

iOS Augmentative and Alternative (AAC) apps



Queensland
Government

Medical Aids Subsidy Scheme
18 June 2025

**Session
Outline**

MASS Communication Aids Service

Feature matching

Text based AAC apps

Symbol based AAC apps

AAC apps with AI

Case study presentation – Mater at Home

Outcome measures



MASS Communication Aids Service




MASS Policy

- The aim of MASS is to provide assistive products to eligible Queensland residents with a **permanent and stabilised condition or disability**
- Assistive products are selected to assist people to live in their **home environment** and avoid premature or inappropriate residential care or hospitalisation


[Medical Aids Subsidy Scheme \(MASS\)
General Guidelines](#)



Eligibility for MASS

	General MASS (Non-palliative)	Palliative Care Equipment Program
<p>Administrative eligibility</p>	<ul style="list-style-type: none"> - Permanent Queensland resident - Concession card or Queensland Government Seniors card holder <div style="display: flex; justify-content: space-around; align-items: center;">    </div> <p>Exclusions: Eligible for communication aids through;</p> <ul style="list-style-type: none"> - NDIS - CDC Package - NIISQ - DVA (gold card) - Transition Care - HCP levels 3 and 4 - Compensation claim - Residential care - Inpatient <p>Under the age of 5 years for pads or nappies</p>	<ul style="list-style-type: none"> - Permanent Queensland resident - <u>MASS Palliative Care Confirmation Form</u> signed by a Palliative Care Specialist
<p>Clinical eligibility</p>	<ul style="list-style-type: none"> - Permanent and stabilised condition - Supporting clinical information for the following: <ul style="list-style-type: none"> ➤ Medical condition(s) ➤ Other contributing factors ➤ Physical, sensory, cognitive, communication skills ➤ Height and weight for mobility/daily living/continence aids ➤ Assessment and management/care plans 	<ul style="list-style-type: none"> - Palliative condition with prognosis less than 6 months - Supporting clinical information for the following: <ul style="list-style-type: none"> ➤ Medical condition(s) ➤ Height and weight ➤ Consideration of rapid disease progression and/or weight loss

Speech Generating Devices



This block contains two images: on the left, an iPad displaying AAC software with various icons; on the right, a hand using a Braille keyboard.

Voice amplification devices



This block contains two images: on the left, a black portable voice amplifier with a microphone and speaker; on the right, a collection of various electronic components and accessories.

iPad with AAC and Communication Software



This block contains two screenshots of AAC software on an iPad. The left screenshot shows a grid of icons representing different words and symbols. The right screenshot shows a virtual keyboard with a grid of icons above it.

Artificial larynges



This block contains two images of artificial larynges. The left image shows a silver, cylindrical device with a microphone and a speaker. The right image shows a black, cylindrical device with a microphone and a speaker, connected to a black cord.



MASS Subsidy Funding for Communication Aids

Specialised Accessories for Speech Generating Devices	Maximum MASS subsidy	May be subsidised when the purpose is
Mounting system	\$1,000	To mount a speech generating device onto a wheelchair. Funding can also be for a table mount or floorstand (only one mount can be chosen)
Switch mounting system	\$350	To mount a switch that operates a scanning display on a speech generating device.
Specialised switches (non mechanical)	\$500	To access a scanning array on a speech generating device where a mechanical switch is not effective.
Head operated accessing devices	\$1,500	To access a communication display on a speech generating device where switch access or other means are not effective.
Eye gaze access devices	\$4,500	To access a communication display on a speech generating device where switch access, head operated access or other means are not effective.
Joystick, for control of SGD	\$500	To access a communication display on a speech generating device where switch access, head operated access or other means are not effective.
Integrated wheelchair controller	\$2,000	<ul style="list-style-type: none"> To capitalise on a single access method and controller to operate a speech generating device and a wheelchair Funding for this item is also offered in the Mobility Aids area of the scheme and will only be provided for one application

iPad with Alternative and Augmentative Communication (AAC)

Clients are provided with:

- A Wi-Fi iPad
- A protective case with amplification
- An Augmentative and Alternative Communication (AAC) app (does not include subscription-based apps)
- Basic and specialised accessories are funded at the established subsidy levels
- The client will take ownership of the device
- If the client owns their own iPad, they may apply for an iOS app only



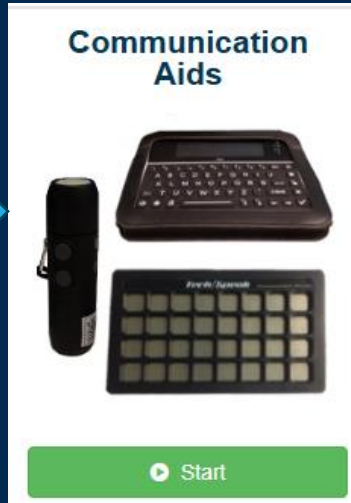
Applying for iPad with MASS-eApply




Registration - Prescribers
29 November 2024

[Start](#)

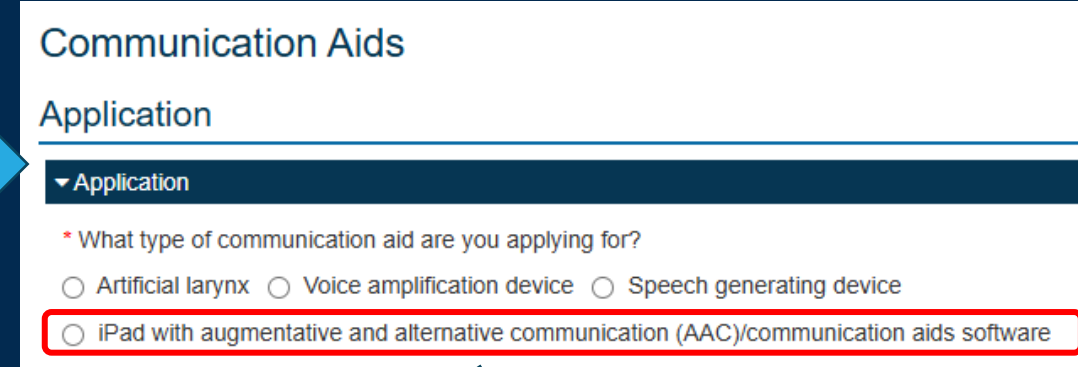
[Registration Forms](#)



Communication Aids



[Start](#)



Communication Aids


Application

▼ Application

* What type of communication aid are you applying for?

Artificial larynx Voice amplification device Speech generating device

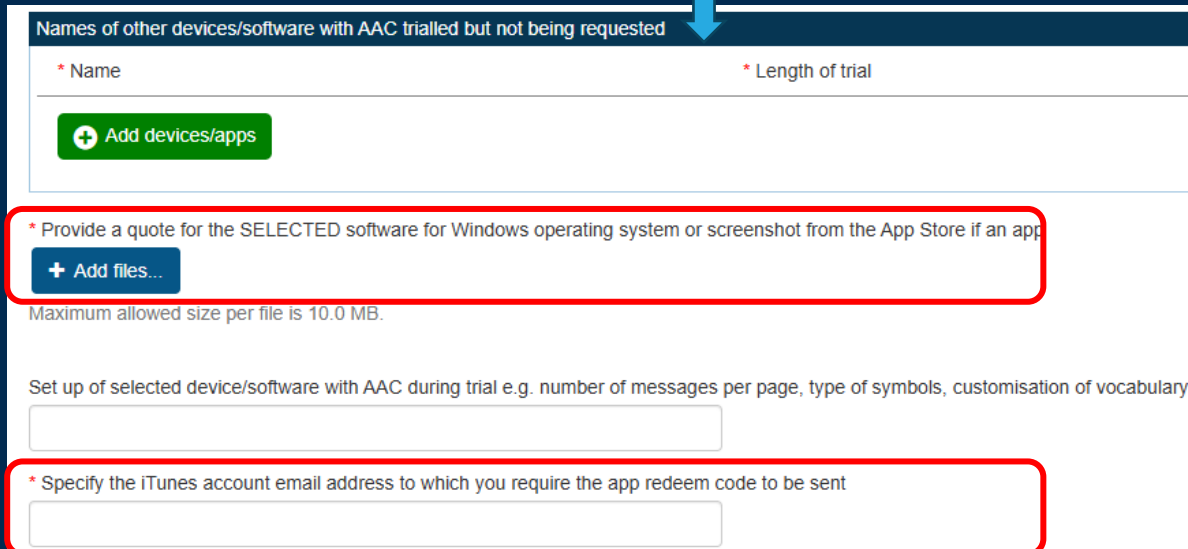
iPad with augmentative and alternative communication (AAC)/communication aids software



▼ iPad with AAC/communication software

* Which type of communication software is this application for?

iPad with AAC / communication software iOS app for Apple mobile device (AAC app only) AAC software for Windows operating system



Names of other devices/software with AAC trialled but not being requested

* Name	* Length of trial
+ Add devices/apps	

* Provide a quote for the SELECTED software for Windows operating system or screenshot from the App Store if an app

[+ Add files...](#)

Maximum allowed size per file is 10.0 MB.

Set up of selected device/software with AAC during trial e.g. number of messages per page, type of symbols, customisation of vocabulary

* Specify the iTunes account email address to which you require the app redeem code to be sent

Examples of Lightweight Speech Generating Device Alternatives to iPads with AAC



TD Navio Midi - Link Assistive



Vibe 10 - Zyteq



Microsoft Surface Go -AAC bundles - Zyteq



TD Navio Mini - Link Assistive



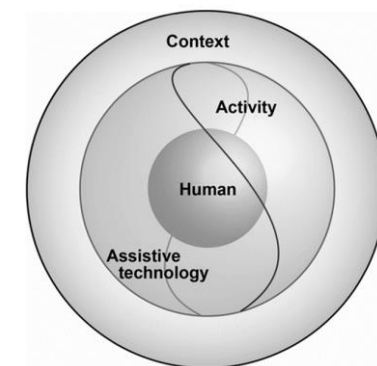
Grid Pad Go - Zyteq



The Uno Touch - Control Bionics

Frameworks for Aided AAC

- **Speech Pathology Australia Clinical Guidelines for AAC, 2020**
(Client/family centred approach, Team approach, Evidence –based approach to assessment, intervention and outcome measurement, Dynamic assessment and feature matching, training, mentoring and support, legal and ethical considerations)
- **International Classification of Functioning, Disability and Health (ICF)**
- **Janice Light’s Definition of Communicative Competence** (linguistic, operational, social, strategic and psychosocial competence)
- **Participation Model**
- **Human Activity Assistive Technology Model**



Cook and Hussey, 1995

Considerations for Using iPads for AAC

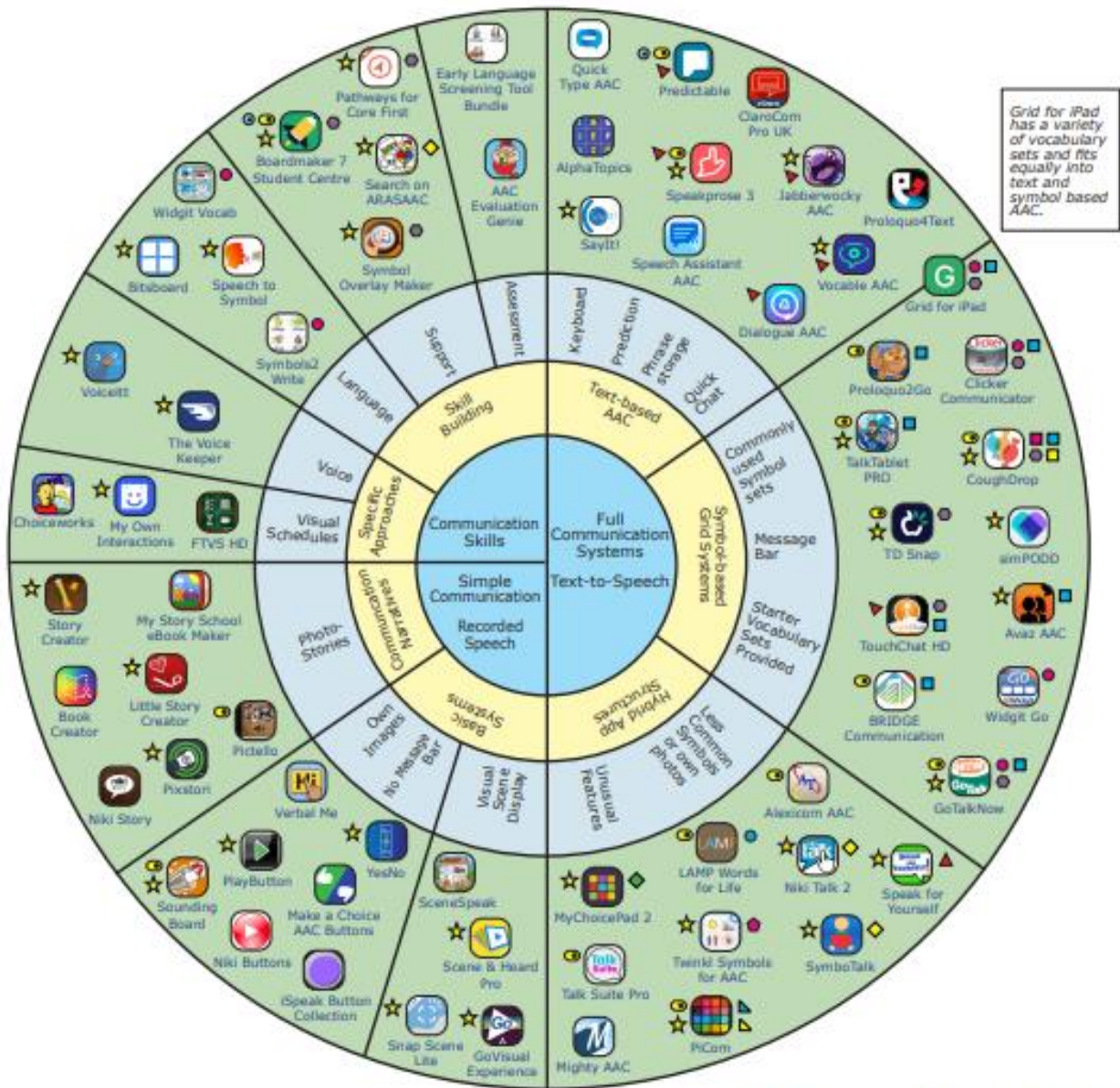
Pros

- Multifunctional
- More motivating for some
- More affordable
- Lightweight, portable
- More socially acceptable
- User familiarity with device
- Carer familiarity with device
- SP familiarity with device

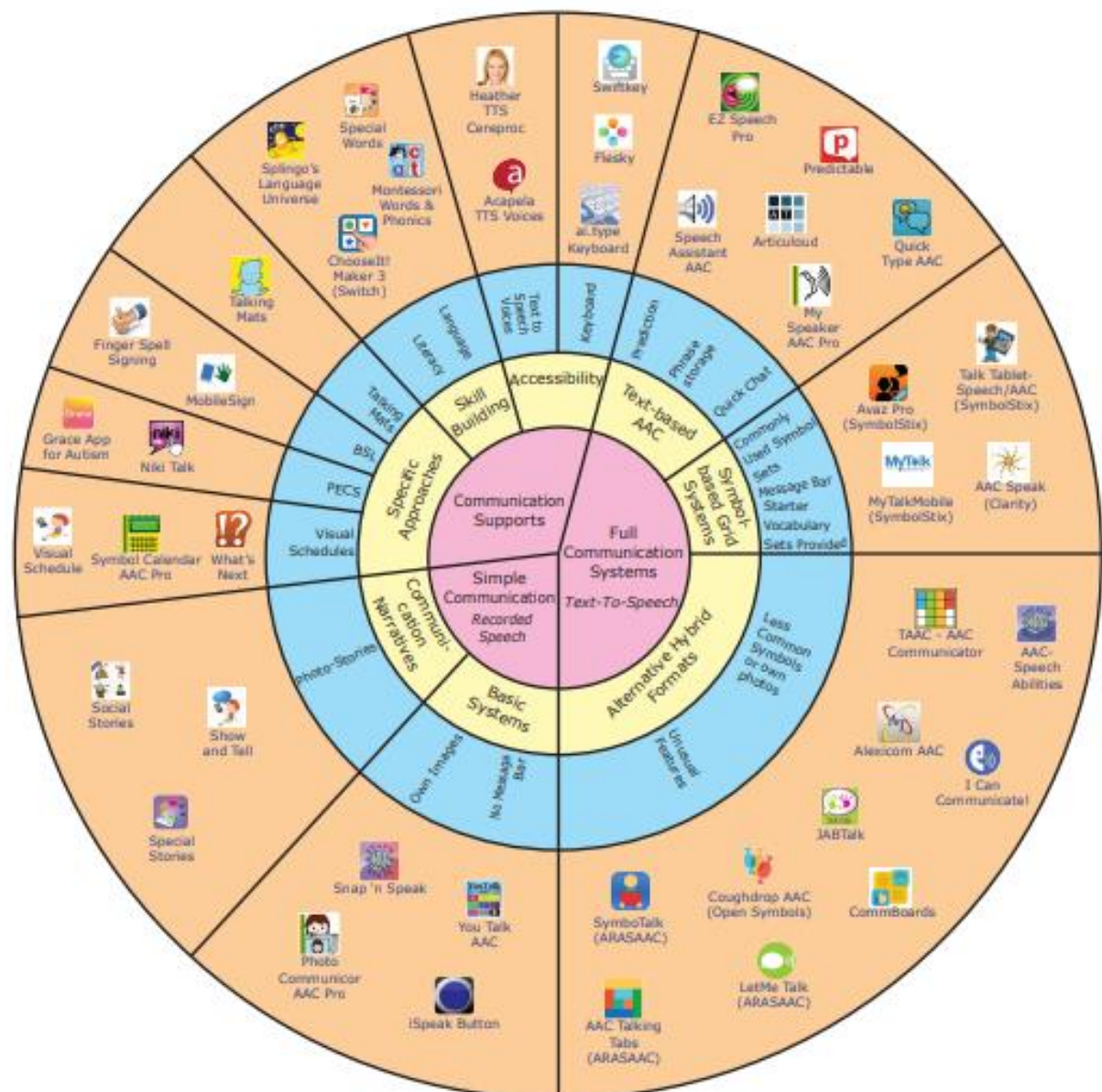
Cons

- Not as many access options
- Not dedicated (although can lock app in)
- Decreased volume (need accessories)
- Not as robust
- Lower battery life
- Other members of the family may borrow it

AAC apps - Overview



Grid for iPad has a variety of vocabulary sets and fits equally into text and symbol based AAC.



- 🔗 Switch access
- ★ Free app
- 🟡 Free Symbols
- 🟢 Makaton
- 🔴 Head tracking
- 👁️ Eye tracking
- 🟠 Open Symbols
- 🟣 Twinkl
- 🟡 ARASAAC
- 🟠 PICom
- 🟠 PCS
- 🟠 Minispeak/Unity
- 🟠 Smarty
- 🟠 Global

[Call Scotland - iOS AAC apps](https://www.callscotland.org.uk/ios-aac-apps)

[Call Scotland - Android AAC apps](https://www.callscotland.org.uk/android-aac-apps)

Text-based AAC Apps



Predictable
\$249.99



Proloquo4Text
\$199.99



Grid for iPad – AAC
Subscription



TD Snap
Subscription



ClaroCom Pro
\$24.99



Dialogue AAC
\$149.99



Flip Writer AAC
\$79.99



Speech Assistant AAC
\$32.99



Listen and Speak
\$22.99

Symbol-based AAC apps with text



Proloquo2Go AAC
\$399.99



GoTalk Now
\$199.99



TouchChat HD – AAC
w/WordPower \$499.99



Sono Flex
\$159.99



AVAZ Australia AAC
In-app purchases



CoughDrop
subscription



LAMP Words for Life
\$499.99



Speak For Yourself
\$499.99



TD Snap
Subscription



Grid for iPad – AAC
Subscription

Free apps



Text to Speech - Talkie



Say It



Jabberwocky AAC



Text to Speech!



Spoken - Tap to Talk AAC



ClaroCom



Vocable AAC



MyVoice -
Speech Assistant



Weave Chat AAC



Sono Flex (Lite)



SoundingBoard



Snap Scene Lite

Poll

What AAC apps have your clients trialled successfully?

- TD Snap
- Predictable
- Proloquo4Text
- Proloquo2Go
- Speech Assistant AAC
- Other – please write in the Chat
- Have not tried any AAC apps as yet
- Trials have been unsuccessful

AAC Feature Matching

Feature Matching of Apps

Table 1 Clinical Features Considered in the Selection of Apps

Clinical Feature	Definition
Purpose of Use	Description of the app's purpose including receptive or expressive language needs
Output	The type of output provided by the device, for example, speech, text, or both
Speech Settings	The supralinguistic features of speech output (pitch, volume, rate) as well as whether the devices will speak after a word or phrase
Representation	The symbol types available for the app including the ability to import and modify icons
Display	The layout of the app including the size, font, and color of the symbols
Feedback Features	Whether the icon highlights, zooms, enlarges, or vibrates and also the extent to which these can be modified
Rate Enhancement	The features that improve the rate of communication output of the app and to what extent these are customizable
Access	How the user interacts with the device in terms of selection of items (scanning, pointer) and whether this can be customized
Required Motor	The motor abilities the user must possess in order to access the device
Competencies Support	Support provided by the app publisher mostly for resolving technical issues
Miscellaneous	Any additional options that are available with the app

Note. Summarized from Gosnell, Costello, and Shane, 2011

General Feature Matching Considerations

- Goals and participation patterns of AAC user
- Social and cultural needs
- Current and future needs
- Symbol sets, display representation
- Operational and access features
- Range of communication partners and communicative functions
- AAC user preference
- Voice output
- Feature Matching in AAC Assessment: PrAACtical AAC

Feature Matching Resources

Key Features	Required Feature	Wish List Feature	Device 1	Device 2	Device 3
Dedicated Device					
Integrated Device					
Symbols/Message Keys*					
None					
Objects					
Phonos					
Symbols					
Symbols with Text					
Letters (Alphabet)					
Words/Text					
Font Size					
Color Symbols					
Black & White					
High Contrast					
Ability to Hide or Mask Keys					
Vocabulary Organization/Representation					
Visual Scene					
Single Meaning Symbols					
Phrase/Sentences					
Core Vocabulary					
Activity (Situation) Based					
Categories					
Alphabet/Spelling					
Icon Sequencing					

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Oklahoma AT Center Feature Matching Comparison Chart

Apps	Purpose of Use*		Output		Speech Settings				CUST. OF S.S.		Representation																	
	Expressive	Receptive	Organizational	Digitized	Synthesized	male	female	child	Multiple languages	No Voice Output	Voice Recognition	Voice Recording	Temporary Volume	Pause Speech	Speak after letter	Speak after Word	Speak after Punctuation	Speak upon selection	Speech to symbol/dictate	edit pronunciation	adjust speech rate	customize speak after	PCS	Symboltix	Photographs	Clipart	Printspeak	Text

Children's Hospital Feature Matching Communication Applications 2013 Jessica Gosnell Caron

App Evaluation							Comments
Name of App:	_____ TEMPLATE _____			Developer: _____			
Tick any box that applies to the app being evaluated							
Purpose	Assessment	Access practice	Resource-making	Introduction to AAC	Progression from simple to complex AAC, symbol-based	Text-based AAC	
Language Features	Full symbol vocabulary	Basic or user added language only	Ability to combine concepts	Phrases	Prediction	Symbol supported prediction	
Format	Symbol / Image only	Symbol / Image and/or Text	Text only	Visual scene			
Symbol Set	PCS	Widget	Symboltix	Other	N/A		
Image Options	Symbol	Take photo	Import from camera roll	Import from web browser			

Barnley Hospital Assistive Technology Team AAC App Evaluation Table

Voice Features	
Important in selecting appropriate AAC options for representing the individual's unique voice and ensuring their ability to be heard and understood by communication partners.	Type of Voice (Synthesized, Digitized) Personalization Options (gender, age, pitch, rate) Language Options (Spanish, Arabic, Bilingual) Built-in / External Speakers
Access Features	
Direct Select Features: Individuals who can access the screen directly with a body part or stylus may require settings or hardware adjustments to maximize accuracy and efficiency.	Keypad Stylus Options Visual Supports (outline, highlight, zoom) Touch screen settings (slow, delay, release)
Mouse Options: Individuals who cannot physically touch the screen/display may be able to directly indicate selections via alternate interface.	Head mouse / Light pointer Alternative Mouse / Joystick Trackball / Trackball
Eye Gaze: Individuals who most accurately and efficiently access AAC systems using directed eye movements require specific methods and/or settings adjustments to optimize communication.	Interaction Settings (calibration/camera settings) Activation Signal (slow, blink, switch) Feedback (color, cursor style, outline, highlight)
Scanning: Individuals who cannot directly select options require specific evaluation of cognitive and physical ability to use scanning methods.	Switch Options (proximity, button, voice, grip) Feedback (visual, auditory, combination) Pattern (linear, row-column, group) Scan Method (auto / 1-switch, step / 2-switch)
Customization / Editing Features	
Customization of AAC tools is essential for effectively meeting the language and access needs of an individual. Different systems offer multiple setting and editing features to meet cognitive, language, access, sensory, and physical needs.	Grid settings (size, spacing, number per page) Function/Navigation button placement Message Window Use Visual Support (color, font, border, background)
Portability / Positioning Features	
For individuals to have access to their AAC systems at all times, consideration must be given to their ability to transport the system, position the system for optimal access, and protect the system during use / transport.	Size / Weight Mounts / Stands Protective Case / Durability Carrying Straps / Handles
Operational / Other Features	
Comparison of dedicated communication systems versus "off the shelf" options require careful consideration of all features, both necessary communication supports as well as desired and competing functions (e.g., computer functions / other apps). Outside supports including training, caregiver and maintenance are critical for successful implementation of an AAC system.	Functioning Requirements (charging, setup) Ease of editing (button / page customization, swap, hide, backup, updates) Funding Options Warranty / Repair Coverage Availability of Technical Support Computer Interface / Access

University of Wisconsin AAC Feature Matching Overview

YOUR

JOURNEY

STARTS

HERE

Does the AAC user have:

- A banked voice/messages
- Accessibility considerations
- Need for a particular voice/image to represent their identity



Do the key communication partners have specific needs?

Message Banking

- <https://mymessagebanking.com/>
- AAC apps that support message banking include Predictable, Dialogue AAC, Grid for iPad, Speech Assistant AAC, TD Snap

iOS feature - Personal Voice

- AAC apps that support Apple's Personal Voice feature: Proloquo, Proloquo2Go, Proloquo4Text, simPODD, Speech Assistant AAC, Twinkl Symbols AAC, Speak for Yourself, MyVoice – Speech Assistant

Voice Banking Integration

iOS apps

- Predictable: ModelTalker, Acapela, Speak Unique and The Voice Keeper
- Dialogue AAC, LAMP WFL, TD Snap, Proloquo2Go, Proloquo4Text, Speech Assistant AAC, WeaveChat, GoTalk Now, Vocable, Avaz AAC, Speak for Yourself, Speech Assistant AAC: The Voice Keeper
- TD Snap, Proloquo2Go, Proloquo, Proloquo4Text, simPODD: Acapela's my-own-voice
- TD Talk: Model Talker, Acapela, The Voice Keeper
- TouchChat HD: The Voice Keeper, VocaliD
- Grid for iPad: Speak Unique, The Voice Keeper

Android apps

- Predictable, Speech Assistant AAC
- [Message Banking | Zyteq](#)
- [Voice Banking Community of Practice - The University of Sydney](#)

Range of Voices/Accents



Arthur app



Weave Chat AAC



ClaroCom



TouchChat – HD - AAC



Dialogue AAC



Proloquo4Text



MyVoice – Speech Assistant



Text to Speech – Talkie



Grid for iPad – AAC



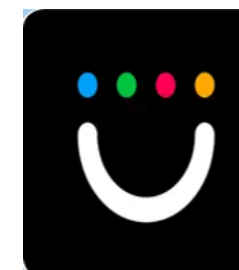
Proloquo2Go AAC



Predictable



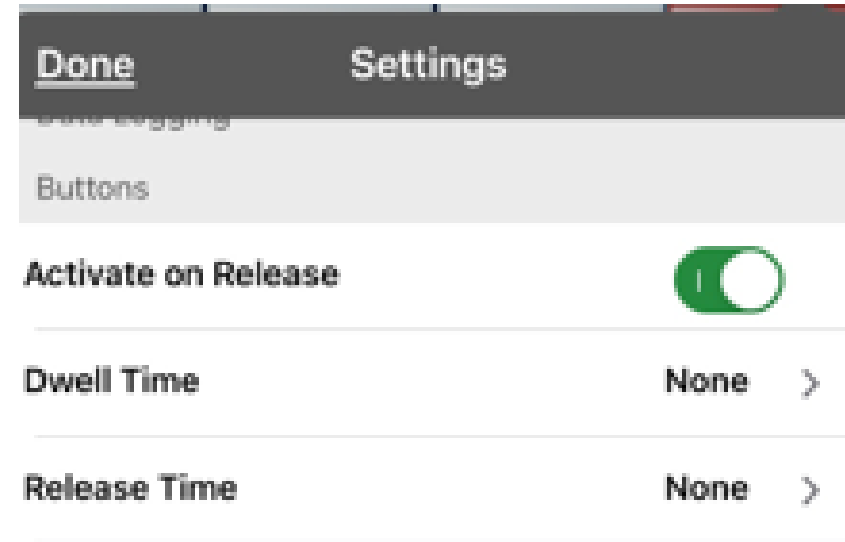
Listen and Speak



Jimple

Accessibility - physical

Many comprehensive apps will offer scanning and touch access options e.g. dwell time, hold duration, repeat delay and select/activate on release.



Alternative Onscreen Keyboards



Free



\$4.99



\$39.99



\$19.99

- **Microsoft SwiftKey AI keyboard** – allows swipe typing and emojis and GIFS
- **Keedogo Plus** – different colour schemes, ABC layouts, fonts, capitals/lower case, word prediction
- **Keeble** – different themes, colours, fonts, word prediction, touch access options, 2 scanning options, auditory feedback
- **Superkeys Accessible Keyboard** – Keys are clustered together and when you tap on the cluster, larger keys are shown. Can customise with colours and font



Compatible with Proloquo4Text, Flip Writer AAC, ClaroCom, Speech Assistant AAC, Text to Speech, Say It, Talkie, Listen & Speak, Weave Chat, QuickType, My Voice – Speech Assistant and Spoken apps

Head tracking and triggers for iOS Devices



Jabberwocky AAC



Predictable



Vocable AAC



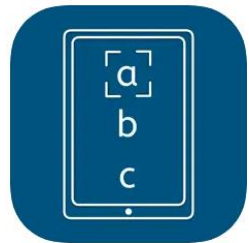
TouchChat HD – AAC
w/WordPower

The device used with the AAC app will need to support the head tracking feature with a TrueDepth camera and support Face ID e.g. iPhone x series and iPad Pro 2018

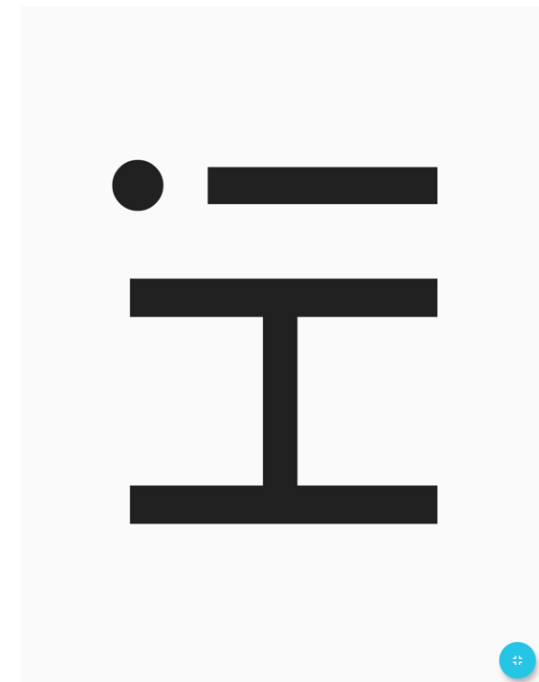
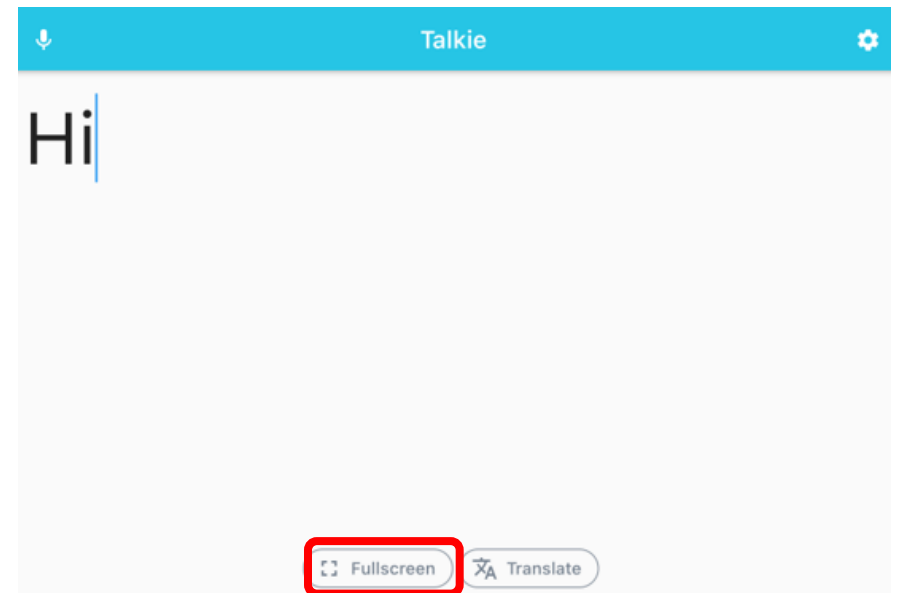
Accessibility - visual

Comprehensive apps enable the ability to change font, font size, font colour and background colour

Done	Settings
Speech Display Bar	
Background Color	White >
Number of Lines	2 Lines >
Single Line Cursor	<input type="checkbox"/>
Tap Action	Speak >
Highlight Spoken Word	OFF >
Highlight Color Phone/FaceTime	Yellow >
Expanded Speech Area	
Font	Arial >
Font Size	80 Point >
Font Color	Black >
Background Color	White >

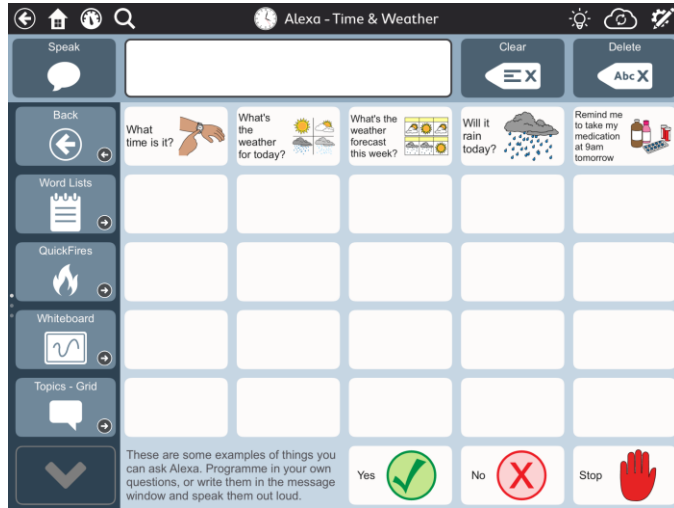


Echo: Auditory Scanning Free



Talkie

Personal Assistants/Environmental Control



TD Snap

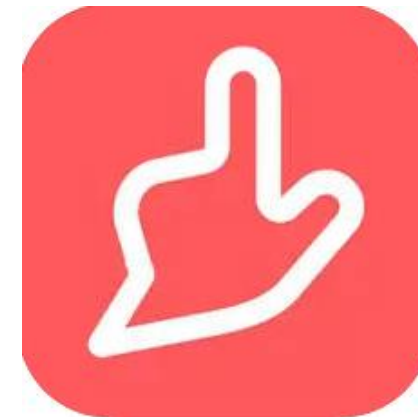


Grid for iPad: Amazon Echo Grid Set

[Supporting everyday life with Grid and Alexa | Smartbox](#)



Grid for iPad: Super Core



Speakprose 3: Subscription based

Speech to Text Function



Speech Assistant AAC



Flip Writer AAC



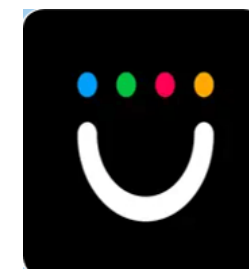
ClaroCom



Vocable AAC



Weave Chat AAC



Jimple

Text Based Apps

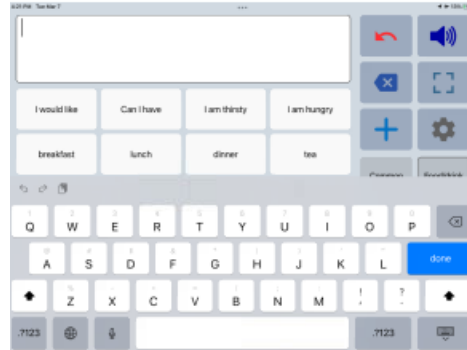
Considerations for Text Based apps

- Phrase-based, alphabet-based, words as well as keyboard
- Different keyboard layouts e.g. QWERTY or ABC
- Rate enhancement e.g. word prediction, grammar prediction, abbreviations, stored phrases/history
- Words plus keyboard
- Colour coding of words e.g. Fitzgerald key
- Typing-speech e.g. speak each word, each sentence, speak and clear
- Symbols accompanying text e.g. Spoken –Tap to Talk AAC
- Flip message for conversational partner e.g. Flip Writer AAC, Listen & Speak
- Sharing your message to other programs e.g. messages, email, Notes app
- Alarm/alert e.g. Dialogue AAC, Speech Assistant

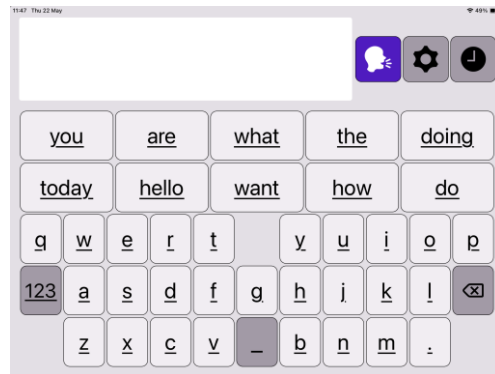
Spelling Focus



Dialogue AAC

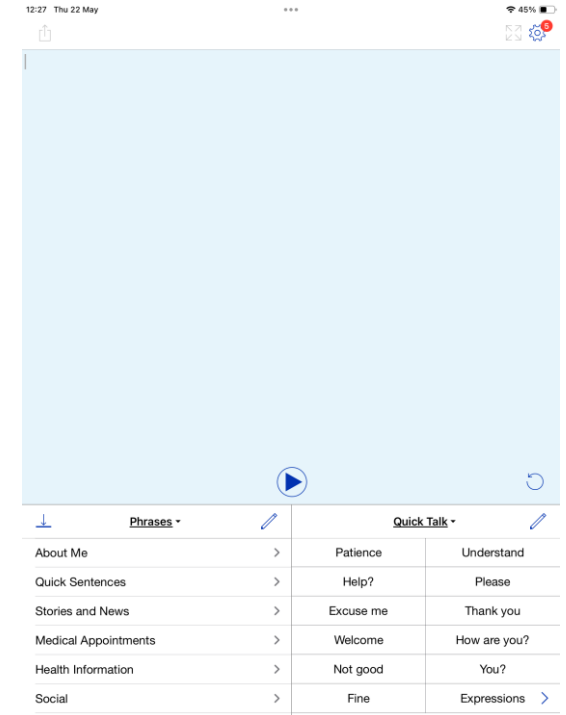


Speech Assistant AAC

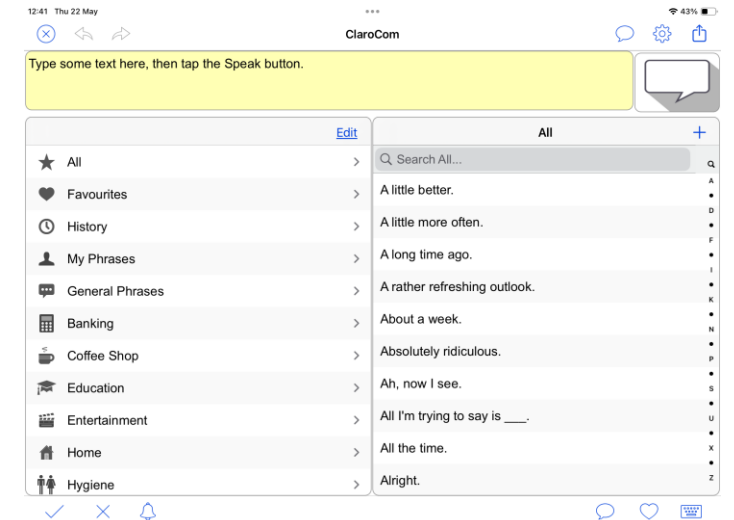


Jabberwocky

Phrase Focus



Proloquo4Text

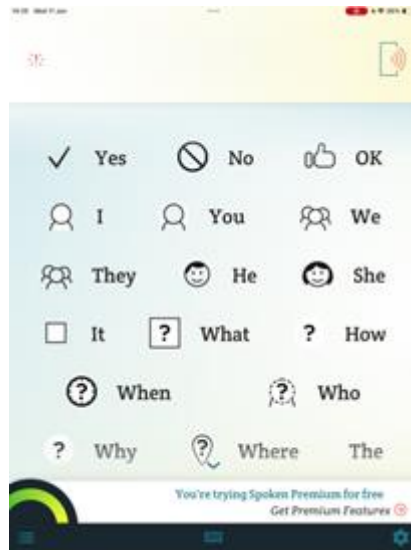


ClaroCom

Words + alphabet

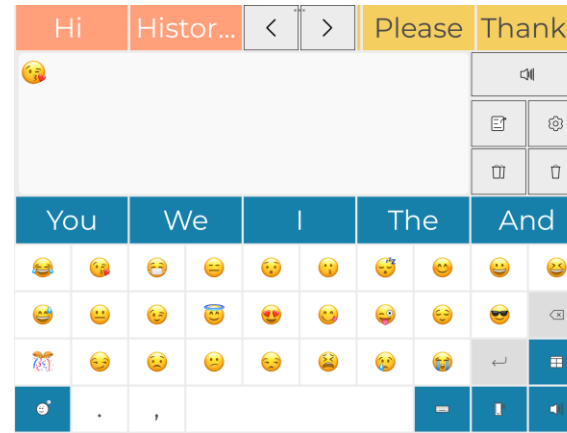


Listen and Speak



Spoken

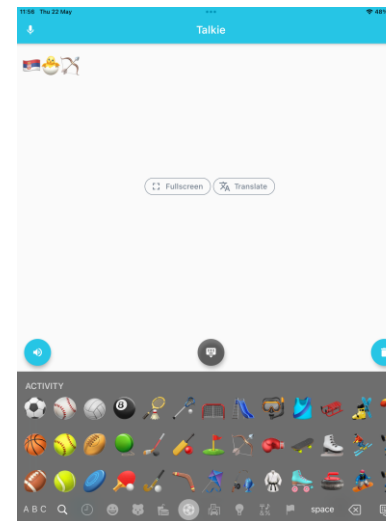
With Emoticons/Symbols



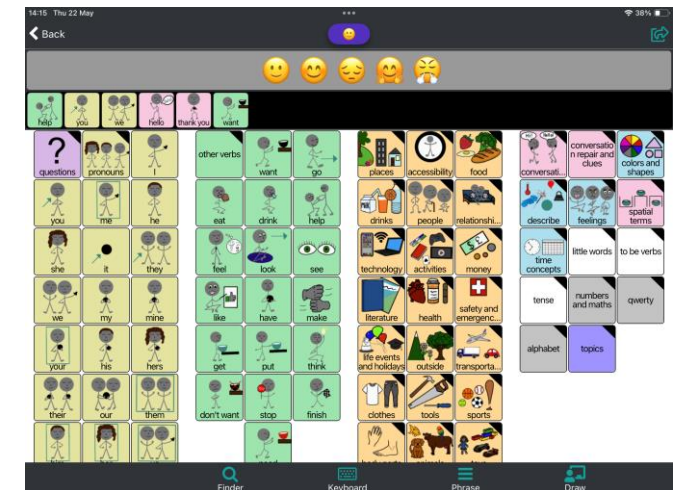
Predictable



TD Snap



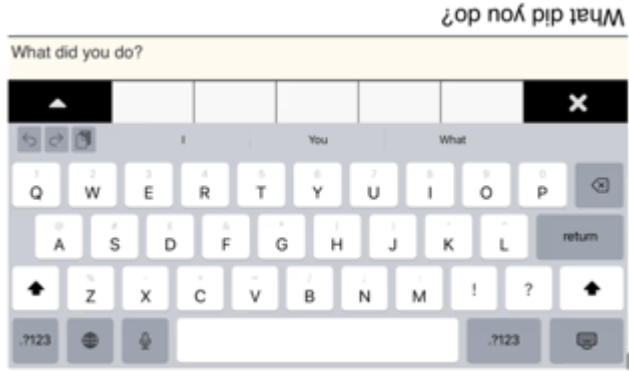
Talkie



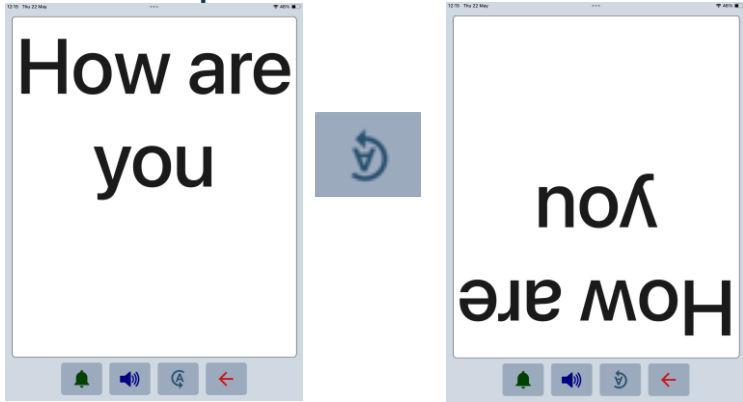
Weave Chat AAC

And Spoken

Ability to flip message



Flip Writer AAC

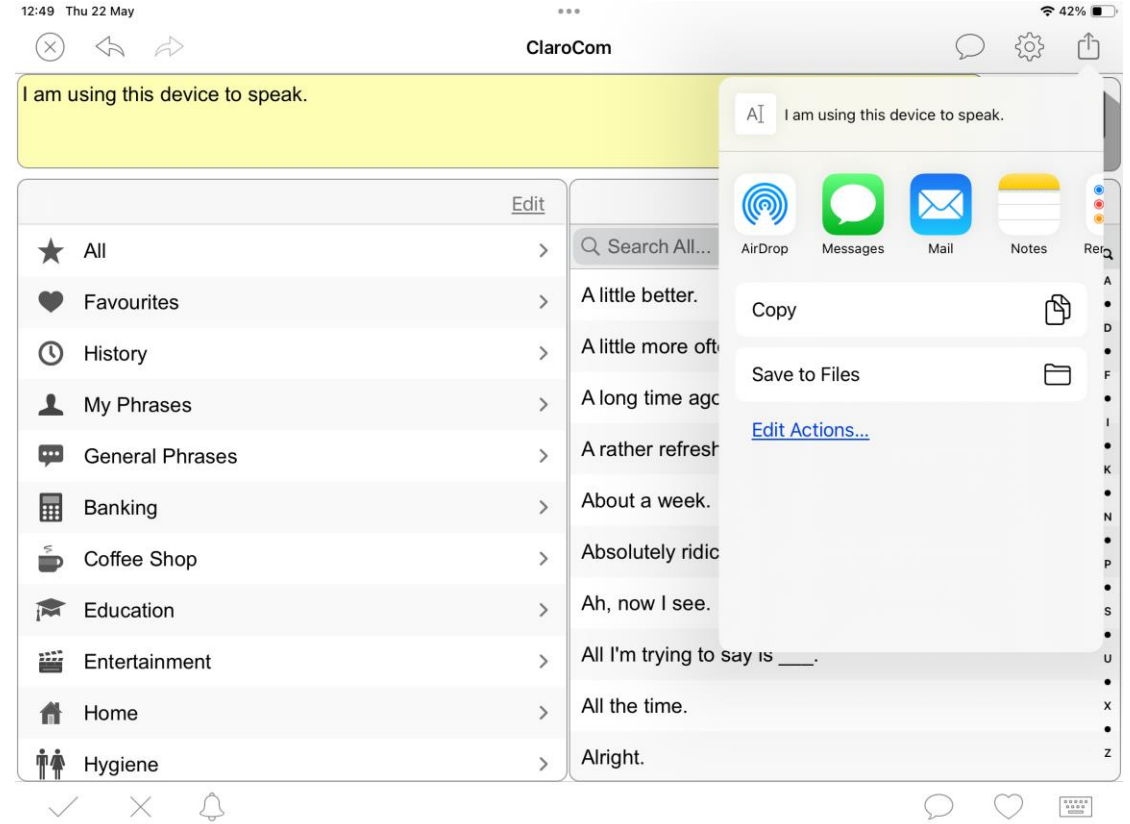


Speech Assistant AAC



Listen and Speak

Share a message



ClaroCom

Whiteboard Function to Write or Draw



Spoken – Tap to Talk AAC
Free



HandySpeech \$4.99



Speak Me \$12.99



Arthur app



Text to Speech – Talkie



TD Snap



Weave Chat AAC
Free

Symbol Based Apps

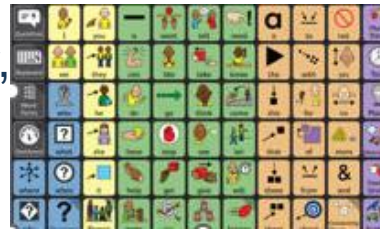
Layout of Vocabulary (core vocab plus fringe vocab)

Schematic e.g. topic boards

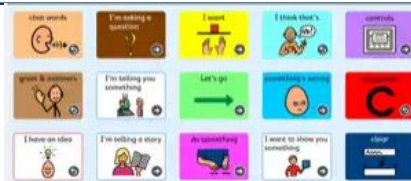


Taxonomic e.g. TouchChat HD w WordPower, TD Snap Motor Plan, Proloquo2Go

Linguistic e.g. TouchChat HD w WordPower, TD Snap Motor Plan, Proloquo2Go



Operationally organised .e.g. semantic compaction



Pragmatically organised e.g. TD Snap:PODD

Environmentally organized (Visual scene display) e.g. Scene and Heard Pro

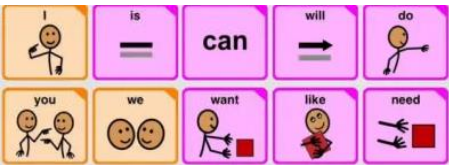









Topical e.g. Talk Suite, Talking Mats



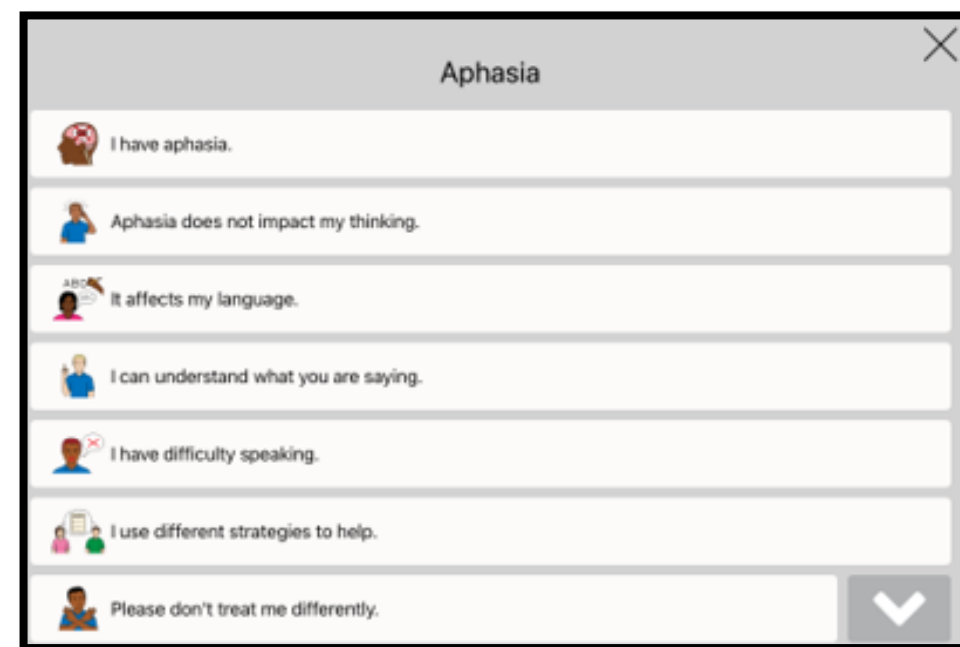
Anecdotes e.g. Pictello

Commonly Used Symbols

<p>SymbolStix: Sonoflex (Lite), TouchChat HD AAC Proloquo2Go, GoTalk Now, Grid for iPad</p> 	<p>PCS Symbols: Grid for iPad, TouchChat HD AAC with WordPower (in-app purchase), TD Snap</p> 
<p>Widgit: GoTalk Now (in-app purchase), Grid for iPad</p> 	<p>Multi-Meaning symbols derived from Minspeak & Unity: LAMP Words for Life</p> 
<p>Smarty Symbols: Speak for Yourself</p> 	<p>Pixon: TouchChat with WordPower (in-app purchase)</p> 
<p>Open Source: Cough Drop</p> 	<p>Unique Symbols: Weave Chat, Jimple</p> 

People with Aphasia

- Is the AAC app customisable?
- Does the person with aphasia require symbol/photo supports?
- If a symbol based app – what kind of vocabulary layout best suits?
- If a symbol based app – does it come in different levels?
- If a text based app – does it have stored phrases/word prediction
- Does the app have a whiteboard for writing or drawing if useful strategies?
- Can the AAC app be paired with another app to supplement conversation e.g. Pictello?



People with Dementia



- **Early stages:** ?voice banking using an app for legacy, offline planning/scripting e.g. Notes app, personalised vocab lists, wallet with business cards
- **Middle stages:** Talking mats (no digitised app in Australia as yet), visual schedules (stand alone app or in TD Snap), Talking photo album, AAC app like GoTalk Now, topic boards in TD Snap, community cards
- **Late Stages:** Talking photo album
- **All stages:** ‘About me’, chat prompts e.g. Pictello app

Apps with AI



Superyou Tech
x Voiceitt

<https://doi.org/10.1080/10400435.2024.2328082>



Voiceitt

(web app)

Transcribes non-standard speech to text and converts it to synthesised speech.

Need to record 50 phrases. Voiceitt, through Webex, offers integration with video call apps like Microsoft Teams and Zoom. Integration with Amazon Alexa.

Free 60 day trial then \$1,299.00 annual subscription.

Project Relate

(Android OS 8+)

Transcribes non-standard speech to text. You teach the app to understand your unique voice and speech patterns by recording a series of audio prompts (500 phrases). Repeat function. Speaks directly to Google Assistant.

Free

Vocable AAC

Grid style with customisable phrases and a QWERTY keyboard. Smart Assist feature presents possible responses to some questions in Listening mode. Head tracking access option.

Free

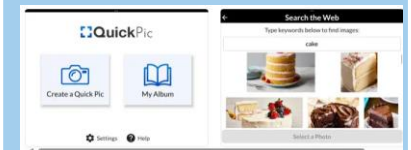
Jimple

Grid style with black and white symbols, voice activity detection, no keyboard

Free trial, then \$15.00/month

QuickPic AAC

Creates topic-specific displays automatically from photos.



\$14.99

Demonstration of 'Listen' function in Vocab



Optimising Communication in Corticobasal Degeneration: The Role of AAC

Amanda Fogarty
Speech Pathologist

Introduction

- Overview of client presentation and communication profile
- Use of the SETT framework and feature matching to guide AAC selection
- Rationale for choosing a dedicated AAC device over mainstream options.
- Real-world implementation strategies, training, and clinical outcomes.

Clinical Background

Age/Gender: 70 year old male

Diagnosis: Corticobasal degeneration (CBD) with primary progressive non-fluent aphasia and verbal apraxia.

Imaging: MRI shows left posterior frontal lobe atrophy, consistent with CBD.

Social history: resides with wife and adult son; has another son living interstate.

Interests: gardening, fishing with friends

Mobility: independent mobilises however, increasing falls risk. Fine motor challenges (still texting on iphone).

Mood/behaviours: frustrated when not understood, enjoys routine, prone to outburst if plans change

MDT: SP, OT, PT, GP, Neurologist

Communication profile

Speech Intelligibility: 50-70% intelligible due to mixed dysarthria (spastic + hypokinetic), verbal apraxia, and PPA.

Language: word finding difficulties, reduced sentence length, grammatical errors.

Cognitive: denies memory issues; behaviour suggests some executive dysfunction.

Psychosocial Impact: Regular frustration, reduced participation, loss of confidence.

Previous Therapy Focus

- Traditional apraxia-based speech therapy with limited long-term functional gains.
- No AAC strategies trialled previously.

AAC Evaluation (SETT Framework)

S – Student (Client)

- Strengths: Good insight, motivation to communicate, uses mobile phone, familiar with technology.
- Needs: Support to express basic needs, maintain relationships, participate socially, reduce frustration, and preserve identity.
- Limitations: Declining verbal output, apraxia, declining literacy, reduced comprehension of complex language, emerging fine motor limitations.

E – Environment

- Home with family, community outings (e.g., fishing), medical appointments.
- Communication partners include wife, adult son, friends, healthcare team.
- Environments vary in familiarity and noise level.

T – Tasks

- Expressing needs and wants
- Engaging in conversation (e.g., with family/friends)
- Requesting changes or help
- Managing care decisions (yes/no, preferences)
- Participating socially

AAC Evaluation (cont.)

T – Tools

Device:

- portable, durable

Access:

- Direct touch (currently reliable)
- Some fine motor issues → **OT consulted** for monitoring access needs.
- **Partner-assisted scanning** considered as backup method

Output:

- Text-to-speech option, but with decreasing reliance due to literacy changes
- Symbol-based navigation with phrase prediction and customizable vocabulary

AAC Trials

Tools Trialled:

- **Low tech:** Yes/no board/card (backup)
- **High tech:**
 - **Speech Assistant on iPhone** (text-based communication initial preference for ct, but not adequate long-term support due to literacy changes relating to condition)
 - **TD Snap on iPad & TD Navio Midi** (symbol-based, customizable page sets to match individual communication needs, consistent motor patterns, high usability). Ct initial preference for *Motor Plan 66*, however, movement to *MP30* by end of trial.
 - **Grid for iPad on iPad** – (supported literacy but less intuitive navigation). Ct preference for *SuperCore 50 + integrated QWERTY keyboard* (felt this was most similar to *TD Snap*). Reduced client buy-in due to strong preference for *TD Snap*, resulting in less independent practice over trial.

Outcome of Trials:

- **TD Snap** was selected due to:
 - Ct/family feedback “less busy layout, easier to learn and customize, symbol search easier to access”
 - Strong symbol support
 - Motor planning stability (important for apraxia and CBD)
 - Familiar iOS interface
 - Option for **simplification** (incl. Aphasia page set) as abilities decline

AAC Implementation

Goals of AAC Use:

1. Express basic needs and wants
2. Participate in meaningful conversation
3. Make requests and choices
4. Maintain identity through personalized vocabulary

Implementation Strategy:

- **Client training sessions** integrated into language therapy tasks (e.g., SFA, Vnest, divergent/convergent naming tasks)
- **Aided Language Stimulation (ALS)** to normalize AAC use in conversation
- **Vocabulary Selection:** Core vocabulary, personalized fringe (e.g., fishing terms, family names, routines), pre-programmed social phrases/functional phrases.
- **Support routine** to reduce anxiety and aid comprehension through visual schedules “My schedule/Today” in Dashboard
- **Support conversation**, identity, memory and storytelling through topic-based photo albums in Conversational Tools page/Photo Album template (Aphasia page set) – family, fishing, holidays, gardening.
- **Access:** Direct touch + low-tech backup yes/no board
- **Partner training:** Wife and son attended sessions and practiced modeling and prompting strategies
- **OT** advised on future support needs (keyguard, stylus, mounting if needed)

Ongoing Review and Adjustment

- Regular monitoring of speech, cognition, motor abilities, swallow.
- Plan to simplify page sets or transition to partner-assisted scanning as necessary.
- May move to smaller page set (i.e., aphasia page set) as condition progresses.

Outcome Measures

Tools Used:

- **Communication Effectiveness Index (CETI)** – family reported increased satisfaction in expressing needs and social interaction
- **Goal Attainment Scaling (GAS):** Met short-term goals of expressing needs with AAC in opportunities in the home
- **Session data:** Improved AAC usage accuracy and reduced breakdowns in structured tasks

Why TD Snap?

- **Motor planning support:** Fixed icon locations help reduce cognitive and motor demands, which is beneficial in CBD, PPA and apraxia.
- **Symbol-based support:** Supports communication even as **literacy declines**.
- **Flexible customization:** Vocabulary and page sets can be easily adjusted as needs change. Options for development of visual aids to support conversation and improve confidence in interactions (i.e., photo albums, visual schedules, life book development).
- **User-friendly for iOS users:** Client and family were already using iPhones and iPads.
- **Ease of use for caregivers:** beginner-friendly
- **Progression planning:** Easily modifiable for future access changes (e.g., from direct touch to partner scanning).

Why TD Navio Midi?

Weight & portability

Lighter and more compact than an iPad with a case and speaker; easier to carry around independently; better for users at risk of dropping devices.

Ruggedness & Durability

Designed as a purpose-built AAC device with a rugged, impact-resistant casing; built to withstand drops and daily handling.

Battery Life

Slightly longer battery life

Warranty

5-year warranty, including accidentally damage

Keyguard & Functionality

Keyguard sits flush and secure on screen

Audio output

Integrated high-quality speakers specifically tuned for voice output (no need for external speakers).

Key Takeaway

- AAC selection must be individualised and flexible
- TD Navio Midi with TD Snap provides a robust solution for this client's current and future needs
- Early and supported evaluation and implementation of AAC helps preserve communication, connection, and quality of life

Thank you



Training and Support

Communication Partners

Follow their lead - how to be a respectful communication partner Amanda Hartmann, (AssistiveWare)



Partner Training Videos | ALS Augmentative Communication Program | Boston Children's Hospital (childrenshospital.org)

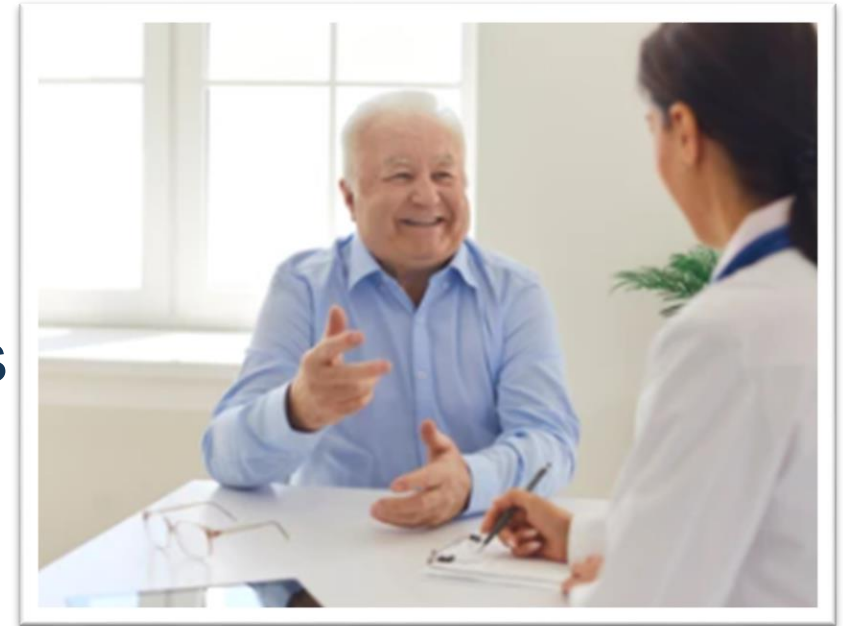


Outcome Measures in AAC

Outcome Measures

- Individual client/family level
- Service level e.g. school, training program, hospital ward
- Purchaser/Commissioner level

- PREMS: Patient-reported experience measures
- PROMS: Patient-reported outcome measures
- Goal Attainment Scale (GAS)
- Language samples/data logging
- The Pragmatic Profile for People who use AAC
- Therapy Outcome Measure – AAC
- Social Networks



Goal Attainment Scaling (GAS)

Person's individual goals are set and measured

Goal Attainment Scaling (GAS) Record Sheet

Patient Name:..... **Age:**.....
Hospital No:..... **Discharge date:**.....
Keyworker:.....

		<small> Importance to patient: score Important , Very Important, Extremely important. Difficulty of achieving (professionals): score Not difficult, Minor difficulty, Moderate difficulty, Extreme difficulty Goal attainment baseline: usually set at some function, or No function, (as bad as it can be) Goal attainment score: As expected = achieves goal as expected, partially achieved = some improvement but goal not achieved, same as baseline = no change, a little better = achieved more than the goal, Much better – over achieved goal </small>					
1	Patient stated goal	SMART goal	<i>Importance</i>	Difficulty of achieving	Baseline	Achieved	Variance (Describe achievement if differs from expected)
			<input type="checkbox"/> Imp <input type="checkbox"/> v.imp <input type="checkbox"/> Ex.imp	<input type="checkbox"/> Not difficult <input type="checkbox"/> Minor difficulty <input type="checkbox"/> Mod difficulty <input type="checkbox"/> Extreme difficulty	<input type="checkbox"/> Some function <input type="checkbox"/> No function <small>(as bad as can be)</small>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Much better <input type="checkbox"/> A little better <input type="checkbox"/> As expected <input type="checkbox"/> Part achieved <input type="checkbox"/> Same as baseline <input type="checkbox"/> Worse
		Date Set.....	<i>Baseline function</i>				Date
			<input type="checkbox"/> Imp <input type="checkbox"/> v.imp <input type="checkbox"/> Ex.imp	<input type="checkbox"/> Not difficult <input type="checkbox"/> Minor difficulty <input type="checkbox"/> Mod difficulty <input type="checkbox"/> Extreme difficulty	<input type="checkbox"/> Some function <input type="checkbox"/> No function <small>(as bad as can be)</small>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Much better <input type="checkbox"/> A little better <input type="checkbox"/> As expected <input type="checkbox"/> Part achieved <input type="checkbox"/> Same as baseline <input type="checkbox"/> Worse
		Date Set.....	<i>Baseline function</i>				Date
			<input type="checkbox"/> Imp <input type="checkbox"/> v.imp <input type="checkbox"/> Ex.imp	<input type="checkbox"/> Not difficult <input type="checkbox"/> Minor difficulty <input type="checkbox"/> Mod difficulty <input type="checkbox"/> Extreme difficulty	<input type="checkbox"/> Some function <input type="checkbox"/> No function <small>(as bad as can be)</small>	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Much better <input type="checkbox"/> A little better <input type="checkbox"/> As expected <input type="checkbox"/> Part achieved <input type="checkbox"/> Same as baseline <input type="checkbox"/> Worse
		Date Set.....	<i>Baseline function</i>				Date

Baseline GAS T-score:	Achieved GAS T-score	Change in GAS T Score	Date.....
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Example Goal for Marsha (MND)

Score	Attainment Level / Outcome
Baseline (skill level at start of trial) -2	Using a text to speech device, Marsha constructs a full message with regular spelling errors, slow speed (>6 mins) and some effort.
Less than expected outcome -1	Using a text to speech device, Marsha will construct a full message with regular spelling errors, slow speed (>4 – 6 mins) and some effort.
Expected outcome 0	Using a text to speech device, Marsha will construct a full message with regular spelling errors, regular speed (>2 - 4 mins) without effort.
Greater than expected outcome +1	Using a text to speech device, Marsha will construct a full message with minimal spelling errors, adequate speed (>0 - 2 mins) without effort.
Much greater than expected outcome +2	Using a text to speech device, Marsha will construct a full message with no spelling errors, adequate speed (>0 - 2 mins) without effort.

Data Logging

- Prentke Romich Company (PRC) devices have built-in language activity monitoring (LAM). This includes the Dialogue AAC app and TouchChat HD AAC
- TD Snap –option to track button usage

Need to consider privacy issues!

		Date	Date	Date	Date	Date
Age (years)	Morphology					
2.0 – 2.5	Plural “s” (e.g., <i>dogs, shoes, chairs</i>)					
2.0 – 2.5	Possessive “’s” (e.g., <i>mom’s coat, dad’s car</i>)					
2.0 – 2.5	First / second person (<i>I, me, you</i>)					
2.5 – 3.0	Gender (<i>he, she, they</i>)					
2.5 – 3.0	Present progressive (<i>-ing</i> ending)					
2.5 – 3.0	3rd person singular (<i>-s</i> ending e.g. <i>eats, wants</i>)					
2.5 – 3.0	Uncontracted aux/copula (<i>is/are</i> : e.g. <i>He is washing</i>)					
2.5 – 3.0	Contracted aux/copula (<i>’s/’re</i> : e.g., <i>He’s tired</i> and <i>We’re hungry</i>)					
2.5 – 3.0	Regular past tense (<i>-ed</i> ending e.g., <i>She washed the dishes</i>)					
2.5 – 3.0	in, on, under					
3.0 – 3.5	Future tense (<i>going to</i> and <i>will</i>)					
3.0 – 4.0	Object Pronoun (<i>him, her, us, them</i>)					
3.5 – 4.0	Irregular past tense (e.g., <i>wrote, ate, drank, slept, went</i>)					
3.5 – 4.0	Possessive Pronouns (<i>his, hers, ours, theirs</i>)					
3.5 – 4.0	S-V inversion (e.g., <i>are you..., is he..., will they...?</i>)					
3.5 – 4.0	Question words (<i>what, where, who, when, why, which, how</i>)					

Therapy Outcome Measure - AAC

Communication Impairment: Expression

0	Profound difficulty with expressing self in speech, AAC or gesture. Not understood by familiar or non-familiar listeners.
1	Very severe problems with expression limited to a few recognisable words or gestures. Only basic messages e.g. positive and negative, understood by familiar family and friends and only with help of context, hand signals/gestures/facial expression.
2	Severe difficulty expressing self. Can produce some recognisable expression (speech, AAC or gesture) but difficulty communicating anything out of context. Familiar topics of conversation can usually be understood by familiar friends and family but strangers only able to understand occasional expression.
3	Moderate difficulty in being understood. Can be understood by familiar family and friends in most circumstances but not understood consistently by non-familiar listeners, and this may be limited to topics in context.
4	Occasional difficulty in being understood. Maybe less intelligible in some contexts. Generally good expression but some maybe less well understood.
5	No difficulty in being understood. Normal expressive ability.

Activity (In relation to AAC)

Firstly, rate this to reflect the individual without any AAC i.e. not using signing systems or technology. Then rate again when the person is using current AAC i.e. signing system or additional technology.

0	No consistent functional communication-- functioning at pre-intentional level.
1	Limited functional communication. Using some purposeful responses to indicate limited needs or feelings with informed/familiar communication partners within limited contexts. Can reliably communicate 'yes' and 'no'. Limited communicative intent.
2	Communicates basic needs and information to informed /familiar communication partners. Consistent attempts at purposeful communication in limited contexts. Some communicative intent.
3	Consistent level of communication relating to subjects outside the immediate context. Can transfer more complex messages. Maybe limited in output relating to restricted access to symbol set or other barriers to vocabulary. Some inconsistency. Communicates beyond here and now with familiar persons and in some contexts. Consistent communicative intent
4	Functional communication available to the individual in most circumstances and with broad range of individuals. Only occasional difficulty. Access to extensive vocabulary which meets needs. May have difficulty reticence in some environments. Consistent communicative intent
5	Able to communicate with anyone in any circumstance using broad range of communication modes.

Participation

Firstly, rate this to reflect the individual without any AAC i.e. not using signing systems or technology. Then rate again when the person is using current AAC i.e. signing system or additional technology. Consider how the person participates socially/can perform their role without AAC and then with it.

(Autonomy/ self-sufficiency/self-reliance = able to determine and have control over one's own viewpoint and not have decisions made by others)

0	Unable to fulfil any social/educational /occupational/recreational /family role. Unable to participate in any situation, even with high-level support. No control and the environment. No social integration.
1	Low self-confidence /poor self-esteem /limited social integration /socially isolated .Unable to fulfil any social /educational/occupational/recreational/or family role. No friends/acquaintances outside family/carers. Only able to engage in social activities with large amount of support from carers.
2	Some degree of self-sufficiency and social integration beyond immediate family and carers. Fulfilling some social occupational /education/recreational or family role with support. Able to personally effect some decisions/ control in familiar situations. Social life is very limited and requires involvement of support from carers.
3	Makes decisions and has control over some aspects of life. Able to engage with family /occupation /recreational/ education system to some extent with appropriate adjustment and support. Has a few friends/acquaintances. Has some self-sufficiency and control over life. Needs encouragement by others to achieve potential.
4	Can indicate preferences and views in most or all activities. Has broader range of friends. Has only occasional difficulties integrating or in fulfilling social/role activity. May have difficulty in achieving potential in some situations on some occasions. May have restricted interests/pastimes.
5	Can indicate preferences and views in all activities. Able to fulfil social, recreational, occupational educational and family role.

Well-being

Firstly, rate this to reflect the individual without any AAC i.e. not using signing systems or technology. Then rate again when the person is using current AAC i.e. signing system or additional technology.

(E.g. are they more upset/distressed/frustrated without access to available AAC-- or does this make little difference and they have the same emotional status with or without?)

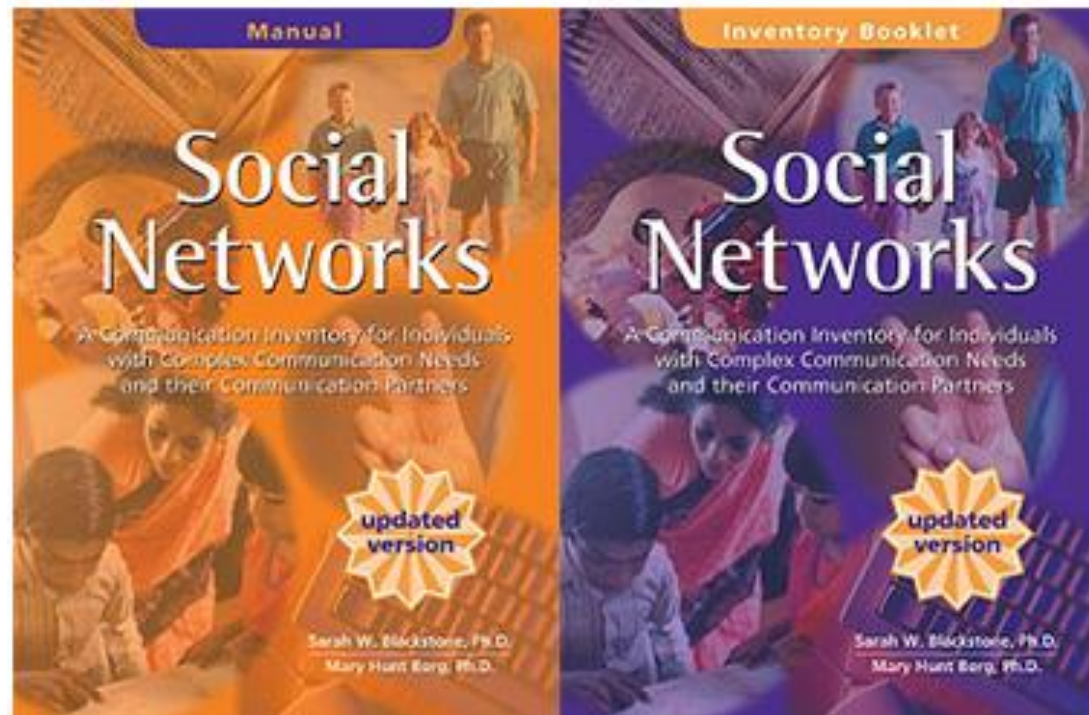
Do not forget that you can rate the relative or carer on this scale as well.

Some carers may find that it is more upsetting/frustrating/anxiety producing when the individual is using technology-- others may find the opposite!






0	High and constant levels of distress and problematic emotions, like frustration/ elation / anger etc. May have severe depression and/or severe anxiety. May have severe apathy/social withdrawal. Likely to be unable to express or control emotions appropriately.
1	Severe levels of distress and problematic emotions. These are present all or nearly all of the time. Becomes distressed easily, requires constant reassurance / support, needs clear / tight limits and structure/ loses emotional control easily.
2	Moderate to severe levels of distress and problematic emotions. Present most of the time. Frequent emotional support required.
3	Moderate levels of distress and problematic emotions which occur frequently. More likely to occur in unfamiliar situations/changes in routine. Controls emotions with assistance, emotionally dependent on some occasions but can use strategies to assist emotional control.
4	Mild levels of distress and problematic emotions. Not present all the time, likely to only be associated with unfamiliar situations or changes of routine. Able to control feelings in most situations, generally well-adjusted/ stable (most of the time / most situations). Occasional emotional support needed.
5	Well adjusted, stable and able to cope emotionally with most situations, good insight, accepts and understands own limitations.

Social Networks

Many people with complex communication needs experience social isolation. The goal of Social Networks is to expand social network circles.



Snapshot Impression of AAC App

	Strongly Agree 	Agree 	Neutral 	Disagree 	Strongly Disagree 
There was sufficient vocabulary to make daily conversation					
Page navigation was easy					
The app was easy to use					
I felt comfortable using the app					
I liked using the app					
I felt confident using the app to communicate with others					
Overall, I am satisfied with the app					

Adapted from Wang, E. et.al. (2018). Development and evaluation of a mobile AAC: a virtual therapist and speech assistant for people with communication disabilities. *Disability and Rehabilitation: Assistive Technology*, 13, 8, 731 – 739. <https://doi.org/10.1080/17483107.2017.1369592>

Questions and Feedback



Fill in the feedback form at
<https://forms.office.com/r/NJqJTWBAtV> to receive a
personalised certificate of attendance



Thank you

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