The Irish Message Banking Toolkit

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Using Technology for Communication

Communication

We all use a wide variety of methods to communicate across our day. For example:

- speech
- writing
- body language
- facial expression
- gesture
- tone of voice

Instinctively we choose what works best within a particular situation, depending on the circumstances and how well we know the person we are talking with. People who experience difficulties with their speech or movement can find it challenging to communicate clearly with others; this is known as a communication difficulty.

What causes a communication difficulty?

A communication difficulty can happen for a variety of reasons including:

- speech muscle weakness or tightness
- breathing difficulties
- problems with the vocal cords
- fatigue
- structural differences following head & neck surgery

Depending on the cause, it might become harder to pronounce speech sounds clearly or the voice might become strained, very quiet or breathless.

What can help if I develop difficulty with my speech?

The use of simple speech strategies can help (e.g. slowing down the rate of speech, taking more frequent breaths). If your speech becomes very difficult to understand, alternative forms of communication can be used alongside, or instead of, talking. This is often referred to as **augmentative and alternative communication (AAC)**. Alternative ways to get a message across include:

- writing
- pointing to letters on an alphabet board
- using a picture chart
- using an electronic communication device

Speech & language therapists (SLTs) can help you to explore these options.

How can technology help me with my communication?

Technology for communication can vary from using a simple piece of equipment (e.g. a voice amplifier to help make your voice louder) to using a complex system with many functions.

There is a wide range of software available specifically for use in one-to-one communication. This software can be installed on smart phones, tablets or on a specialised electronic communication device. For example, there is communication software that allows you:

o To type messages as you think of what you want to say in conversation.

o To select from lists of pre-saved, frequently-used messages so that you do not need to re-type them each time you use them. This can make communication faster.

There are a number of ways that a phrase can be 'spoken' on a smart phone, tablet or specialised communication device. They include:

o **Computerised speech:** A message is selected and typed so that it can be spoken aloud using the device's speakers. Computer software that converts text to speech is referred to as *speech synthesis* and is commonly known as 'computerised speech'. Most of us are familiar with something similar to this when we use a Sat Nav or listen to automated call services. Computerised speech voices are available in both male and female gender, as well as in a variety of different national and regional accents (though unfortunately not always in an Irish accent). These voices are typically clear and easy to understand.

o **Voice banking:** It is possible to create your own personalised computerised voice that can then be used on an electronic communication device in place of the built-in computerised voice.

o **Message banking:** It is possible to record yourself speaking frequently-used and/or personally meaningful messages that can then be incorporated into communication software. When these messages are selected, your communication partner will hear a recording of **your** speech.

Why would I use technology to help with communication?

Technology can help to increase your ability to communicate effectively by making it easier and/or quicker for you:

o To get your message across to the people you need to talk with.

o To communicate with people who do not know you well.

o To communicate in places where it may be more difficult to get your message across (e.g. loud and/or busy environments, over the telephone).

Who can help me to try out a communication device?

SLTs can advise you about communication strategies, devices and tools including technology.

o If a simple piece of equipment will meet your needs, your local or hospital SLT can usually help with this.

o If you require more complex technology, your SLT may discuss the option to refer you to a specialist assistive technology (AT) service who have experts who can advise about the types of technology that may help (i.e. Central Remedial Clinic (CRC) AT team).

As well as an SLT, team members in such AT services include:

o An **occupational therapist** who can advise on:
  □ How to operate the technology if your hand or arm movement is difficult (e.g. using a mouse, joystick or eye-gaze system).
  □ Potential ways the same technology could be used for other things (e.g. for work, controlling your television or texting and emailing).

o A **clinical engineer** who can help you:
  □ To personalise the software setup.
  □ To look at options for attaching the device to a stand or wheelchair if required.

How do I know what technology is most suitable for me?

There is a wide range of devices and software/apps available. Your SLT and/or AT team can help you to decide what type will best meet your needs. Sometimes, they might recommend more than one piece of equipment or a non-technical backup for use in different situations.

Your SLT and/or AT team will carry out an assessment and discuss options with you. Following this, they will help you to consider issues such as:
o   Your previous level of experience with technology.
o   The places/communication environments where you will need to use the equipment.
o   The best size of device for accurate use and portability.
o   The ways you want the device to 'speak out' messages.
o   The ways in which you can type/make selections about what you want to communicate.
o   Other things you may like to use the technology for.

Sometimes, this may involve you trying out equipment at home to help you in making your decision. Once you decide, your SLT and/or AT team will write a recommendation.

How is the equipment funded?

Your SLT and/or AT team will guide you in identifying the most suitable funding source for you. For example:
o   For a small, low cost item, you may decide to buy it yourself.
o   Fundraising by family and/or friends.
o   Public funding.

The main sources of **public funding** are:
o   Your local HSE office – your community SLT can advise you on the eligibility criteria and timeframe for HSE funding in your area.
o   National charities – some provide support for living with the medical condition that caused your communication difficulty.

The length of time this process takes varies depending on the policies of your local HSE office and/or charity. If the equipment request is approved, it will be ordered on your behalf by the funding provider. It is rarely possible to provide you with communication technology on the day or within the week you first trial it.

How will I know how to use the technology when I get it?

o   If the equipment is simple to use, it can be delivered directly to you.
o   If the equipment needs to be set-up/programmed for your particular needs, it can be delivered to your SLT or AT service who will prepare it and arrange an appointment to train you and your family on how to use it. You would then keep the equipment for as long as you need it.

As you become familiar with using the device, you may want to make some setup adjustments. Therefore, it is advisable to agree how to organise this with your SLT and/or AT service at the time when you receive the equipment. Set-up adjustment does not always need a face-to-face review appointment. Other methods can be faster, for example:

o   Talking you through it over the telephone.
o   Accessing your device remotely over the Internet.

What if my equipment needs to be changed over time?

Your equipment needs may change for a number of reasons. These may include:

o   Deterioration in movement that effects your ability to operate the equipment.
o   Changes in your communication environment.
o   Changes in the types of communication technology available.

You can repeat the assessment process as required. However, it is best to report any issues to your SLT as soon as possible as time would be required:

o   To make new funding applications.
o   To set up new equipment.

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