atsa
Assistive Technology
Suppliers Australasia

Assistive Technology in Australia
Briefing Paper

Introduction

One in every ten Australians relies on assistive technology (AT) in their daily lives (ABS 2004). AT is central to increasing participation, minimising long-term costs and improving the lives of people with disability of all ages. AT is a primary enabler, making it possible for people with disability of all ages to do many activities that most of us take for granted such as getting out of bed and going to work or school. Effective AT provision can reduce long-term care costs and healthcare costs, and increase participation in employment and education (Audit Commission 2000, 2004; AIHW 2006; Heywood & Turner 2007).

AT products are often categorised in four main groups: personal care; daily living aids; communication; and mobility. AT also includes home and vehicle modifications. AT varies from simple and inexpensive devices such as aids to open cans or cut up food, shower chairs and canes, through to very complex and high-tech equipment such as highly modified motor vehicles or powered wheelchairs with customised seating and controls (see the AT Pyramid on page 2). The World Health Organization 2004 defines AT as:

an umbrella term for any device or system that allows individuals to perform tasks they would otherwise be unable to do or increases the ease and safety with which tasks can be performed.

ATSA was established in 2000 to represent the interests of AT suppliers who manufacture, import, distribute, service, and hire AT. ATSA members include small, family-owned businesses, international companies and not–for-profit organisations that provide AT products and services. ATSA's Code of Practice for members ensures fair, ethical and consistent provision of equipment and services to consumers with disabilities and older people, and safeguards all stakeholders' interests (see www.atsa.org.au).

The AT Industry in Australia

The number of Australian specialist retailers focused primarily on AT is approximately 350–400, although there are thousands of generalist providers of basic AT items such as supermarkets which stock some continence aid products, and pharmacies which often rent or sell basic items such as wheelchairs and crutches. Specialist retailers obtain their stock from approximately 300 AT importers/distributors, with about 80% of AT coming from less than 40 manufacturers/importers. Approximately 80–90% of AT is imported.

Most AT products are Class 1 Medical Devices and therefore must be listed on the Australian Register of Therapeutic Goods with the Therapeutic Goods Administration (TGA) before they can be legitimately sold in Australia. Importers and local manufacturers undertake the relevant compliance requirements, which include being able to track each item sold in Australia in the event of a product recall. Additionally, while it is not a legal requirement, most AT sold in Australia complies with the relevant Australian or international standards.

Estimates vary and comprehensive data is not available, but the overall size of the AT market in Australia has been estimated to be between $3.6B and $4.5B annually (see ATSA 2013; AIHW 2011; AEAA 2010). In 2010–11 $600M was spent on AT by the primary state/territory (27%) and federal (73%) AT programs, and where data were available these primary programs spent approximately 50–60% of their funds on mobility and personal care equipment, and between 12% and 37% on orthotics and prosthetics, with the remaining proportions spent on oxygen and continence aids (Jenny Pearson & Assoc. 2013). The primary state/territory AT programs assist eligible people of all ages to access AT.

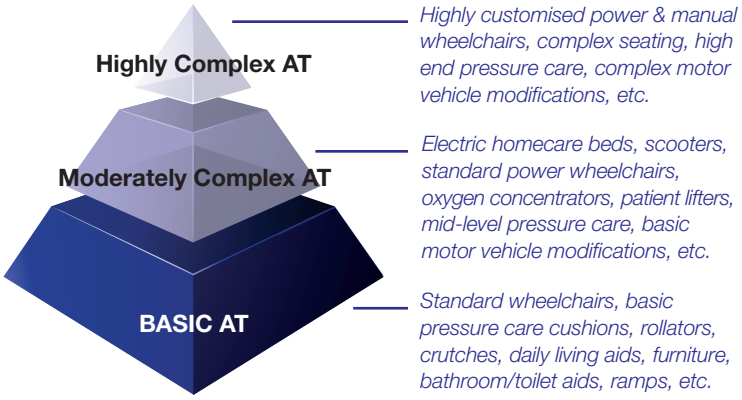
Additionally, the AIHW (2011) estimated that 17% of total AT expenditure was by government, with the balance from individuals (out-of-pocket, insurance and charitable organisation expenditure). The highly fragmented structure of over 100 primary and secondary AT funding programs across Australian governments (Jenny Pearson and Assoc. 2013) produces a complex maze for consumers, and duplication and inefficiencies for governments and suppliers.

Concerns arise from time to time about the costs of AT, and particularly at the middle and higher levels of the AT Pyramid (see page 3) where costs can be high. Recent comparisons of the prices of AT in Australia and other countries have found that Australian prices are on average between 14% and 24% cheaper than those in other countries when like-for-like comparisons are undertaken (Queensland Competition Authority 2014; ATSA 2013; see also the ATSA background paper – *AT Pricing: Is it fair and reasonable?).*

The AT Pyramid

AT varies widely in complexity. The AT Pyramid illustrates the variation in the complexity of AT products, with the least complex high-volume and low-cost products at the bottom and the low-volume very highly complex products at the top.

The AT Pyramid



Getting the Right AT Solution

Ensuring that the AT purchased is the right AT for a given individual, their goals and environment can be relatively simple and straightforward, especially at the bottom end of the AT Pyramid. However, given the extensive range of AT products available and the unique requirements of many individuals who may use 7–10 different AT items (Layton 2010), achieving the right match between the individual and the AT is often a complex process.

Notwithstanding the general impression that AT suppliers are all about 'aids and equipment, hardware and gadgets', it is largely a service-based industry – particularly in relation to moderately and highly complex AT. Specialist retailers invest heavily in hiring and skilling up their staff (which often include health professionals such as occupational therapists and rehabilitation engineers), who are essential to ensuring the 'right fit' between the person and the AT.

A substantial proportion of the retail price of AT goes to covering the costs of providing services to ensure a good match between the person and the AT. Activities include pre-consumer engagement ones such as product development and training of therapists/prescribers, and others directly involving consumers, such as in-home trials. See the Who Does What table for more information.

Currently most publicly funded programs providing AT require a prescription/request from an appropriately qualified health professional before funding for an item will be considered. Prescribers include occupational therapists, physiotherapists, speech pathologists, rehabilitation engineers, respiratory therapists and continence nurses. Many funding schemes also require these therapists/prescribers to have additional levels of education and/or experience to prescribe more complex AT. However there is no formal national credentialing system in relation to AT prescribers (Summers & Walker 2013). Private purchasers of AT are not required to have a prescription, but they often seek information and advice from relevant health professionals and facilities such as the network of Independent Living Centres (ILCs), as well as from suppliers.

Who Does What

ACTIVITY	CONSUMERS	THERAPISTS / PRESCRIBERS	SUPPLIERS	POSITION IN AT SUPPLY CHAIN
Market analysis: opportunities, needs & gaps	Some provision	Some or limited involvement	Major provider	Precursor to product development, distribution & provision
Research and development	Some provision	Some or limited involvement	Major provider	Pre & post product development
Manufacture, source, import, distribution & compliance testing	No involvement or provision	No involvement or provision	Major provider	Product manufacturing & distribution
Inventory, showrooms, spares, expos/conferences, & samples for ILCs	No involvement or provision	No involvement or provision	Major provider	Product availability/ product information
Information, training & education for therapists	Some provision	Extensive involvement	Major provider	Pre client engagement/assessment
Identify needs/goals & possible AT solutions'	Major provider	Major provider	Major provider	Initial client engagement/ assessment/needs & goal identification
Examine, trial & evaluate possible solutions	Major provider	Major provider	Major provider	Determine most effective & appropriate AT solution
Funding of purchase	Major provider	Some provision	Some provision	Securing funding for consumer's AT
Assembly, delivery & installation	Some provision	Some provision	Major provider	Deliver AT solution to consumer at home or workplace
Set-up & adjustment	Extensive involvement	Some provision	Some provision	Increased AT usability & safety for each individual
Information/training of consumer & caregivers	Extensive involvement	Major provider	Major provider	Product use training/information
Review	Extensive involvement	Major provider	Major provider	Post delivery
Warranties, repairs & maintenance	Extensive involvement	Some provision	Major provider	Post delivery

KEY

- Major provider
- Extensive involvement
- Some provision
- Some or limited involvement
- No involvement or provision

The Who Does What table summarises the various roles and activities of consumers, therapists/prescribers and suppliers for most AT other than very simple AT. Details will vary depending on the nature of the AT, and the relative levels of skills and experience of consumers, therapists and suppliers in any given situation. Consequently this table is indicative of what usually happens, not what always happens. The roles of therapists/prescribers described in the table does not include the extensive work undertaken by therapists who are employed by suppliers which is incorporated into the 'suppliers' column of activities.
For more details about this table, see the ATSA background paper *AT Pricing: Is it fair and reasonable?*

Most health professionals currently prescribing AT, as well as consumers, rely extensively on the knowledge and skills of AT suppliers in relation to details regarding differences between different AT products, how they perform in different situations, and the detailed technical aspects of measuring and fitting particular products such as wheelchairs to an individual.

Requirements regarding set-up and adjustment of AT can vary widely, depending on the nature of the AT. Senior therapists/prescribers often emphasise that this should be the role of the therapists, but acknowledge that therapists do not always have the skills or capacity to do it. Particularly when work needs to be done in a workshop, or the set-up and adjustment is highly technical or has particular requirements that are better understood by the supplier, suppliers do this work. Typically who takes responsibility for this work depends on the expertise of the therapist, expertise of the supplier and the nature of the adjustment/ set-up that is required.

Best practice is often considered to be an active partnership utilising the combined expertise of the consumer, the prescriber and the supplier to identify and implement the best AT solution (RESNA 2011), and this is reflected in the extensive involvement of all three of these stakeholders towards the middle of the table in relation to identifying and evaluating possible AT solutions. With the advent of individualised funding focused on providing choice and control to consumers such as in the NDIS, the role of health professionals as prescribers will hopefully shift to one of advice and assistance, rather than as gatekeepers to funds (Summers & Walker 2013).

AT Suppliers

AT suppliers deliver many essential services vital to ensuring that people of all ages get the AT best suited to their needs and goals. Although these activities are summarised in the Who Does What table, more detail is provided below to increase the understanding and transparency of these often taken-for-granted and hidden services.

Importers/manufacturers/distributors
(known as 'sponsors' within the TGA's framework):

- source products, including research and development of new products
- provide information on the availability, function, and detailed specifications of AT products that are TGA listed and meet Australian/international standards
- organise training and education for therapists/prescribers and AT retailers
- maintain product inventory and spare parts – immediate availability is essential for many products, especially spares for 'life critical' items such as wheelchairs, pressure mattresses and hoists
- provide warranties; quality assurance; standards testing and regulatory compliance; product recalls; and participate in the review and development of Australian Standards
- lend demonstration products to ILCs and major specialist facilities (e.g. spinal injuries and rehabilitation) on a long-term basis.

Retailers /local suppliers:

- provide information, advice and assistance to consumers for appropriate product selection, often in conjunction with prescribing health professionals such as occupational therapists, physiotherapists and speech therapists
- provide services requiring excellent communication and assessment skills and a high degree of knowledge and expertise regarding product specifications and performance, measurement and adjustment, customisation/modification and fitting, particularly at the middle and top of the AT Pyramid where high quality services are particularly critical to ensuring a good match between the individual and their AT which is fundamental to good consumer outcomes
- organise trial equipment – trialling AT requires significant investment in product inventory, transportation, and assessment to make equipment available for consumers to take home, to work, school or other settings such as recreation and trial AT over a period of time to ensure appropriateness (e.g. which hoist will work in that space and which sling is most suitable) and to determine exact specifications for more complex AT (e.g. a control system, frame configuration and/or seating for a wheelchair). Suppliers also undertake modifications when required, and provide delivery, set-up and training in use of trial equipment
- develop individualised AT specifications and quotes for the agreed AT solution to consumers and other AT funders
- order, assemble and deliver AT products, including final fitting and adjustments in many instances and consumer/carer training and other assistance as needed
- provide warranty, maintenance, spares and repairs.

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