

Assistive Technology Policy

Introduction

As Occupational Therapists, we focus on promoting health and wellbeing by enabling people to participate in the everyday occupations of life. We are directed towards meeting the goals and needs of our clients. We use a range of strategies and targeted interventions to support people to understand, manage and cope with their daily function, productivity, and capacity. We design a plan of service based on best practice clinical process and the specific needs of each client.

Occupational therapists frequently use Activity Analysis to consider the tools and equipment necessary for clients to engage in a specific activity. Following an assessment, if everyday equipment is not suited to an individual's abilities then the therapist will consider either modifications to it or else wholly specialised devices; in other words, they will consider assistive technology

Assistive Technology is any device or system that allows a person to perform a meaningful task that they would otherwise be unable to do, or increases the ease and safety with which the task can be performed. It is a broad term which includes a wide range of assistive, adaptive, or rehabilitative devices, as well as the expertise by which these devices may be selected, sourced and used.

Our Occupational Therapists at Do it with Purpose Occupational Therapy have clinical experience sourcing, trialling and recommending appropriate assistive technology, which is informed by up-to-date knowledge of published literature related to its use. Being aware of the range of alternatives is only one part of the therapist's task. We also provide independent advice supported by their expertise and clinical reasoning about options and choices of assistive technology to minimise barriers to function and promote independence and improve quality of life.

Statement

Do it with Purpose Occupational Therapy recognises that the prescription of any assistive equipment involves complex reasoning. It is based on observation and evaluation of the client's performance to make specific recommendations for the most appropriate assistive technology (if any) to facilitate improved functional ability. Matching the client's abilities, preferences, environmental contexts, and barriers to the technology device features is undertaken to lead to productive outcomes for our clients.

Our clinicians will integrate information about the device itself with the relationship between the client (physical ability, their functional ability and their goals), their environment (for example, their carers or the layout of their home), and the task at hand. Our clinicians will consider all options, including non-assistive technology supports, addressing the client's functional limitations. Other than being necessary in their own right, explicit consideration of a client's full circumstances is also likely to be essential in securing any funding that may be required.

We support the Social Care Institute for Excellence's four ethical principles to be addressed when considering a solution for a client that uses assistive technology¹:

1. **Autonomy** - whether or not a technology promotes choice in their everyday life
2. **Beneficence** - whether or not a technology promotes their broader wellbeing
3. **Non-maleficence** - whether or not a technology entails a significant risk of harm
4. **Justice** - whether or not the costs of a technology are justified by its potential benefit

¹ Social Care Institute for Excellence (2010), At a Glance, 24: Ethical issues in the use of telecare

This policy avoids prescribing any single procedure but instead provides principles and highlights core issues to assist our clinicians in understanding and implementing assistive technology within our C.A.R.E. model.

Assistive Technology

Assistive Technology is any product (including devices, equipment, instruments and software), especially produced or generally available, used by or for persons with disability: for participation; to protect, support, train, measure or substitute for body functions/structures and activities, or; to prevent impairments, activity limitations or participation restrictions”.² Assistive technologies help people to have greater function, independence and safety. Assistive technologies help people perform activities they may not have previously been able to do, and in a manner that is safe. Assistive technologies can also prevent impairment and development of secondary conditions.

Assistive Technology includes:

- items that reduce the need for assistance
- items which make assistance safe or easy
- items that help maintain functioning
- items that allow the client to complete tasks independently
- items that are personalised for the client.

Examples of types of Assistive Technology include:

- **Daily Living Aids** such as dressing aids, modified eating utensils, tap turners and other kitchen equipment can help people overcome physical or cognitive limitations and maximize their independence in daily living tasks.
- **Vision/Hearing aids** such as magnifiers, large button remote controls and text to speech software may assist in overcoming sensory deficits.
- **Seating & Positioning equipment** such as adapted seating, specialised cushions, positioning belts and head supports can help people maintain an upright posture, maintain physical health and limit postural deterioration.
- **Mobility equipment** such as power or manual wheelchairs, electric scooters, walking frames and modified vehicles for travel may help individuals move within their environment and maximize their participation in their home and community.
- **Alternative & Augmentative Communication (AAC)** such as electronic communication devices, speech generating devices, voice amplification, communication books and other communication resources may help people with speech and language impairments to communicate with those around them.
- **Computer Access aids** such as switch access, mouse alternatives (including eye-gaze mouse control, head tracking devices, mouse emulation software and power wheelchair controls integrated as mouse controls) and specialized computer access software (including voice control software and voice to text software) can allow independent computer access to individuals with complex presentations and very limited functional movement.
- **Environmental Control systems** such as home automation systems, power link devices and advanced remote-control systems can allow individuals to control household appliances (such as lighting, heating, entertainment units) as well as their home environment (such as remote opening doors) and operate their telephone when they may have very little functional independent movement.
- **Leisure/recreation aids** such as adapted gaming controls, adapted sports equipment (bowling supports, fishing rods, horse-riding saddles, kayak seating, paddle grips, etc) and audio descriptions for TV, internet use and movies.

² International Organisation for Standardisation, “Assistive products for persons with disability—classification and terminology,” *ISO 9999:2016*, ISO, Geneva, Switzerland, 2016.

- **Home/school/workplace modifications** provide structural solutions such as ramps, grab rails, stair climbers, bathroom modifications, increased door widths and adaptive desk/workspace configurations to maximize access and safety in the home, school and workplace.
- **Prosthetics and Orthotics** such as hand splints, Ankle Foot Orthoses (AFOs), artificial limbs and orthotic aids provide support, replacement, or augmentation to affected body parts.

Types of Assistive Technology

One important distinction is between technologies that require active engagement from a client and those that do not.

- **Active-client technologies** require the individual to take some action to operate the technology. Examples include operating voice-recognition software, eye gaze systems or the use of rehabilitative applications on a computer or tablet device.
- **Passive-client technologies** do not require conscious interaction from the client. Examples include movement-activated lighting or a falls-detection system.

Another distinction, relevant to the consideration of whether a technology is likely to be practical and cost-effective in the longer term, is between those that require only a one-time set-up and those that are linked to support services on an ongoing basis:

- **Stand-alone technologies**, once set up, will continue to work in a determinate way. Examples include a speaking clock or specialized kitchen utensils.
- **Support-service linked technologies** link to responders or support systems, whether the communication is initiated actively by the client, remotely or automatically. Most telecare systems are examples of support-service linked technologies.

Within the National Disability Insurance Scheme, Assistive Technology have been divided into four complexity levels. These are:

Level 1 (basic): Affordable, low-risk items that can be easily sourced. Products typically have specific features that address functional limitations and are used for familiar activities in familiar environments. Examples include non-slip bathmats, replacement mobility canes/walking sticks, larger print labels, smoke alarms, doorbells, adapted grip equipment, and other similar items for daily living.

Level 2 (standard): Low- to medium-cost/risk products and services that require only minor adjustments to activities and environments. These Assistive Technology products are typically available ‘off the shelf’ and require either straightforward training or minor adjustments before use. Examples include simple bathing and toileting devices, vision/hearing devices, orthotics, and home adaptations like handrails, ramps, and personal alarm systems.

Level 3 (specialised): Assistive Technology is similar to Level 2 but requires either modification to cater to the needs of the user/participant, has a higher risk of injury if incorrectly set up, or the device has a greater level of usage complexity. Examples include pressure mattresses, desktop electronic magnification, power-assisted wheelchairs, non-complex prosthetics, and refreshable electronic Braille displays.

Level 4 (complex): This type of Assistive Technology is either custom-made or configured uniquely for the user, comes with additional complexity of use, or carries high risk if improperly used. Examples include prosthetics and complex home modifications.

Risks associated with Assistive Technology

Do it with Purpose Occupational Therapy, along with Occupational Therapy Australia acknowledges there are inherent risks associated with both use and non-use of assistive equipment. The right choice of technology can prove invaluable in promoting function and independence. However, the long-term use of inappropriate

devices can impair these and, instead, prolong or deepen dependence on family, friends, or formal care. The consequences of poor choices can therefore be costly, as well as disappointing for clients and case managers. Dissatisfaction typically results in discontinuance of assistive technology devices.

It is the responsibility of Occupational Therapists to be aware of safety considerations relevant to their practice. Occupational Therapists shall avoid providing and implementing technology which expose the consumer to unreasonable risk and shall advise the consumer as fully as possible known risks.

Assistive Technologies are often categorised into low and higher risks

Low risk Assistive Technology products are:

- unlikely to cause harm in day-to-day life
- available for trial and / or can be purchased in retail stores
- easy to set up and safely use without professional advice.

Higher risk Assistive Technology products may be one or all of the following:

- complex, such as a power wheelchair
- known to have caused harm
- used for a restrictive practice
- require professional advice, setup or training for safe use.

C.A.R.E. Model

Do it with Purpose Occupational Therapy uses the C.A.R.E. model to guide assessment, and where appropriate, recommendation and implementation of assistive technology solutions for clients.

Their expertise and clinical reasoning underpin their recommendations about options and choices of assistive technology to minimise barriers to function and promote independence of clients and their quality of life.

The C.A.R.E. model

- C. Client-focused** and encouraging consumer choice, where possible.
- A. Appropriate** to client's functional needs and goals, being both reasonable and necessary.
- R. Respects risks** and is safe for the client to use and meets Australia's safety standards, where this is possible.
- E. Effectiveness** of products and services that enable individuals to participate in daily activities and life roles, helping the client to do what, where and when they need it to do.

Each of the stages in the C.A.R.E. model is enacted with clinical expertise and informed by factors (decisions, actions, and clinical considerations). Questions that may prompt these within the context of the C.A.R.E. model include:

C. Client-focused and encouraging consumer choice, where possible.

- Does the proposed technology address the client's specific needs, making the most of the abilities they already possess and maximising independence?
- Can the Assistive Technology be easily incorporated into the routine of their everyday life?
- Is the client likely to embrace the technology, or be resistant to it?
- Might use of the technology actually lead to the client feeling marginalised or unfairly discriminated against, for example by their privacy being compromised?
- Is the client willing and able to use any proposed Assistive Technology?
- Is the proposed Assistive Technology compatible with any existing technology or devices the client uses?

- What approaches can be used to include the client in choosing from an array of assistive technology products and services that addresses needs and outcomes valued by them (in contrast perhaps to those valued by others)?
- Do those integral to the client's day-to-day (carers) lives feel informed and comfortable with the technology and able to assist the client if necessary.
- It is possible the introduction of assistive technology may be disruptive, so will the proposed device be non-invasive?
- Does the client have established coping strategies that meet their specific needs, and does any proposed Assistive Technology fit with these?
- What are the mainstream and custom-made options for the proposed Assistive Technology?

A. Appropriate to client's functional needs and goals, being both reasonable and necessary.

- Does the thorough functional and environmental assessment indicate how identified needs can be addressed or supported?
- What Assistive Technology, if any, needs to be considered?
- Consider the provision of age-appropriate equipment and assistive technology, or is there a simpler approach that would work as effectively?
- Would human contact and intervention be preferable to the use of assistive technology, which should support and not replace personal care?
- Will it be easy to incorporate any proposed Assistive Technology into everyday life?
- Will the prescribed device make an immediate difference while helping the client to long-term goals?
- Is the proposed technology cost-effective in this context, or is there a simpler, cheaper technique that would work just as effectively?
- How and when will there be evaluation as to whether the Assistive Technology is achieving the intended outcome(s)?
- If a review of effectiveness indicates that the Assistive Technology is not achieving its intended outcomes, you may consider whether it is necessary to review the use of the equipment and make any modifications to use if required?
- Is the proposed Assistive Technology user-centric and fit-for-purpose?

R. Respects risks and is safe for the client to use and meets Australia's safety standards, where this is possible.

- Are there safety and risk issues with the technology and the client and their goals, and if so, how can they be managed?
- Are there limitations of space or other environmental factors (such as limited internet access) that would prevent an otherwise suitable technology from being a practical choice?
- Is the technology likely to have an impact on the client's family?
- How reliable is the Assistive Technology device?
- Is modification, support, or training in required and available (and at what costs)?
- Will the proposed Assistive Technology improve everyday actions and safety for the client?
- Is there an Australian option for the proposed Assistive Technology?

E. Effectiveness of products and services that enable individuals to participate in daily activities and life roles, helping the client to do what, where and when they need it to do.

- What aspects of the Assistive Technology might impact its use to achieve goals (effectiveness, operability and durability of the technology)?
- Will the proposed technology remain suitable given the likely progress of a client's condition and possible changes to their degree of impairment?
- Will a training session be necessary to assist the client in using the technology, and should post-installation visits be arranged to monitor their progress with it?

- Is there the ability to have a free demonstration or trial before purchase?
- Is the proposed Assistive Technology able to be used where and when the client requires the support, and is it portable?
- What are the space, storage, maintenance and repair requirements of any proposed Assistive Technology?
- Are there are any additional steps to undertake before the Assistive Technology can be used, for example: modification, installation or training?

[See also](#)

Client-Service Model

Risk Management Policy and Procedures

Service Agreement

Next Review Date: May 2023

Client Guide to Assistive Technology

CLIENT-FOCUSED SERVICE

The services provided by Do it with Purpose Occupational Therapy are directed towards meeting the goals and needs of our clients. We design a plan of service based on best practice clinical process and the specific needs of each client. Our occupational therapists undertake a client assessment, and where appropriate, recommend and implement the use of Assistive Technology solutions for clients to engage in a specific activity or achieve an identified goal.

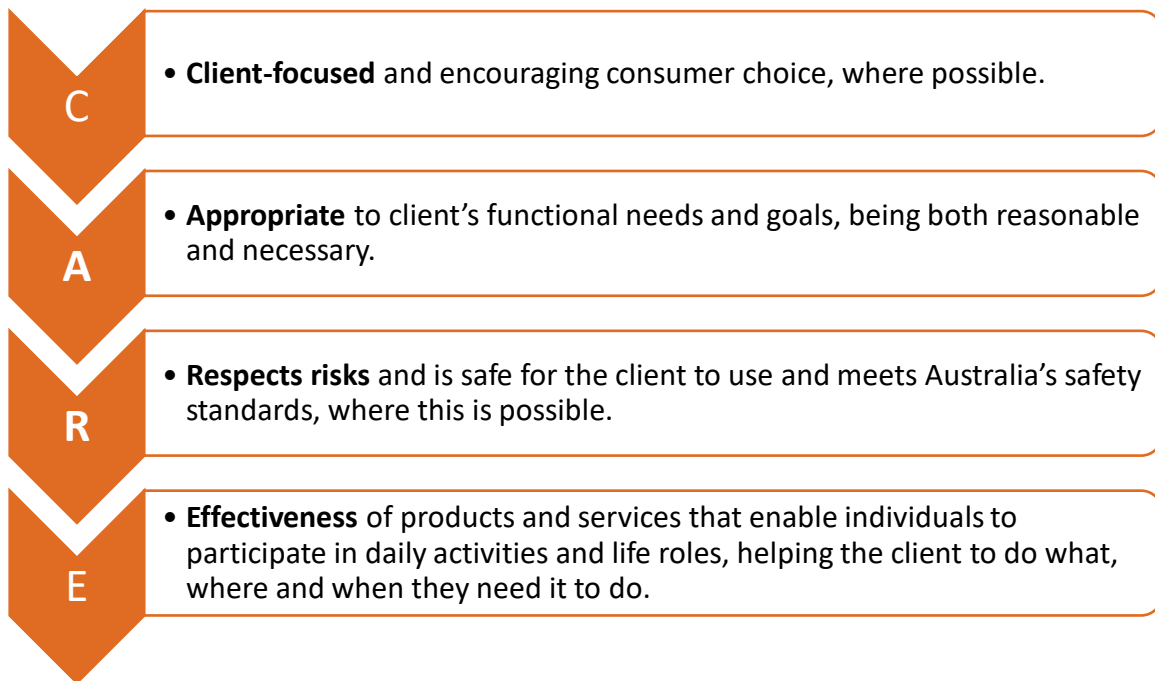
ASSISTIVE TECHNOLOGY

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ASSOCIATED RISKS

There are inherent risks associated with both use and non-use of assistive equipment. The right choice of technology can prove invaluable in promoting function and independence. However, the long-term use of inappropriate devices can impair these and, instead, prolong or deepen dependence on family, friends, or formal care. The consequences of poor choices can therefore be costly, as well as disappointing for clients and case managers. Dissatisfaction typically results in discontinuance of assistive technology devices.

C.A.R.E. MODEL



Each of the stages in the C.A.R.E. model is enacted with clinical expertise and informed by a variety of factors (decisions, actions, and clinical considerations) by your Occupational Therapist.