



ACKNOWLEDGEMENTS

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ABOUT ARCHITECTURE & ACCESS

Architecture & Access is a specialist consultant for the built environment, creating safe and accessible community facilities, workplaces and homes for people with disability and the wider community.

Our services include:

- Home modification design and delivery
- Access consulting
- Occupational health and safety consulting
- Project management
- Architecture, landscape and interior design
- Training and professional development.

Architecture & Access home modification specialists are the new generation of professionals – responsive to the needs of people with different experiences of disability, fluent in the application of universal design principles and the National Construction Code, and committed to delivering home modifications that promote safety and independence for the individual, their family and their carers.

Architecture & Access has more than 15 years experience in the design and delivery of home modification for people with disability on behalf of the Transport Accident Commission (TAC), WorkSafe insurance scheme, the National Disability Insurance Scheme (NDIS) and private clients.

Architecture & Access is:

- a registered provider for the National Disability Insurance Scheme
- pre-qualified as a consultant with the whole of Government Construction Supplier Register to supply OHS, architectural and project management services
- staffed by registered and independent assessors of the Livable Housing Design Guidelines
- an A-Plus member – Australian Institute of Architects.





EXECUTIVE SUMMARY

The CAPS service model of home modification service delivery was developed in response to the issues and concerns of insurers, service providers and people with disability.

The CAPS model is both a conceptual framework and procedural guide to home modification delivery. The model is designed for application in an insurance setting for people with severe and permanent disability living in a home that presents significant barriers to access and independence.

The model is designed for multi-disciplinary teams involved in home modification delivery and uses the principles of project management to ensure effective service delivery, optimal use of resources and consistent outcomes.

It is not currently practised at this time because it does not fit with current approaches by insurance agencies.

The CAPS model features a conceptual and procedural guide to service delivery featuring:

- A culture of respect and accountability
- A team-based approach with clarity of roles and responsibilities for each team member
- The core relationship between the person with disability, the occupational therapist and project manager – the essential perspectives required to define the home modification
- The role of project manager to lead the process
- The development of practice standards
- A focus on outcomes.
- The articulation of practice standards for home modification service delivery to assist service providers to operationalise their responsibility to meet required standards for service delivery. Culture, collaboration, client-focus, cost, quality and compliance impact significantly on project outcomes, and are the areas of focus for the practice standards applied in the CAPs model.

The CAPS project offers a basis to practice further refine a practical service model in partnership with key stakeholders including the home modification industry peak body, leading service providers, insurers and people with disability.

The CAPS model could be:

- Utilised immediately in its current format by professionals or agencies who see the potential for improved process and outcomes;



- Subject to further stakeholder consultation and model refinement by lead agencies or researchers interested in contributing to the evidence base;
- Piloted in a research project to measure the impact of the model in comparison to other approaches currently in use.



INTRODUCTION

What is the CAPS model of home modification project delivery?

The CAPS model is both a conceptual framework and procedural guide to home modification delivery. The model is designed for application in an insurance managed setting for people with severe and permanent disability living in a home that presents significant barriers to access and independence.

Caps are used as a simple concept to illustrate and explain the process of home modification service delivery as a product of a team of professionals working together, and to define and separate the roles of the individual team members in that process.

The model is designed for multi-disciplinary teams involved in home modification delivery and uses the principles of project management to ensure effective service delivery, optimal use of resources and consistent outcomes.

The features of the model are:

- **A culture of respect, collaboration, accountability and timeliness** – it is essential to establish guiding values and principles, to communicate about these, and flow them through every stage of service development and delivery;
- **Defined roles and responsibilities** for each team member, including the insurer, the person with disability, occupational therapist, project manager and others at every stage of the process;
- The **Core Relationship** between the person with the disability, the occupational therapist and the project manager. These team members come together at the assessment and planning stage, to define the best design solution and set the project up for success;
- The central role of the multi-skilled specialist home modification **Project Manager** to co-ordinate the team and provide end-to-end project continuity;
- **Standards of Practice** that apply to the whole team in key areas such as – culture, client-focus, collaboration, quality assurance and cost;
- **Focus on improved outcomes** for the person with disability in relation to independent access, safety, self-care and participation in chosen activities of daily life, and reduced levels of formal support.



The CAPS model is Architecture & Access' contribution to the ongoing process of home modification service development.

The central concept of the core relationship between the person with the disability, the occupational therapist and the project manager has evolved from our experience and reflection on factors that make a home modification successful in terms of process and outcomes.

Architecture & Access believes this is how things should be done, and hopes to attract interest in the trialling and evaluation of the model.

INSURANCE PRINCIPLES

The following principles apply to home modification undertaken in an insurance setting, and will impact the roles and responsibilities of team members. Home modifications must be:

- Reasonable and necessary;
- Appropriate for funding by the insurer;
- Maximise client control, choice and participation in decision-making;
- Address individual goals and needs which are articulated in participant plans, including participation in occupational activities, social and economic life;
- Representative of value for money by project and in comparison with alternatives;
- Effective and beneficial with regard to the existing structure and site of the home;
- Good quality and compliant with building codes and regulations.
- Represent a good return on investment with consideration to potential reductions in the reliance on formal paid supports in the future.

These principles will drive and form the basis on which all home modifications are provided in the future and require service providers to transition to the future market place.

Why was the CAPS model developed?

The rollout of the National Disability Insurance Scheme (NDIS) has been the catalyst for review and transformation within the home modification sector.

A fundamental goal of the NDIS is to maximise participants' choice and control over which support services they receive, who they receive it from, and where it is delivered. It will also formalise the application of insurance principles to professional practice and service provision.



With the scheme on the verge of rollout, people with disability, their families, NDIS planners and co-ordinators will soon need to make informed decisions about selecting home modification service providers.

Home modification has been practised for decades, and specialities have emerged in the form of highly skilled occupational therapists, building designers, construction project managers, builders and program managers.

However, these professionals are relatively few in number and their specialised roles are ill defined or, at least, very fluid in the scope of pre-requisite knowledge, skills and setting of roles and responsibilities.

There are many different approaches to home modification but no evidence to say that any one approach is more effective than another.

As home modification service providers and experts line up to emphasise their contribution to the field, there is also a lack of evidence to support any claims to best practice for home modification delivery for people with disability.

It is important for the industry to gather evidence of best practice, encourage innovation and develop practice standards to guide practitioners and improve service quality.

IDENTIFICATION OF STAKEHOLDER ISSUES AND CONCERNS

Architecture & Access has taken the time to reflect on our own practice, consulting with some of our clients and stakeholders, including people with disability, occupational therapists, builders and representatives from the insurance industry.

Stakeholders identified a wide range of issues and concerns in relation to current approaches to home modification.

For example, Architecture & Access heard from builders and occupational therapists who were expected to double as designers and project managers, insurers implementing multiple approval points in an effort to control risk, and people with disability who felt that they were not listened to and were wondering why everything needed to take so long.

Summary of stakeholder issues and concerns

NOTE: This list is broad and indicative of some of the key issues raised.

People with disability – want:

- Their home modification to look good after the modification;
- The project be initiated and completed quickly without introducing further stress or pain through the process;
- To achieve increased levels of independence and enjoyment of life as a result of the modification;
- To be treated with respect throughout the process;



- More information to visualise the finished product in order to make decisions;
- Guidance on options for undertaking and paying for work over and above the necessary modifications;
- Work to be done by local builders and sub-contractors where possible.

Insurers – want:

- Sustainability (cost/quality);
- Minimal internal sign-off points;
- Return on investment through increased participation and reduced need for formal paid support on the part of people with disability;
- Evidence on the efficacy of different approaches.

Occupational therapists – want:

- A better process around the definition of the design solution;
- Affordable design services;
- Construction advice;
- Cost estimation advice including a better process of gathering quotes from builders;
- Project management services;
- Fairer compensation for the time taken to deliver a home modification with some expressing a preference not to sign-off on the finished project if they were assured it was completed as prescribed.

Project Managers – want:

- Recognition of their knowledge, skills and role in the process;
- To take the lead on design and delivery including proactive control over cost, time, and quality levers;
- Better understanding of their role in applying insurance principles when providing design and construction advice and scoping of works.

Builders – want:

- Greater confidence in design quality to avoid unnecessary variations;
- Reasonable quoting and tendering processes that don't waste their time;
- To get in and out of jobs as quickly as possible to maintain some profitability;
- Assistance with client relationships management.



The CAPS model responds to these issues and concerns in an effort to present a workable model that achieves common goals of all concerned.

What does the CAPS model offer the individual, the team and the system?

Architecture & Access predicts the CAPS model will be cost-effective and provide cost-savings over a range of measures in the short and long-term, and will result in high levels of satisfaction from all parties involved because it promotes:

- Active project planning and delivery to meet time, budget and quality requirements;
- Prevention of delays, costly errors and rectification currently caused by avoidable design variations;
- Consistent delivery of good quality product that meets the individual needs of the person with the disability and their family, that looks good, that is practical for the particular home, and compliant with the building regulations and standards related to accessibility;
- Increased levels of independence and reduced levels of reliance on formal support on the part of people with disability;
- High levels of satisfaction from people with disability in the process and outcomes.

The CAPS model presents a framework for multi-disciplinary teams to function effectively through respect for individual roles, facilitating collaboration and optimising service provision across the team.

Defining a home modification project

For the purpose of the CAPS model, a home modification becomes a project when specialist project management expertise is required to ensure the home modification is designed and delivered on time and within budget to meet a prescribed scope and quality.

Home modification project management may be recommended in the presence of one or more of the following conditions:

- The person has severe and permanent disability and the home environment is posing significant barriers to access and independence;
- Detailed design plans and specifications are required;



- A building contract is required;
- A building permit is required;
- The cost estimate for the project exceeds the benchmark set by the insurer.

A home modification project may include a combination of some or all of the following:

- **Creating stepless thresholds** to improve accessibility including removing steps and uneven floors;
- **Ramp installation;**
- **Installing hand-railings**, increasing circulation spaces and doorway widening;
- **Accessible design and fittings for the bathroom**, vanities and storage;
- **Kitchen design** – accessible appliances, tap ware, sinks, bench and storage design;
- **Bedroom design** – creation of circulation space and accessible wardrobes;
- **Internal and external lighting design** – sensor lights, location of switches and power;
- **Furnishing**, flooring, doors and glazing;
- **Landscape design** – external access paths, railings, car parking.

A home modification project is not:

- The installation of grab rails only;
- Changing of fittings such as tapware only;
- Rearrangement of furniture.

The key to a successful outcome is getting the right design solution considering the circumstances right from the start, which is a function of the CAPS model.



CAPS MODEL KEY FEATURES

Culture

The culture in which the CAPS model can be successful is one of respect, collaboration, accountability and timeliness.

It is essential to establish guiding values and principles, to communicate about these, and to incorporate them into every stage of service development and delivery.

Please refer to Practice Standards – Culture on page 26 for more information regarding how culture can be developed and supported through practice standards.

Clear roles and responsibilities of the home modification team





Over the many decades home modification has been practised in Australia, professional specialities have emerged in the form of highly skilled occupational therapists, building designers, construction project managers, builders and others.

However, the scope of practice for professionals performing these roles is often poorly defined and fluid in the functions, responsibilities, activities, and decision-making capacity that professionals are educated, competent and authorised to perform.

Role definition and separation facilitates collaboration and optimises the service provision distributed across the team when members are clear about each other's scope of practice and competence.

The CAPS service model requires the clear definition of roles and responsibilities for all team members who come together to deliver a home modification. These include the:

- Insurer (I);
- Person with disability (P);
- Home modification specialist Project Manager (PM);
- Occupational therapist (OT);
- Designer (D) and;
- Builder, and others (B).

Note: The roles and responsibilities for each team member outlined in this publication are not intended to be definitive.



THE INSURER

The insurer has a governance **and administrative role** and other obligations set out by law.

The insurer is resource- and risk-conscious. The insurer is thinking: How can I keep the program sustainable, fair and effective? Who can I appoint externally and internally to take care of these interests?

The responsibilities of the insurer cover:

- Program and service system development;
- Facilitating a consistent approach to planning, funding and providing supports to people with disability;
- Developing policy, procedures, contracts and oversight of processes;
- Managing eligibility of a person with disability to be assessed for home modification, and approving home modification project plans;
- Maintaining a current register of service providers.



THE OCCUPATIONAL THERAPIST

The Occupational Therapist (OT) has a client-centred clinical focus, which is characterised as a **clinical and prescriptive** role.

The client-focus in home modification delivery is solution-orientated so the person's needs, wants and preferences are interpreted into a design solution that will improve their independence and safe access, emergency egress, and capacity to manage their own personal care and participate in activities of daily living. These are inherent goals or outcomes of the home modification - to look at the person's specific disability and what the home has to offer, and bridge that gap. In the CAPS model, the responsibilities of the OT cover:

- Prescribing home modification in consultation with the person with disability;
- Consulting on the schematic design of home modification with the home mods project manager;
- Producing a report and recommendations for the insurer in consultation with specialist home modification project manager;
- Signing off the design plan and specifications.



THE PERSON WITH DISABILITY.

The person with the disability is the expert on their own experience. They have a role we would describe as **collaborative and advisory.**

In the CAPS model, the responsibilities of the person with disability cover:

- Communicating with the OT and home modification specialist project manager about their needs and wants in relation to independence, safety and activities of daily life;
- Initially, collaborating with the OT and project manager on the design solution and making their suggestions on how things should be done;
- Communicating with the specialist Project Manager during the design and construction stages;
- Making choices between available options;
- Approving the home modification schematic design and the final home modification design;
- Entering into a contract with, and paying the builder (if they are home owner, and if the contract includes self-funded components.)



THE FAMILY & CARERS

The family of the person with the disability are the experts on their own experience as supporter and carers of the person with the disability.

They have a role as **advisors and advocates**.

In many cases they have a high stake in the home modification, as it is their home environment that may be being modified.

Their responsibilities cover:

- Communicating with the OT and specialist home modification project manager about their role in care and support of the person with the disability, and any needs and wants to support themselves in this role;
- Communicate with the project manager during assessment, design and construction stages;
- Initially, making suggestions on how things should be done;
- Making choices from design available options;
- Entering into a domestic building contract with, and paying the builder (if they are home owner, and if the contract includes self-funded components.)



THE SPECIALIST PROJECT MANAGER

The project manager is responsible for project planning, delivery, quality assurance and compliance, providing end-to-end continuity to complete the project according to the required scope and standard.

The specialist home modification Project Manager has an **objective, outcome focused** role.

The project manager is thinking: What are the issues, facts and next steps? What is possible to achieve with the available resources? How can this project be delivered as designed, on time and budget to the required standard?

The responsibilities of the home modification project manager cover:

- Assessing the suitability of the home for modification;
- Consulting and advising the OT and person with disability on design options, construction issues and cost-saving ideas;
- Preparation of the assessment report, cost estimate and project plan for the insurer;
- Development of the schematic design;
- Development of the design brief and facilitation of design documentation with the draftsman or architect;
- Preparation and management of the tendering, contracting and project delivery;
- Engaging the building certifier and arranging building permits;
- Ensuring compliance and building code requirements are met.



MORE ABOUT THE SPECIALIST HOME MODIFICATION PROJECT MANAGER

Successful teamwork requires someone to be in charge. In the CAPS model, the project manager is responsible for project delivery and the effective delivery of the home modification service across the team.

For this reason, this role must be filled by a qualified and experienced professional.

The project manager requires the following skills and knowledge:

- Home modification project management experience;
- Residential construction knowledge with the ability to identify construction issues and recommend construction solutions;
- Ability to develop design solutions;
- Ability to contribute to budget saving solutions;
- Fluency in the application of universal design principles, the National Construction Code and standards related to access;
- Experience in managing domestic building tenders, contracts and permits;
- Responsiveness to the needs of people with different experiences of disability;
- Applied understanding of insurance principles.

The specialist home modifications project manager takes responsibility for engaging and managing the work of designers and builders along with any other professionals that are required such as building certifiers, engineers and landscape designers.

The specialist home modifications project manager also provides continuity as the intermediary and communication point between the person with disability and their family and other team members throughout the construction process.

The project manager role may be undertaken by a multi-disciplinary professional with additional applied knowledge and skill in the area of home modification project management. This maybe a professional with a background in access consulting, building certification, occupational therapy, building design, architecture, construction project management, or a builder with relevant experience.



THE DESIGNER

The designer has a technical focus as a registered architect or draftsman. Their role is to develop design documentation and specifications in accordance with the design brief.



THE BUILDER

The builder must be a qualified and registered building practitioner, and has the responsibility to construct the home modification as designed.

Role and responsibilities include:

- Respond to tender with quote;
- Enter into domestic building contract with home owner;
- All work over \$5,000 requires domestic building contract (Vic);
- Engage sub-contractors and organise materials;
- Undertake building work in accordance with design brief and contractual obligation for the agreed price;
- Collect certificates of compliance and provide these to the project manager;
- Responsiveness to the needs of people with different experiences of disability.



THE CORE RELATIONSHIP

The core relationship between the person with disability, occupational therapist and the specialist project manager, established in the Planning and Assessment stage, is an essential feature of the CAPS model. It is the innovation in home modification service delivery that has evolved from experience and success project delivery.

Each person contributes their expertise, knowledge, information and ideas in line with their role. It is essential that all three team members consult and collaborate to define the design solution and set expectations around the project from the outset.

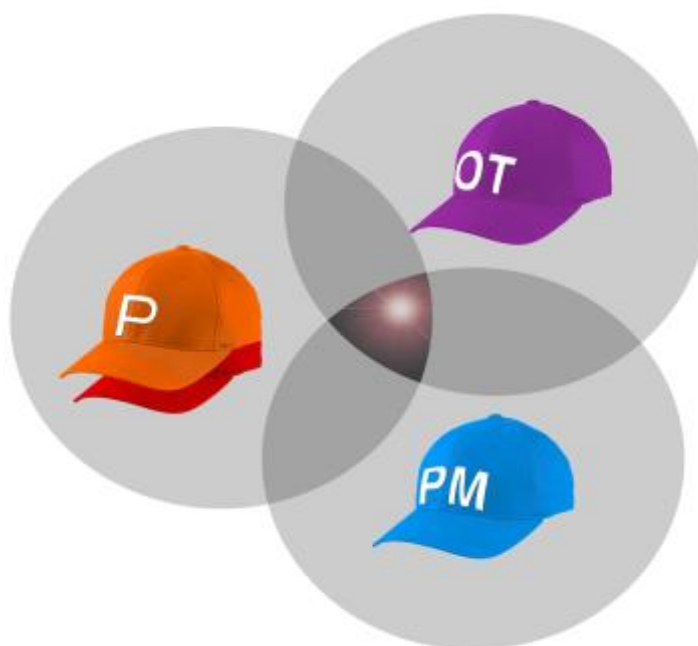


Figure 2: The core relationship.

The CAPS model is firm on this point – all three people bring their specific perspectives into the discussion to this tightly defined area that is the home modification.

Where these perspectives intersect is the home modification.

The best solution, this 'sweet spot' that is the home modification, where the viewpoints intersect – this has to be the result of input from these three parties.



Architecture & Access believes that this doesn't happen consistently well in current home modification planning processes.

It is important to remember that this process is about people first and foremost, so the establishment of the interpersonal connections and trust is also very beneficial.



Figure 3: The planning and development meeting delivers a shared vision for the design solution.

The development of the design solution happens as a collaboration between the person with the disability, the occupational therapist, and the specialist project manager.

- The person with the disability is talking about their specific experience of disability, their goals, needs and wants in relation to participation in activities of everyday life;
- The OT is talking about what kind of modifications might bridge the gaps in the current home to create better access and independence for the person and to enhance participation in activities of everyday life;
- The project manager is talking about changes to the physical environment from a construction and design perspective that may meet the requirements of the OT and the individual that are practical and cost-effective within the structure of the home.

The family and support people are also included in this early consultation process to ensure their views are considered and that the design solution



takes account of realistic expectations in relation to their ongoing provision of care and support.

It is **because** of this collaboration that home modification takes shape. Collaboration is not a 'nice to have', it is actually a function of the team and team culture, and it is needed to complete a critical early outcome – the definition of the design solution that is the best fit for the situation.

Consultation and collaboration happens at every stage in the process of home modification, not just at the assessment and planning phase - between different team members who are drawn into different relationships throughout the process to exchange information and ideas and make decisions – so practice standards for collaboration should apply to all team members. These are covered in the next section of the service model presentation.

At the conclusion of the assessment and planning meeting, a joint report is prepared for the insurer by the OT and the project manager, which presents their recommendations, the design sketch plan, the scope of work and broad project plan, and early cost estimate.

PRACTICE STANDARDS

The development of a standardised service model and methodology that clearly articulates best practice in home modification delivery will lead to more consistent positive outcomes for all involved.

We should utilise the pre-existing standards already developed by the various bodies for each practice area, and devise or adapt others where needed.

It is important that this happens, so that we have a shared reference point for people to recognise their responsibility to meet required standards for service delivery.

Culture, collaboration, client-focus, cost, quality and compliance impact significantly on project outcomes, and are the areas of focus for the practice standards applied in the CAPs model.



Culture

It is essential to establish guiding values and principles; to communicate and flow them through every stage of service development and delivery.

Practice standards to support a positive culture include:

- Support of frontline changes, practices and behaviour that increase the sense of fairness, transparency, collaboration and enjoyment;
- Establish a code of conduct that is clear about everyone's entitlement to be treated with courtesy, honesty, dignity and respect for their human rights;
- Conduct regular performance evaluations;
- Deal with unacceptable behaviour and handle complaints with transparency and consistency;
- Create a learning environment whereby service providers can develop knowledge and skills in modelling desired behaviour:
 - All service providers trained in disability awareness;
 - All service providers trained in principles of non-discrimination and equal opportunity;
- Complete service delivery in a timely manner;
- Provide service information in accessible formats as required by each person with disability.

Collaboration

The home modification team is a multi-disciplinary group of practitioners and support staff with complementary skills including the insurer and their delegates, the occupational therapist, the project manager, designer, the builder, the person with disability and their family.

Consultation and collaboration happens at every stage in the process of home modification, between different team members who are drawn into different relationships throughout the process to exchange information and ideas and make decisions. Practice standards for collaboration should apply to everyone.

Practice standards for collaboration include:

- Effectively communicate with team members to share relevant information and advice within the scope of the role;
- Demonstrate participation and leadership in developing a culture of collaboration within the team;



- Engage all members of the team in collaborative practice and decision-making;
- Build and maintain professional relationships with team members including with the person with disability and their family.

As noted earlier, the definition of roles and responsibilities is a pre-requisite to collaboration because collaboration is actually a function of the team, not just a desired behaviour.

Client-focus

The collaboration that takes place, particularly in the Assessment and Planning phase of home modification is undertaken with a client-centred approach.

A client-centred approach essentially focuses on the needs, wishes and preferences of the person who is to benefit from the service.

A supportive approach, encouraging people to participate in their own project is important when working with people who have experienced a loss of capacity to manage aspects of their own lives because of their disability or ageing.

Practice standards in relation to client focus include:

- Convey information about roles and responsibilities of all team members to the person with disability and their family;
- Provide support and information in accessible formats to encourage people with disability to be active participants in their project;
- Consult with people with disability to integrate their input into the development of the design solution;
- Practise in a way that recognises the individual circumstances, needs and values of the person with the disability;
- Maintain consultation and provide feedback throughout design process.



Quality

Quality in home modification service delivery is essentially about the team being able to predict that they will consistently improve the independence and safety of the person with the disability in providing access to and within the home, personal care and other activities of daily living.

Having a quality system in place gives all parties confidence that the products and services are of consistently good quality, are meeting the required standards and delivering the expected outcomes.

For example, Architecture & Access has a certified quality system in place. One of the key features of our system is quality assurance protection around the process of design and development.

It is quite a detailed process of checks and balances, but it simply steps out good practice and insists everyone follows the steps. Regular internal and external audits are undertaken to make sure people are adhering to the quality system.

This quality process ensures design documents are prepared with care and precision following the same process every time.

Practice standards in relation to quality include:

- Having or working towards having a quality system in place;
- Inviting people with disability, families and carers to provide feedback and participate in project evaluation;
- Participating in quality improvement activities;
- Conducting or participating in audits to identify quality issues within the service or contractor's business.

CLIENT FEEDBACK

Client feedback and evaluation is an important area of quality management as it is one of the key areas for measuring successful outcomes and improving service quality.

Architecture & Access conducts in-depth follow-up interviews with clients and their families about the experience of participating in home modification project. This includes the impact of the home modification on their lives in key areas of independence, safety and activities of daily life, and levels of satisfaction with the process and outcome.

Feedback is used to consider ways to improve service delivery, for example:

- Developing more resources for people to assist them to visualise design solutions;
- Establishing relationships with regional builders because people prefer local suppliers;



- Allowing more time for people to go over their contract before signing.

At a system level, quality assurance should also require the agency or insurer to evaluate service quality to make sure delegates and service providers are delivering the required outcomes and meeting people's needs.

More work needs to be done on developing standardised tools for client follow-up, evaluation and reporting the efficacy of home modification.

Cost

Home modification projects can be expensive and are likely to be one of the single most important projects a person with disability will undertake.

Equally, for the sustainability of support systems as a whole, the cost per project is important, but not as much as the cost-effectiveness over time and the return on investment in terms of the increase in people's independence and participation, and reduced dependence on care.

Cost can be managed through the following practice standards:

- Service agreements and tenders to be inclusive of the cost of all inputs;
- Agreement on the cost management procedures and pricing mechanisms developed in consultation with the insurer and service providers;
- Agreement on management of variations in consultation with the insurer, service providers and participants;
- Scope of work for home modification to include accurate cost estimates.

More work needs to be done on developing practice standards that support a return on investment by considering cost-effectiveness over time.

In addition to poor scoping and cost-estimation, the majority of problems that relate to cost increases after project approval are traceable to some combination of:

- Design-related issues;
- Variations to the contract;
- Poor execution or non-compliance.

To control cost in these areas:

- Develop design solutions in collaboration with the project manager, occupational therapist and person with disability;



- Prepare design drawings and specifications with great care and precision;
- Consult closely with the home owner during design development to include all the details in the contract;
- Be clear with the home owner that the contract is binding;
- When variations must happen, follow strict procedure to cost, document and sign off the variations;
- Use registered and experienced practitioners with clear guidelines on practice standards regarding compliance.

Compliance

Poor quality, defective or non-compliant work is obviously a poor outcome for the homeowner and the insurer. Anecdotal evidence suggests that a large number of home modification projects are being completed without permits or adherence to the building code and standards.

This approach leaves everyone exposed and is not sustainable for the client or the system.

The National Construction Code includes a list of Standards, which set the technical and performance requirements for buildings. Compliance with the Standards is mandatory whenever they apply to any work.

Although not mandatory for residential buildings, Architecture & Access uses AS1428 Design for access and mobility as the standard reference particularly in relation to ramp design, doorway widening, circulation spaces, toilets, grab rails, reach ranges, furniture and fittings, and luminance contrast.

Practice standards for compliance include:

- Use registered practitioners to undertake work;
- Undertake all work in compliance with the National Construction Code and state-based laws and regulations;
- Undertake all work with reference to relevant and applicable Standards inclusive of AS1428 as it applies to the individual needs and project requirements;
- Administer domestic building contracts as required by law.

The law of Domestic Building contracts lays out some general standards to ensure that workmanship is of a reasonable standard and the finished product is fit for purpose.

The best prevention strategy here is to:

- Engage registered and experienced builders;



- Use a reputable building surveyor/certifier;
- Brief sub-contractors onsite to ensure they are clear about expectations;
- Ensure certificates of compliance are provided;
- Project manager to check or 'sign-off' at key stages.

FOCUS ON OUTCOMES

The CAPS model focuses on improved outcomes for the person with disability in terms of their stated goals.

More work needs to be done to develop evaluation tools that measure and analyse participant outcomes in a meaningful way.

The key outcome areas may include improvements in access to and within the home, measurement of personal independence and participation in necessary and chosen activities of daily life.

Outcomes in relation to levels of formal paid supports are also of great interest as they impact on the sustainability of the system and individual client experiences.

Outcomes in relation to cost, timeliness and quality will also inform on the wider application of the CAPS model and home modification service delivery in general.

The CAPS model aims to improve outcomes for the team members as it addresses their specific issues and concerns. Positive outcomes for team members in areas of importance to them will be a key area for evaluation.



THE FIVE STAGES OF HOME MODIFICATION DELIVERY

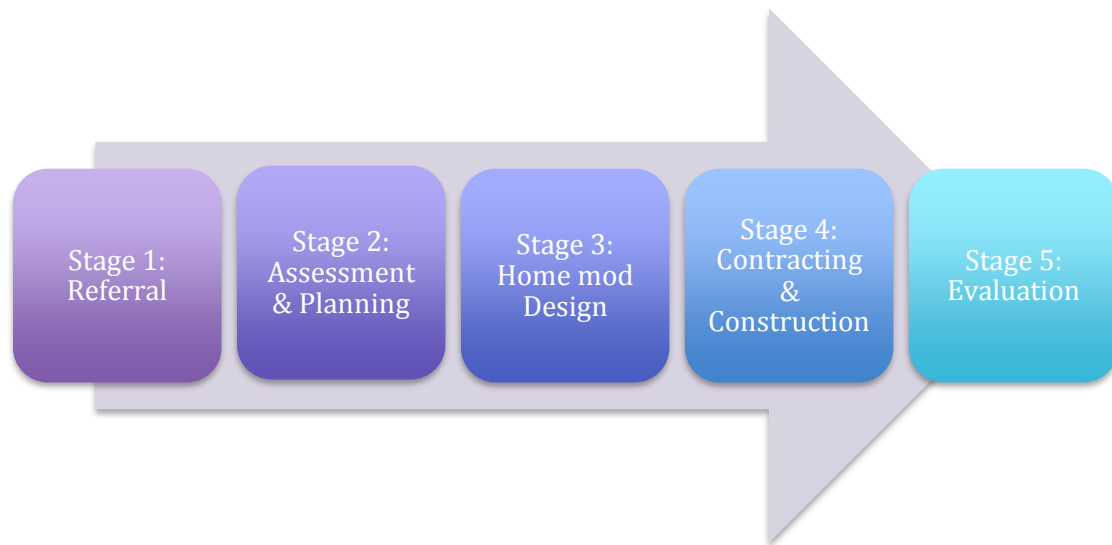


Figure 1: The five stages of home modification delivery.

There are five main stages of home modification delivery.

In the CAPS service model, the specific roles and responsibilities of each team member are clearly spelled out and attached to procedures at each stage with the CAPS providing a communication tool to assist all parties in understanding the roles and responsibilities of the team at each stage.

The stages are:

1. Referral
2. Assessment & Planning
3. Home Modification Design
4. Contracting & Construction
5. Evaluation.



Stage 1: Referral



The first step towards undertaking a home modification is for a person to obtain a referral for assessment by an occupational therapist.

When the occupational therapist receives the referral, they contact the person to arrange a home visit.

The CAPS model proposes that the initial phone call by the occupational therapist includes a set of triage questions to identify the likely scope of the home modification. These would include questions in relation to the person's access to and within the home, their level of independence and the state of the home environment.

If the likely scope fits the criteria for a home modification project requiring project management (refer to page 12), the occupational therapist will recommend to the insurer that a project manager attend the assessment and planning meeting along with the occupational therapist.

For the purpose of the CAPS model, a home modification becomes a project when specialist expertise is required to ensure the home modification is designed and delivered on time and within budget to meet a prescribed scope and quality. (See page 12.)

The occupational therapist or the insurer refers a project manager from the insurer's register to attend the Assessment meeting.

THE NATIONAL DISABILITY INSURANCE SCHEME (NDIS) PARTICIPANTS

The NDIS is available for Australians up to age 65 who are living with a permanent and significant disability. To participate in the NDIS, a person needs to meet the criteria.

Eligible people are linked up with an NDIS planner who takes them through the process for obtaining funding for supports such as home modification.

The NDIS Planner will arrange a referral for assessment by an occupational therapist after identifying the requirement for home modification assessment related to a participant's goals.



WORKSAFE

WorkSafe provides support and funding for necessary home modification for people who have acquired a disability as a result of a workplace accident covered by WorkCover.

This process often requires a letter to the insurer to be written by the general practitioner or specialist recommending assessment for home modification.

Currently, when the insurer receives the letter from the general practitioner, they will arrange referral to an occupational therapist.

THE TRANSPORT ACCIDENT COMMISSION

The Transport Accident Commission (TAC) provides support and funding for necessary home modification for eligible people who have acquired a disability as a result of a road accident.

TAC clients may contact the insurance agency to confirm the process for taking the first steps towards home modification. This process often requires a letter to the insurer to be written by a general practitioner or specialist recommending assessment for home modification.

Currently, when the insurer receives the letter from the general practitioner, they will arrange referral to an occupational therapist.

PRIVATE CLIENTS

Private clients who are ineligible for insurance funding or aged care subsidies and wish to have an assessment for home modification can start the process by talking to a general practitioner.

If the doctor thinks a home modification may improve independence and safety, they will write a referral to an occupational therapist.

PEOPLE OVER 65 YEARS OF AGE

My Aged Care is a government initiative available for Australians up to age 65, including support services and home modification for people who are living with a permanent and significant disability. To be eligible for subsidised services, individuals will need to meet certain criteria.

OTHER SCHEMES

Other schemes covering home modification for eligible people may include:

- The Department of Veterans' Affairs, and
- The Department of Human Services.



Stage 2: Assessment & Planning



When the occupational therapist receives a referral, they arrange to visit the person to find out more about their lifestyle and needs.

A specialist project manager will also consult with the individual and the occupational therapist to consider home modification design options that meet individual needs and recommendations. They also advise on practical and cost-effective modification ideas.

In consultation with the person, their family and occupational therapist, the project manager develops a plan for the suitable home modification. This is called a schematic design.

This is a very important step. It is important that the participant has their say and communicates about their goals, the required changes, and how they would like things to look.

The occupational therapist and the project manager then write a joint report for the insurer containing their recommendations, the proposed schematic design and estimated costs.

The insurer assesses the report and approves funding for the recommended home modification in line with their criteria.

Stage 3: Home Modification Design



The project manager is responsible for developing the initial design sketch plans and early cost-estimation in close consultation with the OT and the person with disability. They will also advise on any construction issues impacting on the modification.

The project manager provides assurance that once built the designed home modification will meet the functional needs of the individual, meet



the OTs requirements, provide the best value for money for the homeowner and the insurer, and be practical for the property.

The project manager will provide a design brief to a registered designer who will prepare the drawings and specifications. This will include all details on the fixtures, finishes and equipment.

The participant and their family will be assisted to make design choices where possible.

Design drawings and specifications must be prepared with great care and precision. This is important because clear design plans, schedules and specifications mean a straightforward job for builder and less chance for variations or mistakes.

The design will consider any required planning regulations, the National Construction Code and standards related to accessibility.

The project manager may also engage other professionals such as a structural engineer and a building surveyor if the project involves structural alteration to the home.

The participant and the occupational therapist will sign off on the final version of the design plans and specifications.

Once signed off, the design plans and specifications are final.

Design plans can be hard to understand for inexperienced people. The project manager will work with the participant to visualise the finished project to allow sign off with confidence.

The project manager will also explain the tendering and construction process to the participant, including how this might affect living arrangements for the duration of construction.

Stage 4: Contracting & Construction



The development phase is complete when a registered building surveyor has issued a building permit. From this point a contract for the construction phase can be activated and the physical building work can commence in accordance with that permit.

In Victoria, under new regulations introduced in 2016, a builder may not appoint a building certifier.



In the CAPS model, the building certifier is engaged by the project manager with the permission of the home owner.

THE TENDER

Before entering into a building contract, the homeowner needs to obtain written offers or quotes from one or more builders. These offers are called tenders.

This is a critical point in the project delivery where inexperienced people can make very costly mistakes.

The builder will base the price offer on the documents as they are provided in the tender.

It is important that the tender contains the documentation and all specifications for the job to be built.

By law, the tender has to contain a full description of the work, the price, start and end dates, and any proposed exclusions or special conditions and a number of other details.

THE CONTRACT

Once the builder is selected and awarded the tender, the contract is written.

A building contract is the agreement between the builder to construct a certain product for the owner and for the owner to pay the builder the agreed price.

The contract is a very detailed legal document that sets out the technical, legal, financial and management details of a project.

Every project with a total value over \$5,000 requires a building contract. Only a registered building practitioner can enter into a domestic building contract.

In Victoria, *The Domestic Building Contracts Act 1995* or DBCA has mandatory requirements for the content of all domestic building contracts over \$5,000.00. They are similar to what needs to be in the tender.

Cooling off rights

Owners are generally allowed to withdraw from domestic building contracts within the first 5 days following their receipt of a copy of the executed contract.

- **INSURANCES & WARRANTIES**

There are many different types of insurance and warranties that the homeowner needs to be aware of, but the main ones are Home Warranty Insurance and Statutory Warranties.



Legislation requires builders to provide **Home Warranty Insurance** for any work with a price above different amounts in different states as summarised below:

- \$16,000.00 in VIC
- \$20, 000 in NSW
- \$12,000 in SA & ACT
- \$20,000 in WA
- \$3,300 in QLD
- Not required in Tasmania.

The builder must obtain the insurance before carrying out any work and before accepting any money under the contract. For a building permit to be granted the building surveyor will need a copy of this policy

This covers the homeowner in case the builder dies, becomes insolvent or disappears – for incomplete work, costs of rectifying any defective work or damage.

- **STATUTORY – IMPLIED – WARRANTIES**

The law (DBCA) also specifies a set of warranties for the benefit of owners, that apply to all domestic building, that safeguard the quality of workmanship and materials, and for the project to be fit for intended use and to live in.

CONSTRUCTION

The construction stage involves:

- The builder completing home modification in consultation and under direction of home modification specialist project manager;
- The specialist home modification project manager signing off on project completion;
- The project manager reporting project completion to insurer and the OT;
- The home owner (or delegated fund manager) making final payment to the builder.



VARIATIONS

Variation-related issues are a major cause of problems on a home modification project.

A variation is any change to any aspect of the work in the signed contract. It may involve changes to the design, the extent the work, the timing, the materials, the standard quality or appearance of any material finishes, dimensions, and so on.

Variations will always cause delays, increase the cost of the project, and lead to tension between people.

In some cases, permit amendments will also be required before a variation can proceed; this will involve further delays and costs.

The project manager's role is to verify and follow up on any impact of variations on the building permit, design plans, and additions to cost and timing of the project delivery.

There are also occasions when the homeowner may insist on wanting to add or change something into the contract, in which case, the project manager is best placed to negotiate the outcome.

Variation cannot be carried out unless they comply with the law, which requires the variation to be in writing, to be accurately described and costed; and stating the impact on the contract period.

If the homeowner doesn't give this authorisation, the builder would be entitled to carry out the work as originally documented.

To prevent variations:

- Consult closely with the home owner during design development to include all the details in the contract;
- Be clear with the home owner that the contract is binding;
- Follow strict procedure to cost, document and sign off the variations in situations where variations must happen.



Stage 5: Evaluation



The insurers or appointed delegate should conduct an evaluation to measure the success of the home modification in delivering the expected outcomes using quantitative and qualitative measures.

Service providers may also obtain feedback from participants and their families and colleagues to assist the process of service improvement.

See also, Practice standards: Quality on page 28 for more information regarding how client feedback can impact on service quality.



SUMMARY OF THE CAPS MODEL

Summary – CAPS home mods service

The CAPS home mods service model is both a conceptual framework and procedural guide to home modification delivery in an insurance setting.

Features:

- Culture of respect, collaboration, accountability and timeliness.
- Clearly defined roles and responsibilities for team members.
- Core relationship.
- Standards of practice.
- New role for the specialist home modification project manager.
- Evaluation of functional and qualitative outcomes for person with disability – access, independence and safety.

CAPS concept promotes understanding and compliance with the process. Each party wears one cap only. CAPS can also assist creative problem solving.

Figure 4: Summary of the CAPS model.

The CAPS home modification service model is both a conceptual framework and procedural guide to home modification delivery.

It is provided in the context of an insurance setting for people with severe and permanent disability living in a home that presents significant barriers to independent access to and within the home.

The features of the model are:

- **A culture of respect, collaboration, accountability and timeliness** – it is essential to establish guiding values and principles, to communicate about these, and flow them through every stage of service development and delivery.
- **Defining roles and responsibilities** for the insurer, the person with disability, occupational therapist, project manager and others at every stage of the process.
- The **three-way core relationship** between the person with the disability, the OT and the project manager, see these team members come together around the table in the assessment planning stage to define the best design solution and set the project up for success.



- **Standards of practice that apply to the whole team** in key areas such as – culture, client-focus, collaboration, quality assurance and cost.

As the home modification service sector matures, it is a good time to look at developing an over-arching set of practice standards as a reference point to guide practitioners and improve consistency in the standard and outcomes of service delivery.

- The newly defined role of the multi-skilled **specialist home modification project manager** to scope and drive the project, to provide end-to-end project continuity, and be the intermediary between all parties.
- Focus to be on high levels of satisfaction and improved outcomes on the part of the person with disability in relation to access, safety, participation in their chosen activities of daily life, and reduced levels of formal support.

The model uses a simple and effective communication tool (our coloured CAPS) to illustrate and explain the process of home modification delivery and promote understanding of the roles and responsibilities for all parties.

The CAPS tool can go further to assist the process of collaboration and creative-problem solving by allowing parties to 'borrow' CAPS in order to change their own thinking by considering the perspective of others.

NEXT STEPS

Architecture & Access will seek partnership to further develop, apply and pilot the CAPS model of home modification delivery, including independent evaluation measuring qualitative and quantitative outcomes.

With ongoing input from the wider field, Architecture & Access will continue to develop more detail around information resources, operational procedures and cost structure.

More research using a larger sample of stakeholders is required to document and analyse their issues, concerns and measures of success, to link these with the features of the model that address them, and to test and refine the service model.

Developing an evidence base for agencies, industry service providers and policy-makers is an important research priority.

It is also important for the industry to be supported to gather evidence of best practice, encourage innovation and develop practice standards to guide their practitioners and improve service quality.

The CAPS project offers a great opportunity to further refine a practical service model in partnership with key stakeholders including the home modification industry peak body, leading service providers, insurers and people with disability.



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