

## AbilityNet Factsheet – June 2018

# Communication aids

Many people have difficulty speaking or understanding what is being said, and this communication disability can be a huge barrier affecting every aspect of life.

2.2 million people are affected by communication problems include people with Aphasia, Autism, Cerebral Palsy, Dementia, Head Trauma, Learning Difficulties, Motor Neurone Disease, Multiple Sclerosis, Parkinson's And Stroke.

A large variety of communication aids are available to help people communicate more effectively. Useful aids can include 'no-tech' (E-Tran frames) computer aided communication using different input methods and dedicated electronic AAC devices.

This factsheet outlines the main options when selecting an electronic aid to make communicating clearer and quicker. These 'augmentative and alternative communication' (AAC) aids can be a purpose-built device or a standard computer, tablet or smartphone running specialist software or apps. Many people combine such high-tech aids with other forms of non-verbal communication, including gestures, facial expression, pictures and signing.

Everyone's communication support needs are different and selecting the right communication aids for an individual will depend on their particular needs, personal preferences and abilities. With so many aids to choose from, we emphasise the importance of seeking a comprehensive assessment by a speech and language therapist. This will ensure that all the important factors are considered – including the individual's motor, visual, cognitive, language and communication strengths and weaknesses. The therapist can also make a referral to a specialist communication aid centre if necessary.

Communication is a two-way process and it is very helpful to include family members and carers in an assessment. Ongoing training and support can also help to ensure the success of the selected aid(s). Additionally, with the cost involved, it makes great sense to have a free trial before committing to the purchase of any expensive communication aid.

## Contents

<b>1</b>	<b>What is augmentative and alternative communication?</b>	<b>3</b>
<b>2</b>	<b>VOCAs</b>	<b>3</b>
	VOCAs operated by buttons	4
	VOCAs operated by touchscreen	4
	VOCAs operated by text	5
<b>3</b>	<b>Software and apps</b>	<b>5</b>
	AAC software and apps	5
	Other usefuls apps	6
<b>4</b>	<b>Other resources</b>	<b>6</b>
	My Computer My Way	6
	AbilityNet factsheets	6
<b>5</b>	<b>Useful links</b>	<b>7</b>
	ACE Centre	7
	AAC Scotland	7
	Communication Matters	7
	Living Made Easy	7
<b>6</b>	<b>Suppliers</b>	<b>8</b>
	Inclusive technology	8
	Jabbla	8
	Liberator	8
	Smartbox Assistive Technology	8
	Tobii Dynavox	8
	Widgit	8
<b>7</b>	<b>About AbilityNet</b>	<b>9</b>
	Copyright information	9

## 1 What is augmentative and alternative communication?

Augmentative and alternative communication (AAC) is an umbrella term that describes the methods used to supplement communication for anyone who has difficulty with their speech or understanding. It can be a permanent addition to your communication or a temporary aid.

The symbols used in AAC include gestures, photographs, pictures, line drawings, letters and words. These can be used alone or in combination, and in conjunction with other communication methods.

AAC methods using computer technology do so at different levels of complexity but mostly focus on producing speech or text for users who find it difficult or impossible to do so for themselves. Many employ computerised versions of AAC picture systems, with the electronic device speaking aloud the symbols selected.

Purpose-built communication devices that ‘talk’ are called ‘voice output communications aids’ (VOCAs). These are also sometimes known as ‘speech output devices’. An alternative high-tech solution is to run specialist AAC software or apps on a standard computer, tablet or smartphone.

## 2 VOCAs

VOCAs use electronically-stored speech as the method of communication. Sentences or longer messages can be pieced together from individual words and phrases, with the stored vocabulary possibly running into thousands of words.

The speech output may use digitised (pre-recorded) speech, synthesized (artificial) speech or both. Digitised messages are created by recording spoken words directly into the communication aid. Although synthesized speech is computer-generated, the quality of this artificial speech has much improved in recent years.

There are a number of ways you can operate VOCAs, by:

- pressing buttons or a touchscreen (direct selection)
- operating switches (using any controllable movement of your body)
- Scanning grids with different inputs
- typing text.

Some VOCAs are handheld, while other models can be for desk-top use or mounting on a wheelchair.

## VOCAs operated by buttons

Many VOCAs have symbols on buttons or cells which you press to generate speech output. Simple models may have only a few messages; others can store hundreds of words and messages to select from.

VOCAs that utilise symbol sets come supplied with pre-loaded icons but, generally, you can add further icon sets of personal images and photos.

Handheld VOCAs operated by buttons include: the *Quicktalker* and a variety of *Gotalk* models.

VOCAs for desk use or mounting on a wheelchair with buttons or cells for direct selection include: *the Bigmack*, the *Gotalk 20 Plus*, the *Smooth Talker* and the *Logan Proxtalker*.

The *Amdi Smart-talk* is suitable for mounting / desk use or for operating as a handheld device.

## VOCAs operated by touchscreen

Touchscreen VOCAs generally allow you to change the content and layout of displays to suit your preferences.

Handheld models operated by touchscreen include the *Gotalk Express 32*, the *Liberator Rugged 7*, the *Logan Proxpad*, and a range of *Nova Chat* and *Accent* models.

Some more expensive touchscreen models offer much greater processing power and capabilities. These are designed for users with physical and / or communication disabilities who are looking to work with an accessible device that can satisfy all their AAC and computing needs. As well as providing both symbol and text-based communication, many of these models also offer:

- access to social media
- bluetooth connectivity
- email, SMS texting and phone calls
- internet browsing
- environmental control (via infrared) of TV and DVD
- built-in camera or and / or webcam
- accessible apps for music, photos, video channels etc.

Handheld and mountable touchscreen models that offer some or all of the above capabilities include: the *Tellus Mobi 2*, the *Tellus 5*, the *Zingui 2*, the *Indi*,

and a range of *Grid Pad* and *Power Pad* models that all operate *Grid 3* software (see the following section).

Many of the above devices can be adapted to various access methods, including switch access scanning. Some models, including the *Tellus 5*, *Grid Pad Eye* and the *Power Pad* are also integrated with eye gaze technology.

### VOCAs operated by text

VOCAS with text input via a standard or touchscreen keyboard include the *TTS 100* (handheld), the *Allora 2* (for desk use or mounting) and a number of *Lightwriter* models.

The *Lightwriter SI40* may be handheld but is also suitable for desk use or mounting on a wheelchair.

## 3 Software and apps

For many people with communication problems, their best options might involve using specialist software on an adapted computer systems and / or communication apps on a tablet or smartphone.

Our factsheet on *Keyboard and mouse alternatives and adaptations* gives advice on alternatives to standard computing equipment and on how to adapt your devices to meet your particular needs. Our free website – *My Computer My Way* – also shows you how you can adjust your computer to assist with vision and hearing impairments, motor issues and cognitive problems.

### AAC software and apps

An extensive range of apps and communication software is now available for PC, Mac and tablet devices. Some of these programmes also provide the main communication software driving high-tech VOCAS. Many use symbol sets to augment communication, with different sets available to match different communication needs and abilities. Personalised messages are formed by selecting and grouping symbols together, and some applications will let you add text, photos, videos and sound.

Comprehensive symbol- and text-based packages with speech output, catering for beginners to advanced users, include:

- *Grid 3* (for PC)
- *Grid* (for iPad)
- *Mind Express 4* (for PC)
- *Proloquo2Go* (for iPad)
- *TouchChat HD* (for iOS).

Symbol-based apps include:

- *GoTalk Pro* (for iPad)
- *Talking Mats* (for iPad).

Text-based software and apps include:

- *Clarocom* (for iOS)
- *Predictable 5* (for all platforms)
- *Ez Speech Pro* (for iOS & Android).

### Other useful apps

To help you find your way through an enormous range of potentially useful media, some organisations have developed their own lists and tools to support people with complex communication needs in accessing apps and software that may be useful to them.

These include the *Aphasia Software Finder* – a website that helps you to search for and assess specialist software and apps that work on different aspects of communication. You can use this for free at [www.aphasiasoftwarefinder.org](http://www.aphasiasoftwarefinder.org)

Call Scotland have produced two 'wheels' of AAC apps – one for iOS, one for Android. These provide categorised guides to useful apps for people with complex communication support needs. You can download both the wheels at [www.callscotland.org.uk/downloads/posters-and-leaflets/](http://www.callscotland.org.uk/downloads/posters-and-leaflets/)

## 4 Other resources

### My Computer My Way

It is essential that your computing equipment is set up the best way possible to suit your particular needs. The *My Computer My Way* website can help you achieve your optimum setup. It is a free, interactive tool developed by AbilityNet that makes any computer, tablet and smartphone easier to use. It covers all the accessibility features built into your computer, laptop, tablet or smartphone, and all the main operating systems – Windows, Mac OS X, iOS and Android.

You can use *My Computer My Way* for free at [www.mycomputermyway.com](http://www.mycomputermyway.com)

### AbilityNet factsheets

AbilityNet's factsheets provide practical advice about specific conditions, and the hardware and software adaptations that can help people of any age use computers to fulfil their potential.

Relevant topics covered include:

- *Keyboard and mouse alternatives and adaptations*
- *Obtaining funds for assistive technology.*

All these resources are free to download from [www.abilitynet.org.uk/factsheets](http://www.abilitynet.org.uk/factsheets)

## 5 Useful links

### ACE Centre

The ACE Centre is a registered charity providing support for people with communication difficulties. It offers assessment, training and information services across England, with a focus on AAC and assistive technology.

For more information, visit [www.acecentre.org.uk](http://www.acecentre.org.uk)

The ACE Centre has also supported the development of 'SpeechBubble'. This website provides up-to-date information on the latest AAC resources, including communication aids, software and apps.

For more information, visit [www.speechbubble.org.uk](http://www.speechbubble.org.uk)

### AAC Scotland

AAC Scotland website provides access to a range of practical AAC resources commissioned by NHS Education for Scotland and created by CALL Scotland.

For more information, visit [www.aacscotland.org.uk](http://www.aacscotland.org.uk)

### Communication Matters

Communication Matters supports people with little or no clear speech. It works to promote the best possible communication for people with complex communication needs, and aims to involve people using AAC in all its work. The charity maintains a database of AAC Assessment Centres across the UK.

For more information, visit [www.communicationmatters.org.uk](http://www.communicationmatters.org.uk)

### Living Made Easy

*Living Made Easy* is an online guide developed by the Disabled Living Foundation. It provides impartial advice about independent living for disabled adults and children, older people, their carers and families. Its section on AAC provides extensive information about available products in different categories – including prices, manufacturers' details and suppliers.

For more information, visit [www.livingmadeeasy.org.uk](http://www.livingmadeeasy.org.uk)

## 6 Suppliers

### Inclusive technology

Inclusive Technology is a supplier of software and hardware for special educational needs – including a range of communication aids and communication software.

For more information, visit [www.inclusive.co.uk](http://www.inclusive.co.uk) or call 01457 819790.

### Jabbla

Jabbla develops technology that assists people with communication challenges. Its products include *Mind Express 4*, *Allora 2*, *Mobi2*, *Tellus 5* and *Zingui 2*.

For more information, visit [www.jabbla.com](http://www.jabbla.com)

### Liberator

Liberator provides products and services for individuals who use AAC, their families and support staff. Products include the *Rugged 7* and *Accent* VOCAs.

For more information, visit [www.liberator.co.uk](http://www.liberator.co.uk)

### Smartbox Assistive Technology

Smartbox Assistive Technology produces a range of specialist communication devices and software, including *Grid 3* (and additional Grid sets), *Grid for iPad*, various *Grid Pads* and the *Power Pad*.

For more information, visit [www.thinksmartbox.com](http://www.thinksmartbox.com)

### Tobii Dynavox

Tobii Dynavox is a company that produces the multi-access *Indi* tablets and a range of specialist communication software including *Snap + Core First* and *Boardmaker*.

For more information visit [www.tobiidynavox.com](http://www.tobiidynavox.com)

### Widgit

Widgit Software specialises in SEN software and apps. It has developed a widely recognised set of over 15,000 symbols which are used globally to support language development, communication, literacy and learning. Products include *InPrint 3*, *SymWriter 2* and *Widgit Online*. The company is also the sole distributor for the Logan ProxTalker.

For more information, visit [www.widgit.com](http://www.widgit.com)

## 7 About AbilityNet

AbilityNet is the national charity that supports people with any disability, of any age. Our specialist services help disabled people to use assistive technology and the internet to improve their lives, whether at work, at home or in education. We offer:

- free advice and information
- accessibility services
- DSA/student assessments
- workplace assessments
- consultancy services
- IT help at home
- IT volunteers.

### Support us

Visit [www.abilitynet.org.uk/donate](http://www.abilitynet.org.uk/donate) to learn how you can support our work.

### Contact us

- Telephone 0800 269 545
- Email [enquiries@abilitynet.org.uk](mailto:enquiries@abilitynet.org.uk)
- Web: [www.abilitynet.org.uk](http://www.abilitynet.org.uk)

We are always keen to help share knowledge about accessibility and assistive technology. If you have any questions about how you may use the contents of this factsheet, please contact us at AbilityNet and we will do all we can to help.

### Copyright information



This factsheet is licensed by AbilityNet under the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 Unported License.

View a copy of this license at [creativecommons.org/licenses/by-nc-sa/3.0/](http://creativecommons.org/licenses/by-nc-sa/3.0/)