Advances in technology are transforming the lives of people of all ages around the globe, enabling greater participation in a broad range of activities.

Enhancing inclusion by enabling participation benefits everyone in society, and this is increasingly important in Australia, where an ageing population means an increasing number of people living with chronic conditions and disability. Assistive technologies (AT) are critical to the health and wellbeing of one in ten Australians, and national expenditure on AT exceeds $4.4 billion. Access to quality assistive technology will enhance their political, social and economic participation and inclusion in Australian society.

Principles of assistive technology provision:

1. The process is person centred, not product or service centred,
2. The outcome is enablement of participation in desired activities,
3. An evidence-informed process is used in assistive technology provision,
4. Assistive technology provision is conducted in an ethical manner, and
5. Assistive technology services are provided in a sustainable manner.

Developed by ARATA and reviewed and ratified by over 200 delegates of the 2016 AATC Conference, this statement summarises the current state of the science in assistive technology research and practice for the Australian context into 3 directives for good practice:

1. Clear definitions for assistive technology

Clearly defining assistive products and related service steps, in relation to AT user-driven goals, enables all AT stakeholders to identify and provide all necessary elements of a successful assistive solution.

**Assistive technology** comprises products and services used to provide assistive solutions that, combined with opportunities for use in desired occupations, across multiple environments, and without prejudice, enable individuals’ functioning and participation.

**Assistive products** are 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.

---

---
**Assistive technology services** include any service that directly assists an individual in the selection, acquisition, or use of an assistive solution. Sometimes known as ‘soft technologies’⁷, these include providing information and assessment, identifying and trialling assistive solutions, purchasing and customising the solution and ensuring ongoing and effective use, maintenance and review⁵,⁶.

**Assistive solutions** represent the combination of assistive products and services tailored to an individual user’s situation, including their environments and occupations of use⁷,⁸.

Assistive technology is not medical technology (healthcare products used to diagnose, monitor or treat diseases or medical conditions), rehabilitation technology (devices focussed on the efficiency or effectiveness of clinical services or rehabilitation programs provided by health professionals), or telehealth (the technology-mediated delivery of health services).

The term assistive technology is used internationally, but not widely adopted in Australia, where the term aids and equipment is still in common use. Inconsistencies in understanding and vision may explain why AT provision remains inequitable and inefficient. Reaching a shared vision for defining, funding and deploying assistive technology is critical for its successful use.

---

**Providing the essential steps of assistive technology provision**

Assistive technology, appropriately provided, is effective in increasing autonomy, independence, health-related quality of life and productivity of individuals and their circles of support⁹,¹⁰. Assistive technology decreases the societal cost of care and other services across the lifespan by enhancing economic and social participation, and limiting secondary complications and residential care admission for people with disability and chronic conditions¹¹.

Internationally recognised good practice steps for AT provision include information and assessment, identifying and trialling assistive solutions, purchasing and customising the solution and ensuring ongoing and effective use, maintenance and review⁵,⁶. AT abandonment and non-use increases where these steps are fragmented, underfunded or not provided⁷,¹⁰.

There are significant gaps in the availability of assistive products and services for different populations (by location, age, and need) and inconsistent eligibility criteria for funding from public and non-government sources. There is fragmentation of assistive technology provision, with many programs delivering particular assistive products or services, but few that fully support all good practice steps of identification, sourcing and ongoing use of individualised assistive solutions. AT users and AT practitioners may therefore find the funders and services they are working with do not follow these principles or provide all these steps. In these instances, good practice actions include identifying service gaps, seeking alternatives and systemic advocacy to improve provision systems.
Getting the right people involved in assistive technology provision

The individual user of the assistive solution is the centre of AT provision activities. AT users include people of all ages with any sort of impairment (e.g. sensory, physical, and cognitive), health or age-related condition. Appropriate attitudes, that is, the ability to be person-focussed, goal oriented and to work co-productively are essential attributes for all stakeholders working in AT provision. Other participants in assistive technology provision include family and friends, formal and informal caregivers, health and disability professionals, engineers and technicians, product designers, manufacturers and suppliers. Skills and knowledge regarding AT provision is drawn from education (including professional training), experiential knowledge and the AT evidence base. Competent AT practitioners will identify their personal scope of practice and will engage in communities of practice to support their ongoing learning. Overlapping knowledge domains may include specific AT device types, specific activity and participation areas, as well as specific impairment types or age groups of AT user. Different skillsets are indicated in different situations. This will depend on variables such as the nature of the AT user, their participation goals and their environments, as well as the complexity of the AT and related supports. Based upon these factors, building an individual AT solution may require:

i. capability-building supports for the AT user and their circle of support;

ii. skilled peer supporters; generalist AT practitioners with relevant fields of knowledge;

iii. specialised AT practitioners or a combination of AT practitioners in the form of a multi-disciplinary team.

Clearly defining assistive technologies, endeavouring to deliver on the full range of AT service provision steps, partnering with all players and extending one’s personal scope of practice, are hallmarks of excellence in AT practitioners.
References


