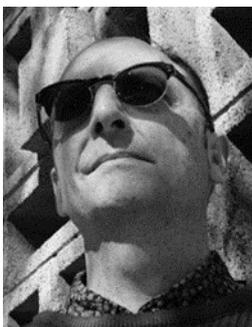
3 BRIDGES COMMUNITY

Julian Werrett is a licensed builder with 25 years' experience in the building industry. He is currently the Home Modification and Maintenance Manager at 3Bridges Community, a not-for-profit in Sydney's South West. Julian manages a team of highly skilled and committed building professionals who provide specialised major and minor home modification services to those people who are eligible for the NDIS, CHSP, DVA and My Aged Care programs. 3Bridges also provides specialist home modification management to icare NSW.



SCOPE HOME ACCESS

Annette Hanly is a practicing Occupational Therapist (OT) and Divisional Manager for OT services within the South Coast Home Modification and Maintenance Service, trading as Scope Home Access. She has worked extensively in the field of Home Modifications, both in the UK and Australia. Annette is committed to developing services that promote choice and safety for people within their preferred home environment and has a keen interest in the use of technology to streamline and customise all consultation and prescription practices.



NSW LAND & HOUSING CORPORATION

Nicholas Loder is Senior Project Officer, NSW Land and Housing Corporation, Family and Community Services. Since 2003 he has provided design policy advice for multi-unit medium density residential and major refurbishments projects for LAHC, especially on access standards, Liveable Housing/Universal Design features and the NDIS. Prior to this, Nicholas spent nearly twenty years in various small to medium sized architectural firms designing and documenting medium density housing, commercial, heritage, correctional projects.



ASSISTIVE TECHNOLOGY SUPPLIERS AUSTRALIA

David Sinclair is an Executive Officer sits on a number of Government and disability reference groups on behalf of ATSA. He has presented to a number of Senate and Government enquiries providing industry advocacy that has supported users of assistive technology (AT). For just over 12 years he has overseen the supply of AT and medical consumables for the disability sector as a provider and industry representative. Prior, he has held several senior management roles in other industries, principally in the delivery of customer service for over 25 years.



ODYSSEY BUILDERS KURI COMMUNITY SERVICES

Frank Riggio is the Odyssey Builders Manager for Kuri Kuri Community Services. Has 25 years building experience and 10 years being experience in providing Home Modifications and has worked Statewide within the Disabilities/Aged Care sector, ranging from transitional modifications to major complex modifications. Frank has experience in internal and external modifications, extensions and has had involvement with SDA new builds collaborating with Occupational Therapists, participants and their families and tradesman.



OCCUPATIONAL THERAPY AUSTRALIA

Deborah Hammond is an occupational therapist with extensive experience in home modifications, disability access and safety in design. She has worked with home modification services and private builders on minor and major building modifications. She provides design advice on disability accommodation and design reviews on health facilities including hospitals, cancer centres, rehabilitation facilities and residential aged care. Deborah lectures on safety and design for Consult Australia, and guest lectures at Sydney University School of Architecture and Australian Institute of Architects.



WESLEY MISSION HOME MODIFICATION AND MAINTENANCE

Angela Peri is a Senior Occupational Therapist with 15 years clinical experience in a variety of rehabilitation and community settings for both the public and private sectors in Australia and overseas. Angela specialises in complex home modification assessments at Wesley Home Modifications and Maintenance Service, and is leading an interest project on enhancing the relationships between OT's and Building Professionals. Angela lectures on 'Professional Practice' at The School of Occupational Therapy in the University of Sydney.



TECHNOLOGY ASSISTING DISABILITY WESTERN AUSTRALIA

Steve Pretzel is CEO of Technology for Ageing & Disability WA (TADWA). He entered the home modifications industry in 2017, bringing nearly forty years of high level commercial and leadership experience in marketing, technology and recreational policy and advocacy. Steve is now applying that experience and his passion for technology in his role at TADWA to further the recognition and opportunities for home modifications to contribute to positive ageing.



DEPARTMENT OF HUMAN SERVICES

Agnieszka Kuna is the Manager, Specialist Equipment Services at Domiciliary Equipment Service (DES), Department of Human Services in South Australia. As an occupational therapist since 1999, Agnieszka developed an avid interest in assistive technology and its use in people's daily lives. Her interest and experience have expanded into the area of service delivery, policy and program management, and currently oversees the major home modification service at DES.

2.2.2 Advisory Committee Members – Aged & Disability Peaks



PHYSICAL DISABILITY COUNCIL NSW

Hayley Stone is the Senior Policy Officer at the Physical Disability Council of NSW (PDCN), and has held this position since Feb 2020. Hayley has worked across a number of community roles, including working as a solicitor at Redfern Legal Centre and working as a policy officer at the Tenants' Union of NSW. Prior to commencing work at PDCN she was Chief Executive Officer of Eastern Area Tenants' Service, a tenant's advice and advocacy service in Eastern Sydney.



NATIONAL SENIORS AUSTRALIA

Irene Stein is the National Seniors Australia NSW Policy Advisory Group Chair and National Policy Congress member.



COUNCIL ON THE AGEING NSW

Karen Appleby is the Senior Policy Officer at Council on the Ageing NSW, where she has specialised in examining the policies and issues that impact older Australians for over 2 years. The role encompasses research, advocacy and consultation with older people, government and other stakeholders to ensure the needs and aspirations of older people are addressed. Karen has extensive community development experience in the areas of ageing, disability and youth, including social research and planning. She has a Master's degree in Gerontology (Policy) from Charles Sturt University.



SPINAL CORD INJURIES AUSTRALIA

Greg Killeen has been working at Spinal Cord Injuries Australia (SCIA), since July 1991. Greg was an SCIA Information Officer providing information and referral to people with disability, their families, friends, carers, professionals and the general community, including people working in related disciplines who required information on home modifications and maintenance, access to buildings and the built environment, as well as assistive technology etc. Greg was recruited to work as the SCIA Senior Policy and Advocacy Officer and predominantly works on systemic advocacy.



PARAQUAD

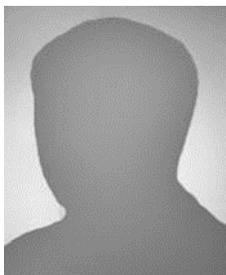
David Clarke is the CEO of the Paraplegic and Quadriplegic Association of NSW (ParaQuad NSW), a community organisation that supports people with a spinal cord injury (SCI) across NSW. A major focus has been the provision of suitable accommodation for people with SCI and the deployment of the specialist Clinical Programs team enabling people to live better lives at home.



YOUNGCARE

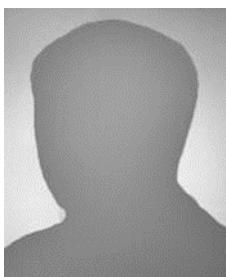
Anthony Ryan is the CEO of Youngcare and is highly regarded in the Not for Profit and Business sector of Australia. Anthony has received recognition for his innovative approaches to uniting the business sector with worthy community causes. Anthony is leading change in the sector particularly in engaging with Developers and Investors in building Platinum accommodation for Young People with High Care Needs. Anthony believes strongly in advocating for the thousands of Young People across Australia with High Care Needs who are trying to navigate through the NDIS and live with dignity and choice.

2.2.3 Advisory Committee Members – Government



AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH

Suzette Skobier is the Assistant Director for NSW and ACT in Social Services.



NATIONAL DISABILITY INSURANCE AGENCY

Donna Dives is the Director for Engagement and Development who lead strategic change both internally and externally for Community Gateway to position the organisation as a provider of choice for people with disability and older Australians.

2.3 HMinfo Specialist Review Panels

The Specialist Review Panels provide HMinfo with the expertise for a comprehensive review process for their published documents. The review aims to fulfil the function of a traditional academic peer review of HMinfo documents by researchers in the same field. However, the review also contributes the valuable knowledge of experts in other fields, including design, building and healthcare, as well as the experiences of people with a wide range of disabilities.

The Specialist Review Panels are comprised of three regular panels of four to seven members: the Research Panel, Industry Panel, and Consumer Panel. These panels provide specialist advice and represent the viewpoint of a wide range of stakeholders. Accordingly, panel membership aims to include members with various backgrounds and experiences. At times, publications may require the co-opting of people with a specific specialty or expertise, as guest expert reviewers.

HMinfo would like to acknowledge and thank all the participants listed below for their involvement during 2019-2020.

2.3.1 Research Panel Members

Members involved during 2019-2020 reviews	Dr Michelle Donnelly, Southern Cross University
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Other Research Panel Members	<p>Dr Satoshi Kose, Professor Emeritus, Shizuoka University of Art and Culture</p> <p>Karen Roberts, Caulfield General Medical Centre</p> <p>Lindy Clemson, University of Sydney</p> <p>Stephen Harfield, Centre for Contemporary Design Practice UTS Sydney</p> <p>Jordana Maisel, Centre for Inclusive Design & Environmental Access, Buffalo University</p> <p>Kay Saville-Smith, Centre for Research, Evaluation and Assessment</p>
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2.3.2 Industry Panel Members

Members involved during 2019-2020 reviews	<p>Susan Dinley, DVA Advisors for ABC Rehab</p> <p>Karen Campbell, DVA Advisors for ABC Rehab</p> <p>Pamela Arndt, DVA Advisors for ABC Rehab</p> <p>Julian Werrett, 3 Bridges Community</p> <p>David Lebnan, Eversafe Electrical</p> <p>Lyndal Millikan, iCare</p>
Other Industry Panel Members	<p>Beverley Garlick, Royal Australian Institute of Architects NSW</p> <p>Nicholas Loder, NSW Land & Housing Corporation (guest expert)</p> <p>Mark Relf, Association of Consultants in Access (guest expert)</p> <p>Vanessa Richards, Upper Hunter HMMS</p> <p>Francis Lenny, Association of Consultants in Access Australia</p> <p>Con Livanos, Association of Consultants in Access Australia</p> <p>John Templeman, MOD.A</p>

2.3.3 Consumer Panel Members

Members involved during 2019-2020 reviews	Emma Bartley, Guide Dogs NSW/ACT Jen Moon, Guide Dogs NSW/ACT
Other Consumer Panel Members	Dr Janice Herbert, National Seniors Glenn Redmayne, Marrickville Council Greg Killeen, Spinal Cord Injuries Australia Keith Shinn, Deafness Forum of Australia

director's report

SECTION 3



3 DIRECTOR'S REPORT

It is with great sadness but not a little pride that I write this my last Directors report for HMinfo. As anyone reading this will be well aware, this has been a year to remember for all the wrong reasons, first the bushfires and then COVID-19.

As you may also be aware UNSW, Sydney, HMinfo's home for the last twelve years like other universities and organisations across Australia and globally, identified a substantial shortfall in its financial position. The sudden impact of the COVID-19 pandemic on UNSW finances caused the university to offer all permanent university staff redundances. Additionally, a decision was also taken to merge three existing faculties: Arts and Social Sciences; the Art and Design; and Built Environment into one. Having been awarded the position of Emeritus Professor, I took the opportunity to retire early.

So, at the end of December 2020, I will pass on the Directorship of HMinfo to the soon to be Dr Vasilakopoulou. Many of you will know Konstantina who has been the senior researcher at HMinfo for the last few years and who is extremely capable and competent. I know I leave HMinfo in very safe and capable hands and in my Emeritus Professor role will continue at UNSW to lead the Enabling Built Environment Program at UNSW and will continue to act as the lead grant holder and advisor for HMinfo into 2021.

Luckily, the Built Environment in its new form as one of six schools within the newly merged Faculty has remained pretty much intact and HMinfo is looking forward to continuing its associations under this much broader umbrella as a part of the Disability Innovation Institute and Ageing Futures Institute at UNSW.

Despite the many challenges this year, I am proud to say we have produced and continuously updated fact sheets on Home Modification interventions during COVID-19, successfully concluded two large National grants, one an Australian Research Council Infrastructure grant where HMinfo was recognised as a key grey literature provider in Australia and the other an Australian Housing and Urban Research Institute grant looking at Smart Home Assistive Technology and its impact on older people, people with disabilities and their carers and I expect more information about these reports will be available early in 2021.

I am also extremely pleased to report that the National OT Exchange conference featured a number of papers by Occupational therapists that discussed the positive history and impact of HMinfo on home modification interventions that reduce care needs, and improve quality of life for those that choose them. Indeed, as we move towards a COVID Safe Australia, it is more important than ever for people at greater risk of illness and/or institutionalisation to have access to information that assists them to have autonomy and control and that affords accessible and affordable homes as this is critical to ageing well within a community.

Most importantly, I want to give a big shout out and a huge thank you to the amazing HMinfo team, the dedicated Advisory Committee and all of you who shared information, reviewed our

materials and worked with us to create the best evidence available. Also thanks the myriad National and International scholars and the Disability and Older people's communities who have been active co-designers, reviewers and advisors on every project. To them I say with much gratitude, anything good that has been achieved it is solely due to you, and it could not be done without your knowledge, skills and dedication and I know that despite turbulent times that 2021 will see HMinfo's amazing evidence-based information that helps so many to make decisions that facilitate them to stay safely and comfortably at home continue.

A handwritten signature in black ink that reads "C Bridge". The signature is written in a cursive, flowing style.

Professor Catherine Bridge,
Director, Home Modification Information Clearinghouse

workplan

SECTION 4

4 HMINFO WORKPLAN 2019-2020

Historically HMinfo received 77% of funding from the Australian Government Department of Health through the Commonwealth Home Support Programme (CHSP) and 23% from the New South Wales Government Department of Family and Community Services (FACS), through the Community Care Support Program (CCSP). However, with the rollout of the National Disability Insurance Scheme (NDIS) the division of FACS was subject to Administrative restructures as a result of Administrative Arrangements Orders and other government orders. Consequently, implementation of the National Disability Insurance Scheme (NDIS) has had a material impact on the operations and organisational structure of FACS and disability services and the 23% of funding previously received ceased on June 30th 2018, so this program no longer requires any ongoing annual Activity Work Plans.

In May 2018, the Department of Health offered HMinfo an extension of the CHSP funding it was receiving, under the “Home Support” program. The funding extension applies to the financial years 2018-2019 and 2019-2020. The Activity Work Plan for these years is shown on the following pages, with the reported measures of success for the year.

4.1 Workplan Title

AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH, COMMONWEALTH HOME SUPPORT PROGRAMME (100% HMinfo funding)

ACTIVITY DETAILS

Activity Requirements

The objectives of the Home Modification Information Clearinghouse Activity include:

1. List Developing and disseminating information on the CHSP and its interaction with the broader aged care system.
2. Embedding wellness, reablement and restorative care approaches into service delivery.
3. Strengthening the capacity of CHSP service providers to deliver quality services that are responsive to client needs, including clients with diverse needs.
4. Brokering, coordinating and delivering training and education to service providers, workforce and consumers.
5. Developing and promoting collaborative partnerships within the CHSP and across the broader aged care service system.
6. Supporting and maintaining the volunteer workforce.

Activity Work Plan Period

Activity Work Plan Start Date: 01/07/2018

Activity Work Plan Start Date: 30/06/2020

ACTIVITY DELIVERABLES

Objectives:

1. Developing and disseminating information on the CHSP and its interaction with the broader aged care system.

Deliverable

Timeframes

Update and maintain currency of arranging home modification consumer factsheet as it relates to CHSP.

Any change in policy or program manual reflected in all information available within factsheet within 24 hours of change notification.

ACTIVITY DELIVERABLES

Objectives:

2. List Embedding wellness, reablement and restorative care approaches into service delivery.
3. Strengthening the capacity of CHSP service providers to deliver quality services that are responsive to client needs, including clients with diverse needs.

Deliverable	Timeframes
Update and review evidence published on HMinfo website which reflects current good practice and the developing home modifications evidence base so as to support older people and their carers.	Number of items identified for update or review.
Maintain HMinfo website to current standards.	HMinfo website available 24/7.

ACTIVITY DELIVERABLES

Objectives:

2. List Embedding wellness, reablement and restorative care approaches into service delivery.
3. Strengthening the capacity of CHSP service providers to deliver quality services that are responsive to client needs, including clients with diverse needs.
4. Brokering, coordinating and delivering training and education to service providers, workforce and consumers.

Deliverable

Timeframes

Publish new and updated research relevant to home modifications and enabling environments for older people.

HMinfo content reviewed on a rolling 5-year cycle or as new information becomes available.

Publish HMinfo quarterly newsletters.

- Quarterly newsletters published on time.
- Number of downloads of newsletter from website

ACTIVITY DELIVERABLES

Objectives:

5. Developing and promoting collaborative partnerships within the CHSP and across the broader aged care service system.

Deliverable	Timeframes
Work with Design and Construction Industry, AIA, OT Australia and Independent Living Centres Australia to promote crosslinks between websites and facilitate access to home modifications evidence-base.	Maintain MOUs with relevant bodies. Maintain liaison with individual Assistive Technology Australia members until they have a national body.
Enhance knowledge of home modifications for Home Modification Group Forums for occupational therapists and for building practitioners.	Maintain Forums. Increase number of Forum members.
Ensure government, industry and consumer stakeholders on HMinfo Advisory Committee reflect a national focus.	DoH nominate a relevant representative to the HMinfo Advisory Committee to ensure that a Commonwealth government perspective is incorporated into all HMinfo considerations HMinfo Advisory Committee is broadly representative of appropriate industry and consumer stakeholders.

ACTIVITY DELIVERABLES

Objectives:

4. Brokering, coordinating and delivering training and education to service providers, workforce and consumers.
5. Developing and promoting collaborative partnerships within the CHSP and across the broader aged care service system.
6. Supporting and maintaining the volunteer workforce.

Deliverable

Maintain existing links with research stakeholders and develop new ones as appropriate.

Timeframes

Number of papers/seminars/posters etc. delivered at number of conferences/seminars/forums/other media i.e. social media.

Number of citations of HMinfo research in published articles.

ACTIVITY DELIVERABLES

Objectives:

6. Supporting and maintaining the volunteer workforce.

Deliverable

Maintain and update information associated with DIY modification App, that facilitates reablement and volunteer participation in Home Modifications.

Timeframes

DIY modify App available 24/7 on Google Play and Apple store.

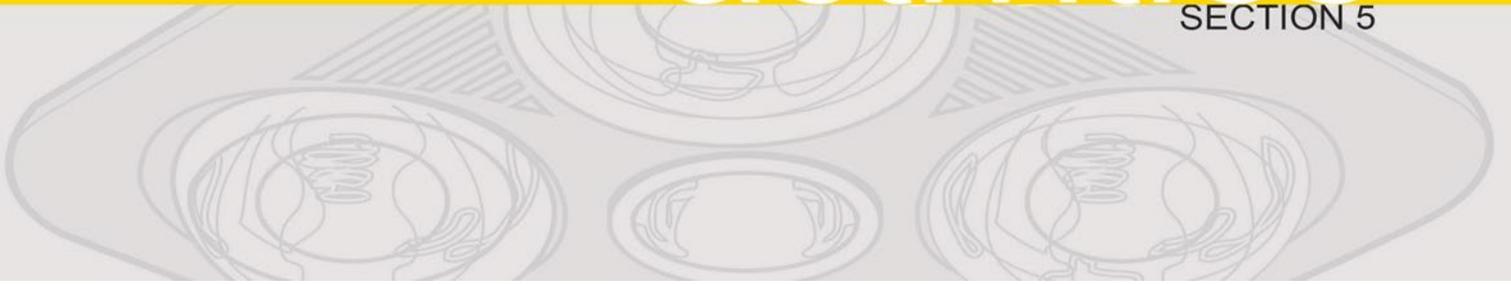
All 52 associated consumer factsheets available and contents current in terms of any change in legislation, new research etc. within factsheet within 24 hours of change notification.

STAKEHOLDERS

Stakeholder	Interest or Impact	Engagement Strategy
RAS Assessors.	RAS Assessors require access to evidence-based home modification information to support clients to make informed decisions about home modifications to maintain or restore independence and self-care.	Continued to ask DoH for access to the contact list for RAS Assessors, so that HMinfo can work with them to identify their information needs and ensure that HMinfo is responding to them. RAS Assessors unaware of the information that is available to support informed decision making around home modification.
MyAgedCare.	HMinfo Needs to be relisted on the MyAgedCare database so that RAS assessors, OTs, home modification providers and other relevant parties can access information about HMinfo and the information and support it can provide.	Continued to ask DoH for HMinfo to be reposted on MyAgedCare so that service providers and others can find HMinfo and use its services.
Home modification providers.	Home modification providers require access to evidence-based home modification information in order to support clients to make informed decisions about home modifications to maintain or restore independence and self-care.	Continued working with MOD.A, the industry body for home modification providers. Maintained reciprocal weblinks with MOD.A Maintained building practitioners Forum on HMinfo website.
Occupational therapists.	Home modification providers require access to evidence-based home modification information in order to support clients to make informed decisions about home modifications to maintain or restore independence and self-care.	Unable to establish reciprocal weblinks with OTA: Link from HMinfo to OTA, but no link from OTA to HMinfo. Maintained OT Forum on HMinfo website.
Other researchers in how home environments impact independence, self-care and ongoing care costs of older people.	Work with other researchers in the area of home modifications and how they support older people to maintain/restore independence and self-care and reduce ongoing care costs.	Maintained links with relevant researchers national and internationally: See research panel list at http://www.homemods.info/about-us/specialist-review-panels .

activities

SECTION 5



5 HMINFO ACTIVITIES 2019-2020

5.1 Research & Publications

HMinfo Publications

HMinfo Clearinghouse, (2019). Industry Factsheet: Designing home environments for people with problems with cognition who display aggressive or self-injurious behaviour, Ed. 2. doi: 10.26288/5dddeafdc0906

HMinfo Clearinghouse, (2019). Consumer Factsheet: Designing home environments for people with problems with cognition who display aggressive or self-injurious behaviour, Ed. 2. doi: 10.26288/5deef1e78f0a4

HMinfo Clearinghouse, (2019). Consumer Factsheet: Arranging Home Modifications, Ed. 2. doi: 10.26288/5df9ade8b5570

HMinfo Clearinghouse, (2019). Industry Factsheet: COVID – 19. doi: 10.26288/5e7d8a168bfc6

HMinfo Clearinghouse, (2019). Consumer Factsheet: Home lighting. doi: 10.26288/5e8efd2e8f3fa

Book Chapters

Bridge, C. (2020). Understanding how space design, access point provision, and services enable or disable from a frail user perspective, In Judd B, Liu R. & Tanoue K. (Eds.) *Aging in Place in the Western Asia-Pacific: Design, Planning and Policy Responses*. Edward Elgar Publishing. ISBN: 978 1 78897 608 4

Bridge, C. (2020). Home Equity Conversion. Gu. D & Dupre, M. (Eds.) in *Encyclopedia of Gerontology and Population Aging*. Springer Publishing Company, Cham. ISBN 978-3-030-22009-9

Bridge, C. (2019). Home Modifications. In: Gu D., Dupre M. (Eds.) *In Encyclopedia of Gerontology and Population Aging*. Springer Publishing Company, Cham. ISBN 978-3-030-22009-9

Journal Articles

Prof. Catherine Bridge

Bridge, C. & Sweatman, P. (2019). Ageing Joyfully: Promoting wellbeing through collaborative design. Caroma whitepaper, GWA Int. Available online at

https://specify.caroma.com.au/sites/caroma_industry/files/Caroma%20Whitepaper_LiveWell_1.pdf

Konstantina Vasilakopoulou

Geun Young Yun, Jack Ngarambe, Patrick Nzivugira Duhirwe, Giulia Ulpiani, Riccardo Paolini, Shamila Haddad, Konstantina Vasilakopoulou, Mat Santamouris (2020). Predicting the magnitude and the characteristics of the urban heat island in coastal cities in the proximity of desert landforms. The case of Sydney, *Science of The Total Environment*, Volume 709, 2020, 136068, ISSN 0048-9697, <https://doi.org/10.1016/j.scitotenv.2019.136068>.

M. Santamouris, R. Paolini, S. Haddad, A. Synnefa, S. Garshasbi, G. Hatvani-Kovacs, K. Gobakis, K. Yenneti, K. Vasilakopoulou, J. Feng, K. Gao, G. Papangelis, A. Dandou, G. Methymaki, P. Portalakis, M. Tombrou (2020). Heat mitigation technologies can improve sustainability in cities. An holistic experimental and numerical impact assessment of urban overheating and related heat mitigation strategies on energy consumption, indoor comfort, vulnerability and heat-related mortality and morbidity in cities, *Energy and Buildings*, Volume 217, 110002, ISSN 0378-7788, <https://doi.org/10.1016/j.enbuild.2020.110002>.

Conference Papers and Presentations

Author Invited Speaker 'History of Home Modifications in Australia' at the OT Exchange 2020, Tuesday 15 September 2020 in Melbourne.

Invited speaker 'How rapid urbanisation impacts older people and evidence that can assist in better policy and community inclusion measures' UNSW Ageing Futures Symposium, Sydney on 11 December 2019.

Invited speaker 'Australian Housing Initiatives and AHURI older person and disability research' to San Francisco Bay Area Rapid Transit District (BART) Professionals, San Francisco. USA, 14th August 2019.

Invited speaker 'Enabling Built Environments Program Overview' OT Program Academics at University of Wisconsin, Milwaukee, USA, 12th August 2019.

Invited speaker on 'Universal design and home modifications in Australia' for the Centre for Inclusive Design and Environmental Access staff, School of Architecture and Planning, Buffalo, New York, USA, 7th August 2019.

Invited speaker on 'Universal design and home modifications in Australia' for the Centre for Excellence in Universal Design/National Disability Authority, Dublin, Ireland, 26th July 2019.

5.2 Reviewer & Assessor Roles

Prof. Catherine Bridge

- International Guest Reviewer for the Master's students at the Wellington School of Architecture in New Zealand, 2020.

5.3 Teaching/Convened Courses

Prof. Catherine Bridge

- **2020**
 - Bachelor of Architectural Studies (Honours) 4521; Total units of credit (UOC) 48
 - DES2223 Design Studio 2C (July) Design for Healthy Ageing, lecture and Design Crit.
 - OCCTHPY 625: Design and Disability, Fall 2019 'Home Assessment: What do I need to know?' Invited guest lecture, University of Wisconsin, Milwaukee, USA.

Konstantina Vasilakopoulou

- **2020**
 - UNSW, Faculty of the Built Environment, ARCH1361-Architectural Science & Environment 2 (T2, 2019): Lectures and tutorials. (Course Convenor: Jonathan Fox)

5.4 Research Student Supervision

Prof. Catherine Bridge

Primary Supervisor

- 2017-present: Maximilienne Whitby, PhD candidate (UNSW) Built Environment.
- 2018-present: Sima Alizadeh, PhD candidate (UNSW) Built Environment.

5.5 FBE & UNSW Committees & Roles

Prof. Catherine Bridge

- Invited member Disability Innovation Institute UNSW (DIU) Steering Committee External Committees & Roles.
- Foundation Member UNSW Ageing Futures Institute.
- Faculty of the Built Environment, Health, Safety, and Environment panel member.

5.6 External Committees & Roles

Prof. Catherine Bridge

- Invited Co-chair of the Age and Ageing CAG - Assistive Technology & Environment group for The Sydney Partnership for Health Education, Research and Enterprise (SPHERE), Clinical Academic Age and Ageing Stream - Environment and Assistive Technology Committee.
- Invited external advisor on the newly awarded US National Institute for Disability, Independent Living and Rehabilitation Research (NIDILRR) awarded HESTIA grant to continue with the next phase of app development! Have been awarded the Disability and Rehabilitation Research Development Project (DRRP) to continue with Home Evaluation App for Community Independence.
- Member Council of the Ageing (COTA)NSW Policy Advisory Group.
- Member of Sydney Partnership for Health, Education, Research and Enterprise (SPHERE) Frontiers Technology Clinical and Academic Group.
- Member NSW Smart Sensing Network.

5.7 In the Media

- **2019**
 - Future of Design in Aged Care at Caroma Live Well's launch in collaboration with UNSW. <https://www.youtube.com/watch?v=RkkMapNGDB0>
 - Dezign Ark Pioneering inclusive design through motion-capture technology. <https://deziqnark.com/blog/assoc-professor-catherine-bridge-on-pioneering-inclusive-design-through-motion-capture-technology/>

website

SECTION 6

6 WEBSITE STATISTICS

6.1 Website Overview 2019-2020

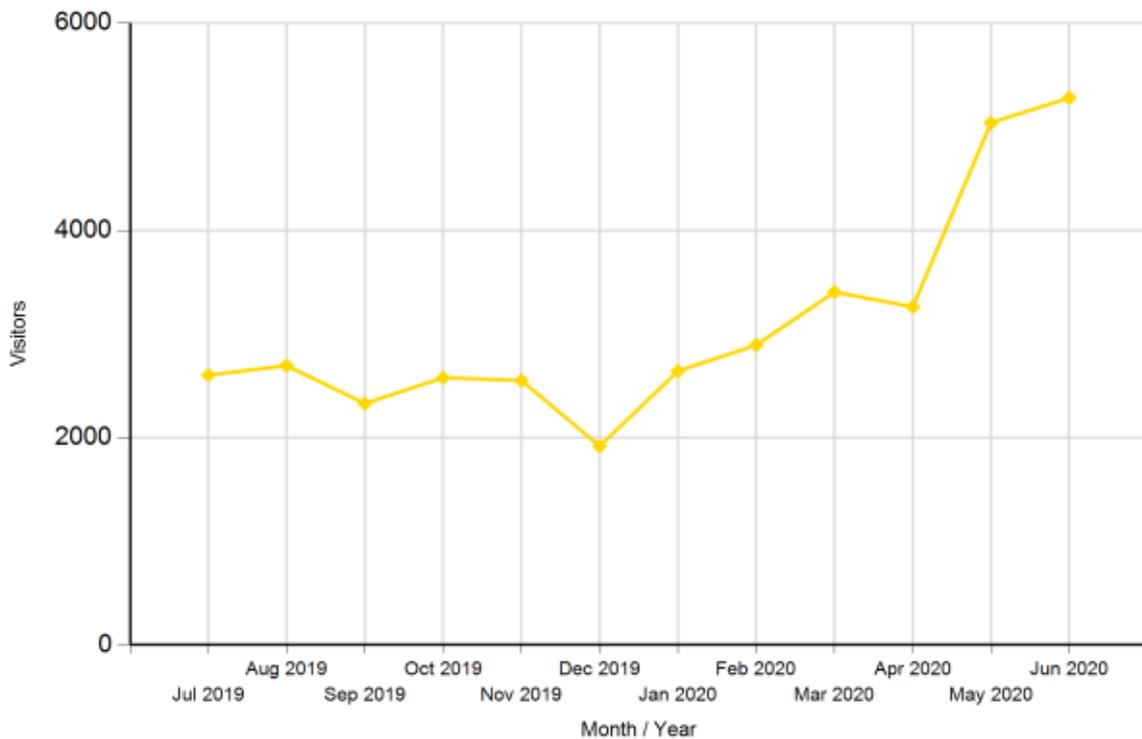
Total page views: 93,018

Total visitors: 37,202

Total new website registrations: 106

6.2 Website & Google Analytics Reports

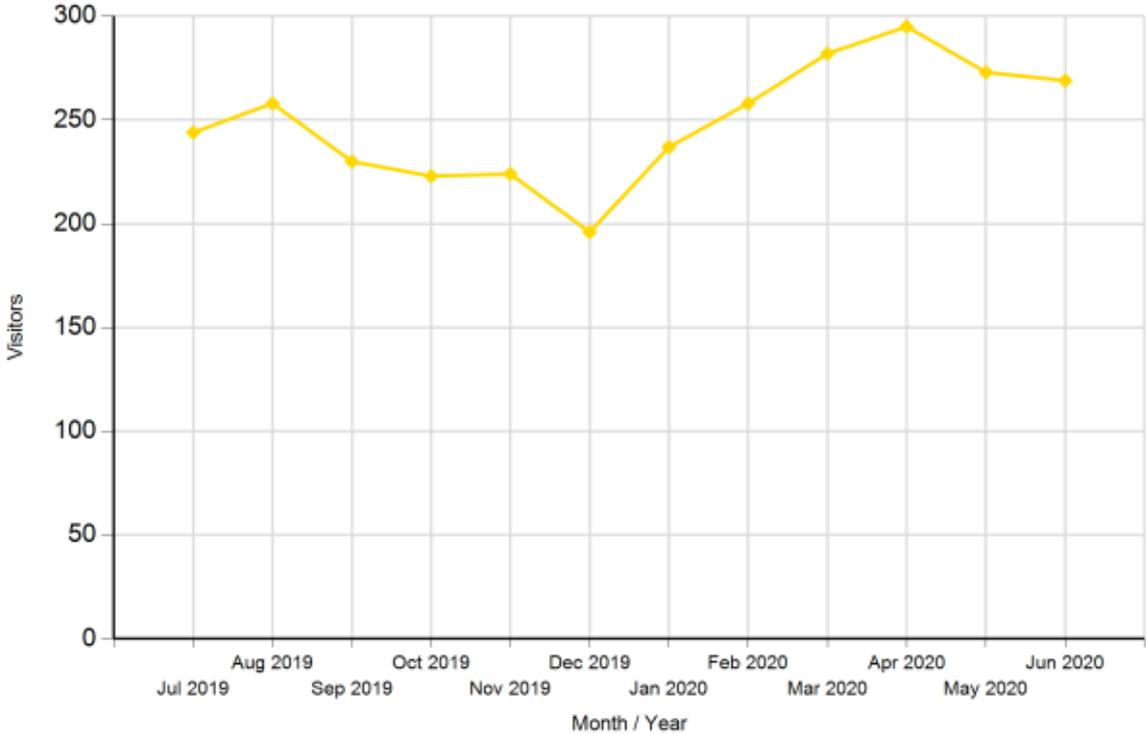
6.2.1 Visitors by month – 2019-2020



Month (year)	Visitors	Page views
July 2019	2,604	7,347
August 2019	2,695	7,798
September 2019	2,330	6,582
October 2019	2,579	7,220

November 2019	2,552	6,643
December 2019	1,918	4,968
January 2020	2,643	7,171
February 2020	2,894	7,005
March 2020	3,406	7,549
April 2020	3,263	8,847
May 2020	5,039	11,564
June 2020	5,279	10,324
Total	37,202	93,018

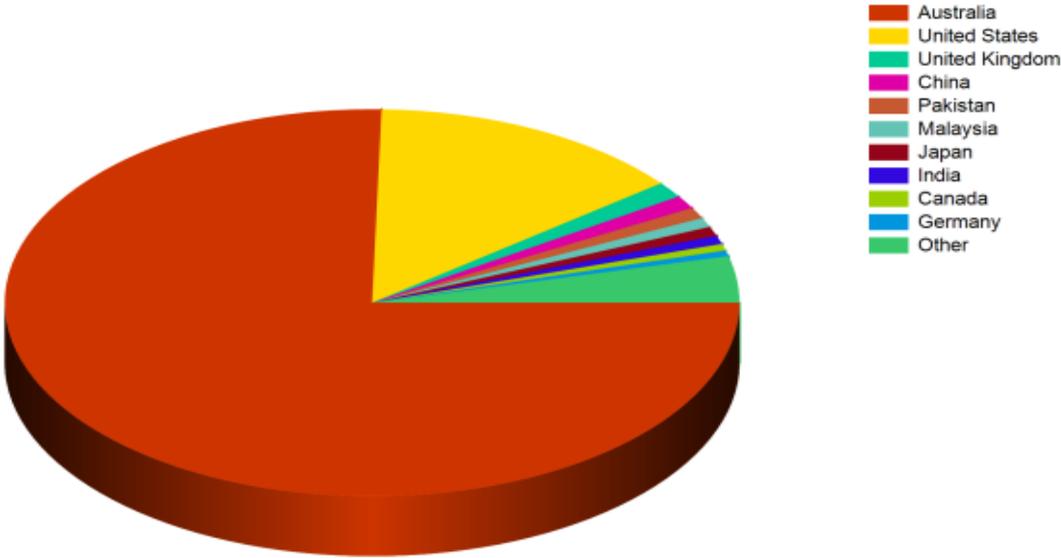
6.2.2 Visitors returning by month – 2019-2020



Month	Number of returning visitors	% of Total returning visitors
July 2019	244	8.16
August 2019	258	8.63
September 2019	230	7.69
October 2019	223	7.46
November 2019	244	7.49
December 2019	196	6.56
January 2020	237	7.93
February 2020	258	8.63
March 2020	282	9.43

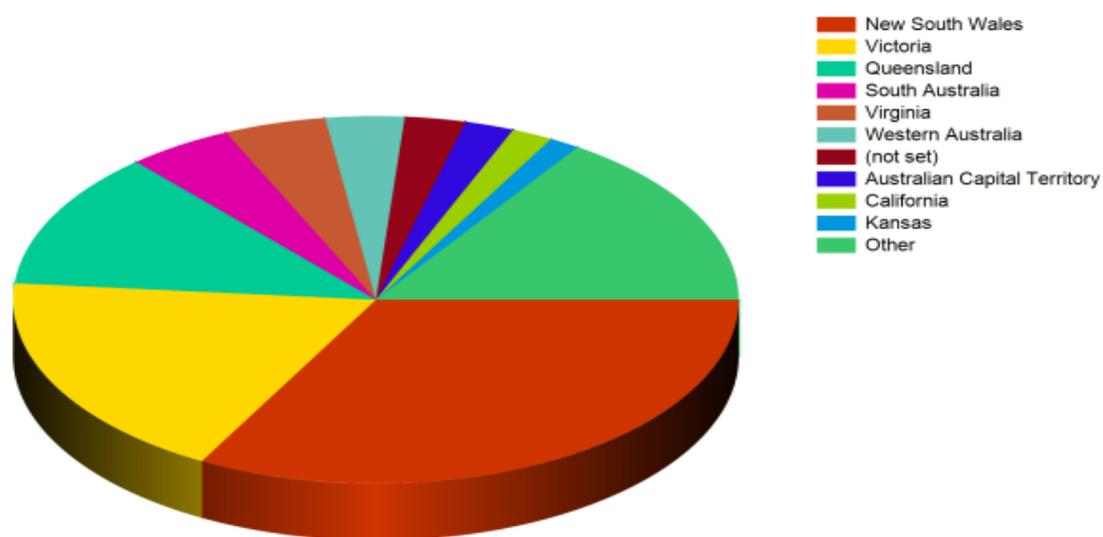
April 2020	295	9.87
May 2020	287	9.13
June 2020	269	9.00
Total	2,989	100

6.2.3 Visitors by country – 2019-2020



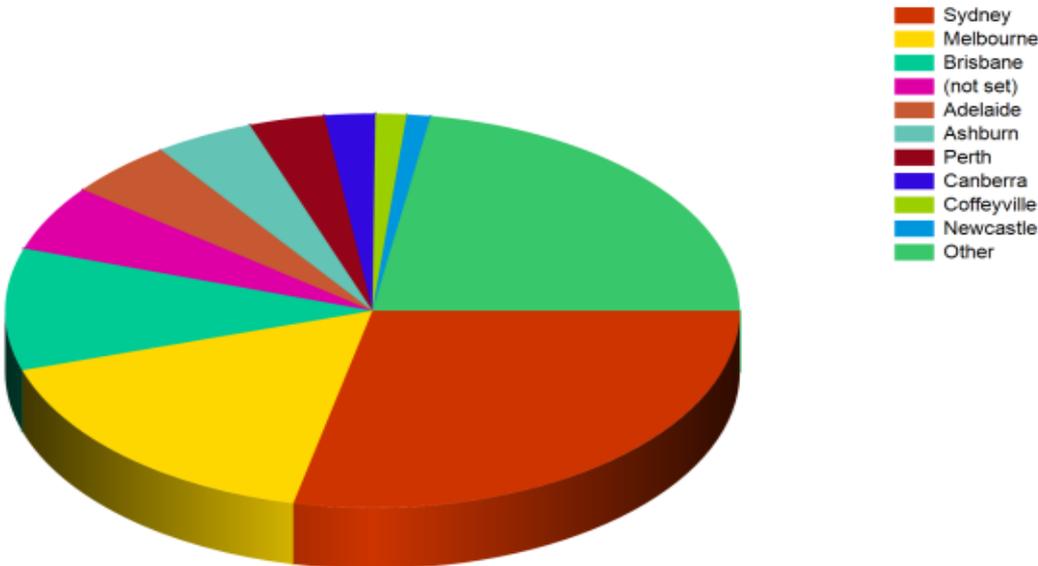
Country	Visits	% of Total visitors
Australia	28,053	75.41
United States of America	5,207	14.00
United Kingdom	493	1.33
China	413	1.11
Pakistan	350	0.94
Malaysia	297	0.80
Japan	289	0.87
India	267	0.72
Canada	208	0.56
Germany	179	0.48

6.2.4 Visitors by region – 2019-2020



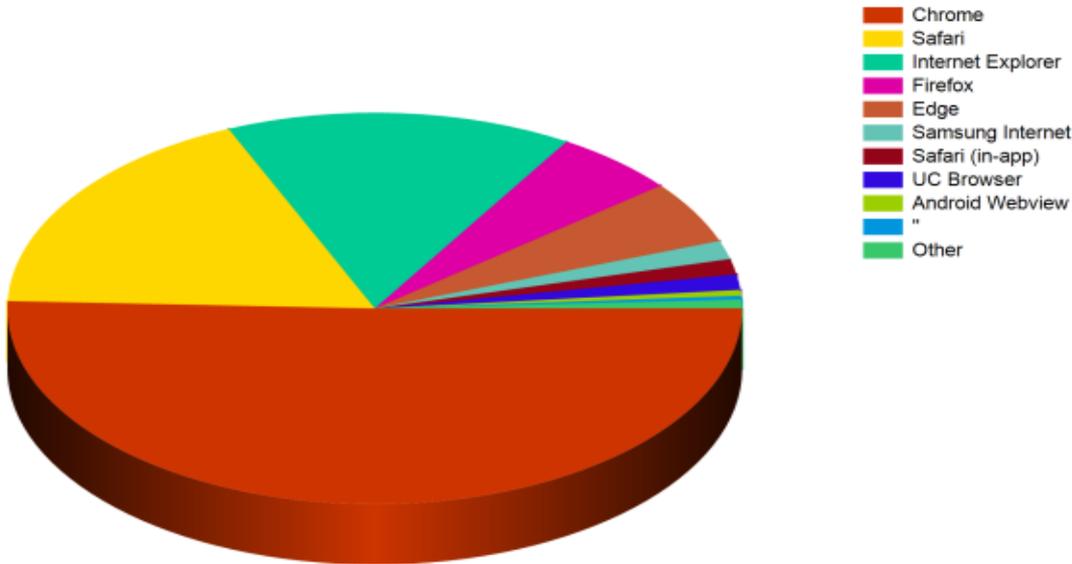
Region	Visits	% of Total visitors
New South Wales	12,263	32.96
Victoria	6,871	18.47
Queensland	4,492	12.07
South Australia	1,753	4.71
Virginia	1,688	4.54
Western Australia	1,308	3.52
(not set)	1,007	2.71
Australian Capital Territory	819	2.20
California	687	1.85
Kansas	508	1.37

6.2.5 Visitors by city – 2019-2020



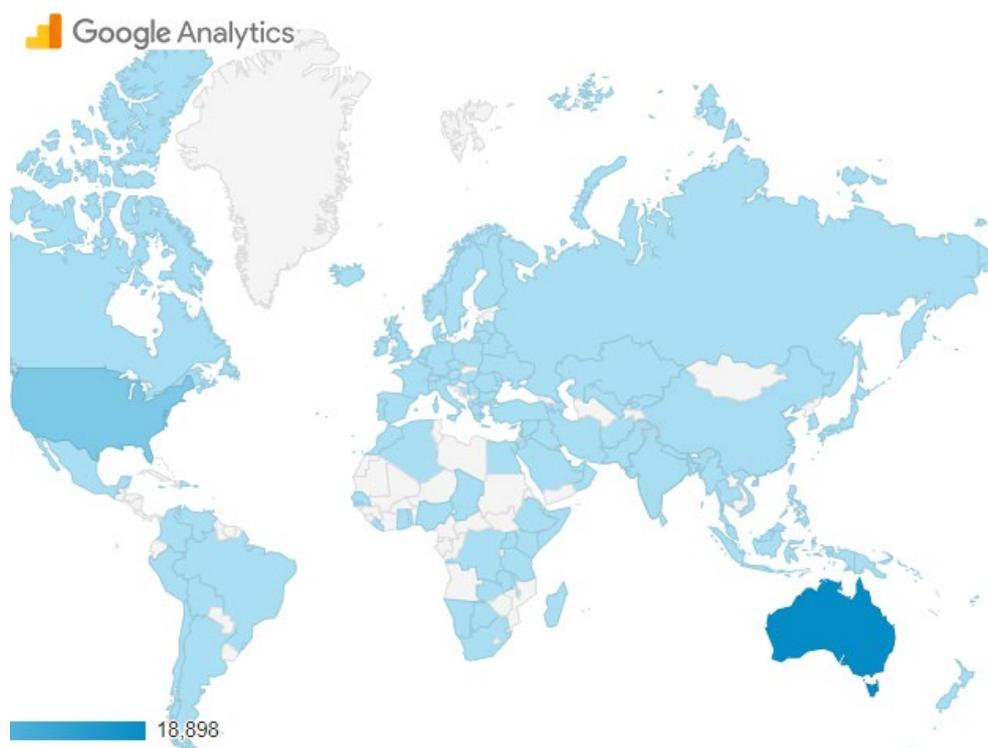
City	Visits	% of Total visitors
Sydney	10,494	28.46
Melbourne	6,142	16.66
Brisbane	3,690	10.01
(not set)	1,999	5.42
Adelaide	1,724	4.68
Ashburn	1,608	4.36
Perth	1,227	3.33
Canberra	1,889	2.22
Coffeyville	503	1.86
Newcastle	385	1.04

6.2.6 Browsers used – 2019-2020



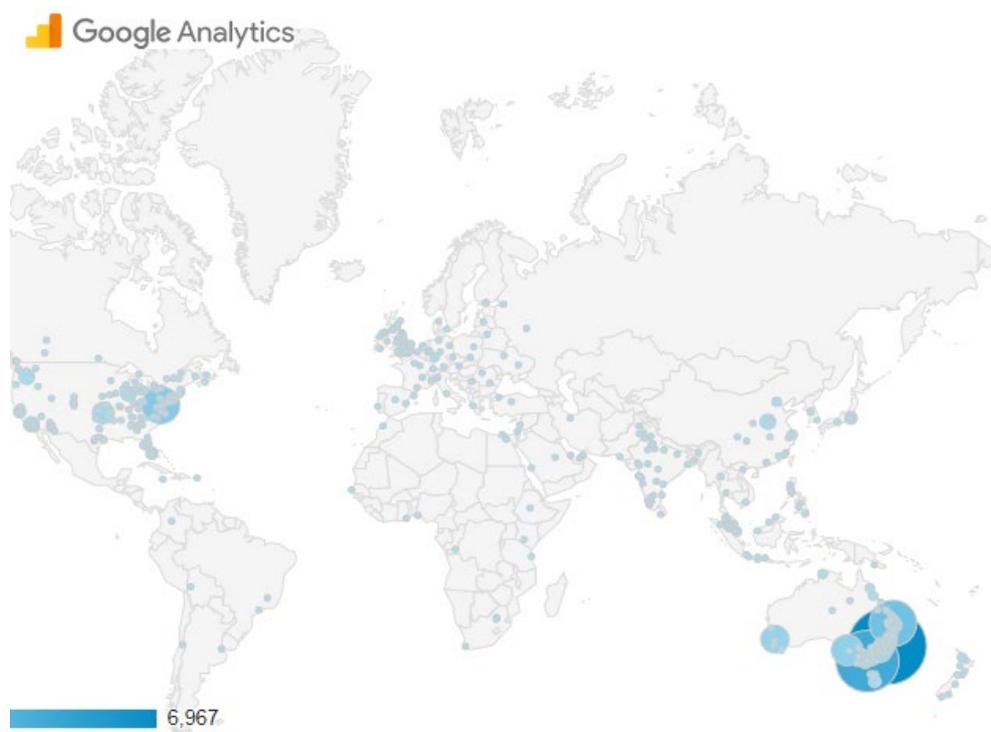
Browser	Visits	% of Total
Chrome	18,824	50.60
Safari	6,652	17.88
Internet Explorer	5,681	15.27
Firefox	2,029	5.54
Edge	1,930	5.19
Samsung Internet	573	1.54
Safari (in-app)	475	1.28
UC Browser	473	1.27
Android Webview	181	0.49
"	114	0.31

6.2.7 Google Analytics – visits by country – 2019-2020



Country		Acquisition			Behaviour		
		Users N (% of total)	New Users N (% of total)	Session N (% of total)	Bounce Rate %	Pages/ Session	Avg. Session Duration HH:MM:SS
Totals		27,280	26,734	37,202	67.47%	1.90	00:01:21
1	Australia	18,898 (69.27)	18,376 (68.74)	28,053 (75.41)	60.58%	2.86	00:02:02
2	United States	5,109 (18.73)	5,106 (19.10)	5,207 (14.00)	81.26%	1.20	00:00:14
3	United Kingdom	449 (1.65)	447 (1.67)	493 (1.33)	72.62%	1.80	00:00:58
4	China	401 (1.47)	400 (1.50)	413 (1.11)	91.53%	1.27	00:00:15
5	Japan	288 (1.06)	287 (1.07)	289 (0.78)	97.23%	1.12	00:00:06
6	Malaysia	258 (0.95)	255 (0.95)	297 (0.80)	77.78%	1.37	00:01:05
7	India	247 (0.91)	246 (0.92)	267 (0.72)	67.79%	1.59	00:00:29
8	Canada	189 (0.69)	188 (0.70)	208 (0.56)	71.15%	2.26	00:01:26
9	Germany	168 (0.62)	167 (0.62)	179 (0.48)	82.12%	1.53	00:00:32
10	New Zealand	96 (0.35)	94 (0.35)	137 (0.37)	63.50%	2.25	00:00:59

6.2.8 Google Analytics – visits by city – 2019-2020



City		Acquisition			Behaviour		
		Users N (% of total)	New Users N (% of total)	Session N (% of total)	Bounce Rate %	Pages/ Session	Avg. Session Duration HH:MM:SS
Totals		27,234	26,415	36,852	68.61%	2.00	00:01:10
1	Sydney	6,967 (25.58)	6,700 (25.36)	10,494 (28.48)	58.66%	3.06	00:02:26
2	Melbourne	4,377 (16.07)	4,290 (16.24)	6,142 (16.67)	63.68%	2.56	00:01:34
3	Brisbane	2,412 (8.86)	2,313 (8.76)	3,690 (10.01)	62.63%	2.56	00:01:37
4	(not set)	1,682 (6.18)	1,633 (6.18)	1,999 (5.42)	74.14%	1.92	00:01:10
5	Ashburn	1,608 (5.90)	1,608 (6.09)	1,608 (4.36)	78.30%	1.02	00:00:00
6	Adelaide	1,148 (4.22)	1,109 (4.20)	1,724 (4.68)	62.70%	2.56	00:01:39
7	Perth	921 (3.38)	894 (3.38)	1,227 (3.33)	63.81%	2.81	00:01:42
8	Canberra	534 (1.96)	515 (1.95)	819 (2.22)	60.56%	2.74	00:01:43
9	Coffeyville	503 (1.85)	503 (1.90)	503 (1.36)	79.32%	1.03	00:00:02
10	Gold Coast	267 (0.98)	238 (0.90)	323 (0.88)	53.25%	3.30	00:02:57

6.2.9 Top 10 HMinfo Publication Reads – 2019-2020

Rank	Publication title	Reads
1	Consumer Factsheet: Arranging Home Modifications	1,776
2	Bidet douche seats, flexible hoses and bidets	1,703
3	Summary Bulletin: Slip Resistant Floor Surfaces	1,555
4	Summary Bulletin: Regulatory Requirements for Controlling Water Temperature in Bathrooms	1,242
5	DIYmodify Factsheet: CHOICES for GRAB RAILS	1,168
6	Evidence Based Practice Review: Designing home environments for people who experience problems with cognition and who display aggressive or self-injurious behaviour. Ed. 2	1,166
7	DIY Home Modifications: What information is required at point-of-sale? Final Report	1,144
8	DIYmodify Factsheet: Accessibility	1,127
9	Follow-up efficacy post environmental modifications; a guide for clinical practice.	1,120
10	DIYmodify Factsheet: CHOICES for HANDHELD SHOWERS	1,112

6.2.10 Top 10 HMinfo Publication Downloads – 2019-2020

Rank	Publication title	Reads
1	DIYmodify Factsheet: CHOICES for GRAB RAILS	5,574
2	Summary Bulletin: Ramps	3,989
3	Stairs - A Summary Bulletin	2,956
4	The Effectiveness of Ceiling Hoists in Transferring People with Disabilities - A systematic review	2,936
5	Summary Bulletin: Environmental Assessment & Modification for Australian Occupational Therapists	2,452
6	DIYmodify Factsheet: Electrical zones in the bathroom	2,262
7	Summary Bulletin: Electrical Safety in Bathrooms 2nd ed.	2,151
8	Summary Bulletin: Legalities of the Australian Standards and Alternative Access Solutions to Ramping	1,979
9	Information Needs of Occupational Therapists Practicing in NSW	1,706
10	Summary Bulletin: Fire Safety - Smoke Alarms 2nd ed	1,678

financials

SECTION 7

7 FINANCE REPORT

7.1 DSS-DoH Financial Acquittal for the 2019-2020 period

21 August 2020

This is the acquittal statement for the Grant funds received from the Department of Health (DoH) under the Commonwealth Home Support Program (CHSP).

The disclosures in this section have been taken from the UNSW Financial system.

DoH Schedule ID 4-20VWZKS (UNSW account RG152759)

Carry Forward: A balance of \$0 was not spent in the 2018/19.

Income: The Home Modification Information Clearinghouse (Activity 4-225MU6D) received recurrent funding of \$199,352.09 for the financial year 2019/20.

Expenditure: The funds were spent on salaries for research associated staff and other direct research expenses including salaries for website maintenance, updates and improvements. Total expenses incurred during this period amounts to a total of

\$199,352.09 resulting in a closing balance of \$0.00 in 2019/20. No carry- forward request needed to be submitted.

I certify that accounting records are maintained in accordance with the University's accounting policy and procedures, the Australian Accounting Standards, and the FP&A Act and requirements.



Name: AR Gardner CA

Title: Manager, Group Research Finance

looking ahead

SECTION 8



8 LOOKING AHEAD INTO THE FUTURE

We intend to continue providing a high quality, accessible and evidence-based support for making changes to the home for individuals, families, and carers.

Specific research planned for the year ahead on advice from our Advisory Committee as priorities include:

8.1 Self-assessment tools of the functional ability in the home, for older people and people with disability

An Evidence Based Practice Review, collating the literature on the assessment tools for the functional ability of older people and people with disability in the home, is going to be published within the next reporting period. This publication aims to investigate if there are any self-assessment tools and/or whether some of the assessment tools, used by healthcare professionals, can be transformed in self-reporting tools, during periods of self-isolation. The HMinfo team intention is to produce Consumer and Industry Factsheets on the subject as well.

8.2 Research on Assistive Technology for older people and people with disability

Assistive technology includes aids or equipment assisting people to perform everyday tasks. It might include from mobility aids, such as wheelchairs, scooters and prosthetic members to software helping people control their home environment with minimum effort.

The research that HMinfo will carry out includes an overview of the assistive technology systems that are related to the home environment. It can be used from occupational therapists and consumers, as well as academics to get familiar with some of the latest technologies that might be useful for people with disabilities.

8.3 Other HMINFO Research

During 2020-2021, we intend to update many of our old consumer and industry factsheets, to reflect changes in policy and recent evidence-based knowledge and practice.

8.4 Accessibility and Usability Strategy

A list of web development items was generated to address accessibility and usability issues raised in Vision Australia's accessibility audit and PDCN's usability review of the HMinfo website in January to April 2019.

Before any proposed web development items are actioned, they will require justification based on industry standards, guidelines and best practice. The outcomes of the process will be used to formulate a website accessibility and usability strategy that will be available via the HMinfo website. Future user interface development will be actioned in line with the strategy to ensure consistent application of accessibility/usability standards and guidelines across the website. This work is subject to funding from NDIA or other sources

8.5 Real-time Report Progress

Website reports require a few minutes to generate but currently do not provide an indication of progress to staff, such as a progress bar or status text. Reports will be redeveloped in a manner that allows the reporting process to update a progress bar in real-time so that staff are aware of progress made during the production of a report.

8.6 DOI Capability Upgrade

The HMinfo website's ability to mint DOIs will be impacted by technical changes to the DOI service provider's systems in September 2020. Integration functions will be upgraded to adapt to the incoming technical changes and therefore allow the HMinfo website to continue to mint DOIs.

8.7 Drupal 9 Upgrade

During 2021, the HMinfo website will undergo an upgrade to Drupal 9 (released in June 2020) as support and security patches for older versions of Drupal will end in November 2022.

glossary

SECTION 9



9 GLOSSARY

ABCB	Australian Building Codes Board
ADHC	Ageing, Disability & Home Care
AHURI	Australian Housing and Urban Research Institute
CHSP	Commonwealth Home Support Programme
DOH	Australian Government Department of Health
DSS	Australian Government Department of Social Services
DVA	Department of Veteran's Affairs
EBEP	Enabling Built Environments Program
HACC	Home & Community Care Program
HMinfo	Home Modification Information Clearinghouse
MOD.A	Home Modifications Australia
NCC	National Construction Code
NDIA	National Disability Insurance Agency
NDIS	National Disability Insurance Scheme
OT	Occupational Therapist
OTA	Occupational Therapy Australia is the professional association representing Occupational Therapy throughout Australia
PDCN	Physical Disability Council of NSW



Home Modification Information Clearinghouse

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