Developed by ARATA and reviewed and ratified by over 200 delegates of the 2016 AATC Conference, this Issues Statement accompanies the ‘Statement on AT Good Practice’ and identifies three key issues for AT in Australia.

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\(^1\). Access to quality assistive technology will enhance their political, social and economic participation and inclusion in Australian society.

This issues statement summarises key issues in assistive technology research and practice for the Australian context, requiring action.
ISSUE 1: Wholistic assistive technology provision

Definitions: 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 (see glossary).

Funding and access: 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, and so current Australian service provision does not fully meet human rights benchmarks2,3

Service provision: 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.

Actions

• **Awareness and recognition**- of the rights of people with disability to access assistive technology, and of its economic and social benefits to individuals and society.

• **Sufficient resourcing of and equitable access to** - assistive technology services that provide information, advice and support in finding and using assistive solutions, and to quality assistive products.

• **Coordination**- between mainstream and specialised services to ensure that assistive solutions are appropriate to each individual’s situation, and to involve the assistive technology user in all activities and decisions

• **Agreed outcome benchmarks**- meeting human rights criteria and supporting the World Health Organisation definitions of human activity and participations4

ISSUE 2: Identifying the full costs and benefits of assistive technology

The use of technologies to assist with activities and participation is pervasive, for example use of spectacles or information and communication technologies, and it can be difficult to isolate ‘naked performance’5 in order to fully realise the effectiveness of AT. The presence of environmental barriers or facilitators also plays a critical role in the experience of disability and the need for AT or related environmental adaptations.

From a health outcome perspective, AT is effective in increasing autonomy, independence, health-related quality of life and productivity of individuals and their circles of support 6,7,8,9. From a costs perspective, AT 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 conditions10. A range of studies provide methods to evaluate the economic impact of AT on an individual basis, such as social cost inventory analysis11,12, health sector perspectives upon the cost offsets of AT13 and costing the impacts of lack of AT provision14.

Actions

• **Research**: There is insufficient rigorous research evidence to support the effectiveness of most assistive technology provision services and systems.

• **Practice-based evidence**: skilling the AT sector to collect outcomes data on current practice, utilise inclusive research methods and collaborate as a community of practice to add to the evidence base.
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. 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. Appropriate attitudes, that is, the ability to be person-focused, goal oriented and to work co-productively are essential attributes for all stakeholders working in AT provision. Skills and knowledge regarding AT provision is drawn from education (including professional training), experiential knowledge and evidence-based practice. 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 team.

Wholistic and consumer-centered assistive technology provision, provided by appropriately skilled practitioners, is a cost effective strategy to achieve life outcomes.

Actions

- **Education** - to support the education and development of professionals and support staff
- **Quality or credentialing** policy and practice that is most likely to meet individual needs and deliver high-quality, sustainable outcomes for society

**Glossary**

**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 technology’, these steps include providing information and assessment, identifying and trialling assistive solutions, purchasing and customising the solution and ensuring ongoing and effective use, maintenance and review. Good practice in AT service delivery includes these steps, and AT abandonment and non-use increases where these steps are fragmented, underfunded or not provided.

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

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).
References


15. NDIA. Assistive Technology Strategy. 2015.


