



## Communication tools and technology (AAC)

Use this guide to:

- explore tools and technology that support communication
- learn about low-, mid- and high-tech tools, and how to use them
- identify your communication goals (e.g. messaging, asking for help, making decisions, or staying social)
- understand different access options (touch, switches, or eye-gaze)
- see how tools and technology help to stay connected and independent
- know the funding options, such as NDIS and My Aged Care
- explore your options with your speech pathologist and carers.

### About this guide

This guide is part of the *speech and communication in MND* series of guides and practical tools. This series was developed with MND Queensland, people living with MND, and their carers to help prepare for and adjust to speech changes, get support, and stay connected.

Scan to learn more



# Communication is more than speech

When speech gets harder, communication tools and technology can help you stay connected. This can be as simple as a pen and paper or tablet app, or as advanced as a speech-generating device that “talks” for you.

This guide covers three groups of tools:



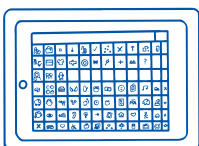
## Simple or low-tech tools

Such as pen, paper, printed boards, no batteries.



## Mid-tech tools

These are small devices or apps, battery-powered but simple to learn.



## High-tech tools

These are more complex tools like speech generating devices (SGDs) and eye-gaze.

## AAC

You may hear the term AAC. It stands for augmentative and alternative communication. It means any tool, method or technology that helps you communicate. This includes simple things like yes/no signals and communication boards, as well as high-tech devices that speak for you.



## Communication tools and technology can help to:

- reduce frustration and fatigue
- make it easier to get your message across
- use your own voice even as speech gets harder
- share your needs and stay part of conversations
- express your needs in an emergency ('I need help', or 'Please wait')
- stay independent at home, in hospital, or in the community.

**Your speech pathologist can help build the best system for you. See *Building your communication system* for more.**

# Getting started

With so many options available, it can be hard to know where to start. Talking about it early gives you time to try different options and learn what works for you. Your speech pathologist can guide you, help you trial devices, and support you with funding and setup. Knowing your goals helps to work out which tools, devices and systems will be most useful.

## Some common goals include:



Messaging friends and family (text, email, social media).



Watching movies, listening to music, playing games, browsing the web.



Being involved in your healthcare – making decisions, sharing feelings, getting help in an emergency.



Making phone or video calls to family, friends and others.



Making changes to your environment – lights, TV, music, or air-conditioning.



Being involved in daily life – shopping, exercise, travel, social groups, community activities.

## What are you using now?

You may have already started using technology to support your communication. This is a great place to start. For instance, you may be using:

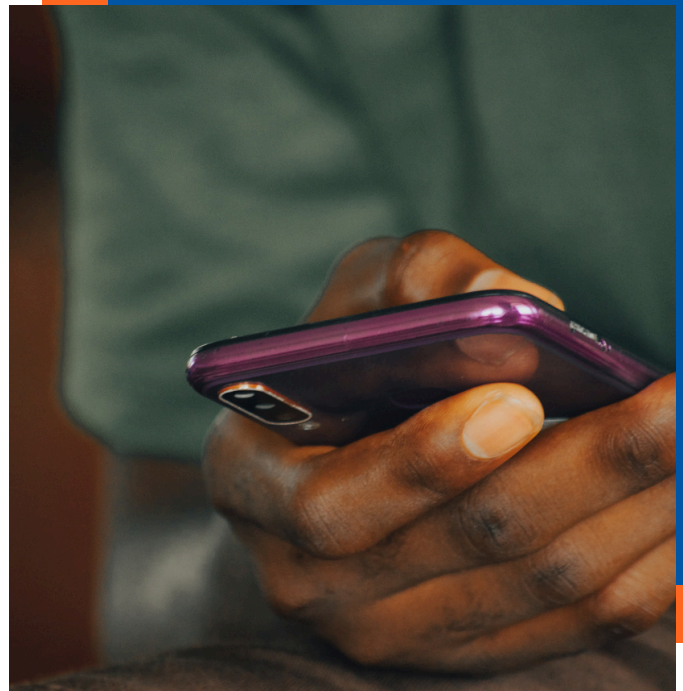
- smart phones or tablets to type messages out
- text messages instead of calling
- voice commands to control your device
- text to speech apps.

# Simple or low-tech tools

These tools don't replace speech but can give you extra support. You may already use them. These tools can be used at any stage.

## Use these tools when:

- speech starts to get harder
- you need a simple, low-cost option
- you are feeling tired
- you don't have a device with you, or batteries are flat.



## Partner-assisted scanning (PAS)

A partner points to or reads out letters, words, or symbols on a communication board. You signal "yes" when the right one is reached.



## Some common options



### Pen and paper, whiteboards, boogie boards

- Keep a notepad and pen nearby to write short messages.
- A small whiteboard with a marker can be wiped and reused.
- Boogie boards or LCD writing tablets are portable, low cost and easy to use.
- Good backups if batteries go flat or devices aren't nearby.



### Messaging and phone notes

- Texting can replace phone calls.
- Notes apps let you save or type messages to show in person.



### Smart devices (voice assistants)

- Siri, Alexa, or Google can be used to call someone, send a message, control your phone, turn off lights and many other commands.
- Ask about switch controls.
- You can also use a phone or tablet app to control these devices without speech.

### Communication boards

- Boards with letters, words, phrases, pictures or symbols (e.g. comfort, food and drink).
- You can point, look, or use partner assisted scanning (PAS).

A	B	C	D	...	...
E	F	G	H	...	...
I	J	K	L	M	N
O	P	Q	R	S	T
U	V	W	X	Y	Z

# Mid-tech tools

**Mid-level, or mid-tech communication tools are devices that need some tech skills to set up and operate, but are simple to learn. They are often battery powered.**

## Use these tools when:

- speech is getting harder to understand
- speech feels tiring
- you need fast, reliable messages for care needs.

## Some common mid-tech tools



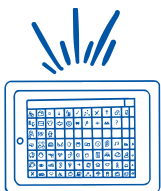
### Voice amplifiers

- Small, portable speakers that make your voice louder.
- Useful in noisy places or when your voice feels weak.
- Start with the volume low and increase slowly to avoid feedback.
- Find online or through disability suppliers in Australia.



### Single-message devices

- A button that plays one recorded message when pressed (e.g. 'I need help').
- Easy to use and reliable.



### Speech generating devices (entry level)

- Simple talking devices with preset words or phrases.
- These are a step before larger, high-tech systems.



### Text to speech apps (on a phone or tablet)

- You type a message, and the device speaks it out loud.
- Handy if your speech is hard to understand when you are tired.
- Some apps let you save common phrases (like 'Please wait' or 'I need a rest') so you don't have to type them every time.
- Examples: Predictable, TD Talk, Speech Assistant AAC.
- Most apps have predictive text but they work best when you can type or tap easily.
- If typing gets harder, talk to your speech pathologist about other access methods.



### Multi-message devices

- Small machines with several buttons.
- Each button plays a different message you've recorded, such as greetings, requests, or care needs.

An iPad or Android tablet is light and portable, and a great way to stay connected. If hand control (touch typing/tapping) gets harder, there are other options. See **High-tech tools and access options** on the next page.

# High-tech tools and access options

High-tech communication tools can offer faster communication, independence, access to stored phrases, messaging, and online activities. High-tech tools work best with low-tech tools as a backup, especially when you are tired or have technical problems. High-tech tools can be accessed using touch, eye-gaze, switches and scanning.

Many high-tech devices can speak using your voice, if you have banked it. This helps communication feel more personal and familiar.

## Use these tools when:

- speech is limited or no longer possible
- you want to explore high-tech options before speech gets harder
- you want to be involved in family life, social activities, and medical care
- you cannot use touch controls.

## High-tech tools and access: SGDs and eye-gaze



### Speech generating devices (SGDs)

- Speech-generating devices or SGDs “speak” what you type or select, using saved personal phrases.
- They can be set up for different access methods: touch, switch scanning, or eye-gaze.
- Useful for longer conversations, medical appointments, sharing your choices and decisions.
- Many SGDs can also run extra apps for texting, emailing, or browsing the internet.
- May be funded through the NDIS, My Aged Care.
- Are durable, mountable, and portable.
- Come with features to support everyday communication (e.g. speakers, long battery life, partner message windows.)



### Eye-gaze

- One of several ways to access and control a device.
- Instead of touching the screen with your hands, you use your eyes to point, select, or type,
- A small camera watches where you are looking and turns that into a command.
- Takes practice, but can be fast and reliable once you learn.
- Can also control TV, air-conditioning, or computer functions (e.g. email, games).
- An eye-gaze controlled SGD can be mounted to a wheelchair, recliner, or table for comfort and access.
- Works best with stable seating and good lighting.

# High-tech tools and access: switches and scanning

Eye-gaze is helpful when hand movement becomes harder, but is not the only option. High-tech communication tools can also be used with switches or scanning for access. See below for more.



## Switch access

- Switch access is another way to control a communication device when hands or fingers can't be used easily.
- A switch is a small button or sensor that you press with any part of your body that still moves well – such as your hand, foot, knee, head, or even a cheek muscle.
- Pressing the switch lets you make choices on the screen, move through options, or type messages, similar to clicking a mouse.
- Switches come in many shapes and sizes, so your speech pathologist can help you find one that feels easy and reliable for you



## Scanning

- Scanning is a method that lets you choose items on the screen without touching it.
- The device highlights one option at a time, or moves through groups of options.
- When the one you want is shown, you press a switch (or blink, or use another signal) to select it. Scanning can be slower than other methods, but it can be very helpful when movement is limited.
- Your speech pathologist can set up the speed, layout, and timing so it works as smoothly as possible for you.

There are many ways to access or control your device if you cannot use touch controls easily. The best method for you depends on your posture, vision, movement and energy levels. Your speech pathologist can help you work out which method is the most comfortable and reliable for you.

# Next steps

- 1 Talk to your speech pathologist about which option suits you best now. See *Building your communication system* to find out more.
- 2 Download and print the *PAS and Communication Boards pack* or make your own.
- 3 Involve your carer or family in learning about Partner Assisted Scanning (PAS), so they can support you.
- 4 Ask to trial different tools and access options (tablets, apps, SGDs, eye-gaze) to help you plan for the future.
- 5 Ask your speech pathologist or MND support coordinator about NDIS applications and other funding options. See *Communication system funding guide* for more.



Technology can't prevent changes to your speech, voice, breathing, or facial expression. But it can make sure you can always communicate and stay part of the conversation.

