



# Communication Matters – Research Matters: an AAC Evidence Base

**November 2012** 















### **Learning objectives**

- You will learn something new about the research project
- You will gain insight into some of the research methodologies used
- You will learn about how you may be able to use the outcomes of the research to support your work





## The AAC Evidence Base project

£468k grant from Big Lottery Fund

**UK-wide research** 

High tech & low tech AAC

Started June 2010

Results in 2012 - 2013





## Our research partners







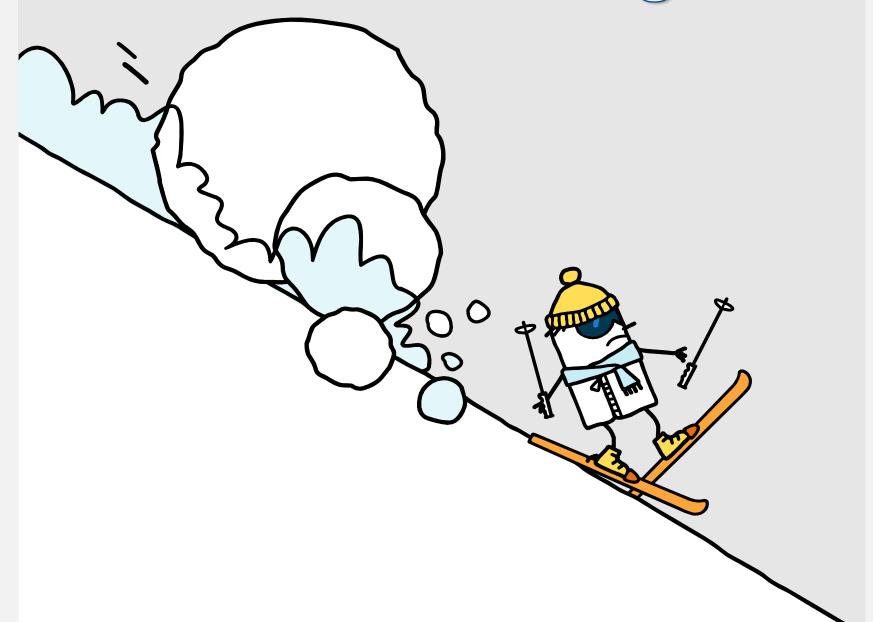




### **Project outcomes**

- Increase awareness of the need for AAC
- Increase understanding of current AAC provision
- Improved access to evidence about AAC
- Building research capacity

# The avalanche of change







NHS Commissioning Board (England)

**Communication Champion** 

DfE AAC Grants (England)

**AAC Evidence Base research** 

AAC Quality
Standard,
outcomes,
competencies

Scotland
A Right to Speak
guidance

Welsh Government AAC Review





# University of Sheffield & Barnsley Hospital

- Increase awareness of the need for AAC
- Increase understanding of current AAC provision





# The data mountain







# Prevalence - quantifying AAC use, need and unmet need



## Numbers for use and need



Number of people who could potentially benefit from AAC

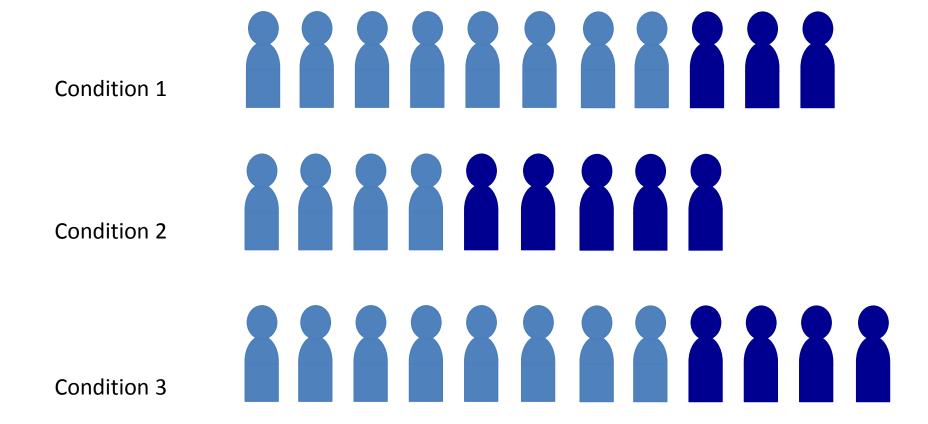
Number of people who could benefit from AAC and are not accessing AAC services

Number of people who currently use AAC



# People who could benefit from AAC

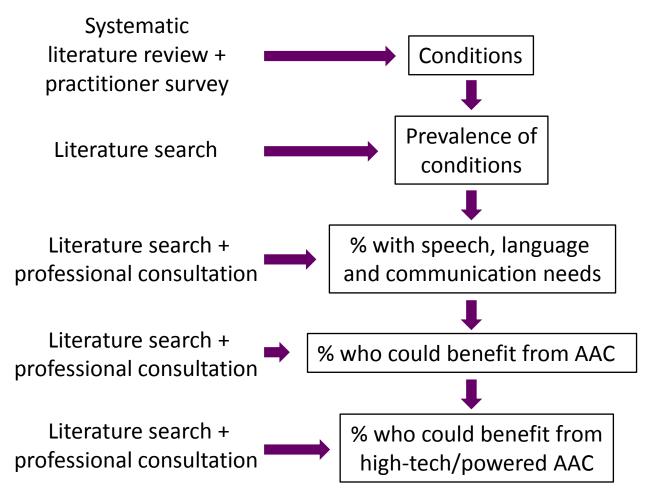






# Calculating need (UK)



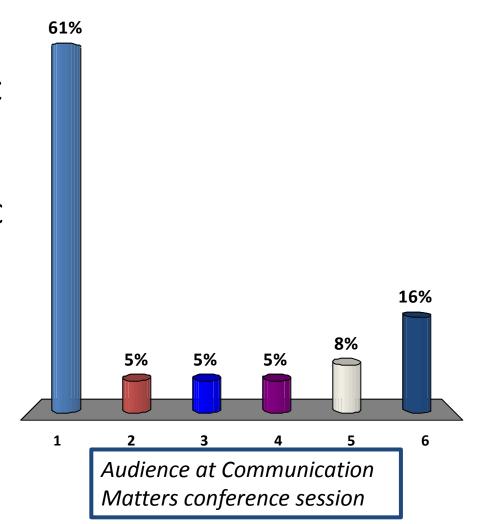




## Who is here?



- 1. AAC practitioner
- 2. Person who uses AAC
- 3. Family member/assistant of person who uses AAC
- AAC company employee
- 5. Researcher in AAC
- Other interested person





# What are the top 5 main conditions of people who could benefit from AAC?



- 1. Autistic spectrum disorder
- 2. Learning difficulties
- Profound and Multiple Learning Difficulties
- 4. Cerebral palsy
- Motor neurone disease
- 6. Multiple sclerosis
- Parkinson's disease
- 8. Stroke/CVA
- 9. Alzheimer's/Dementia

Please rank your top 5 with most common first

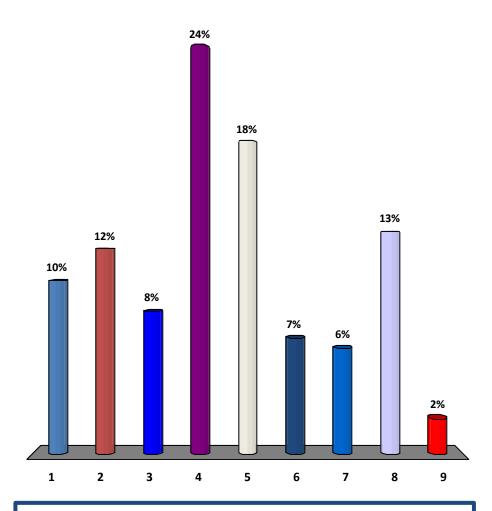


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Responses from audience at Communication Matters conference session





# Top 5 main conditions of people that could benefit from AAC: response from literature & expert opinion

|                               | Per 100 000 population |
|-------------------------------|------------------------|
| 1. Parkinson's                | 120                    |
| 2. Autistic Spectrum Disorder | 100                    |
| 3. Learning difficulties      | 70.5                   |
| 4. Stroke/CVA                 | 52.4                   |
| 5. Cerebral palsy             | 24                     |

As reported at Communication Matters conference session September 2012 – further analysis to be undertaken



# Summary



- Continuing to try and establish the number of people who could benefit from AAC
- Difference between expected total of people who use AAC and actual data collected provides an indication of the gap in service provision
  - Some mismatch between those accessing services and expected need
- Need further analysis for accurate conclusions



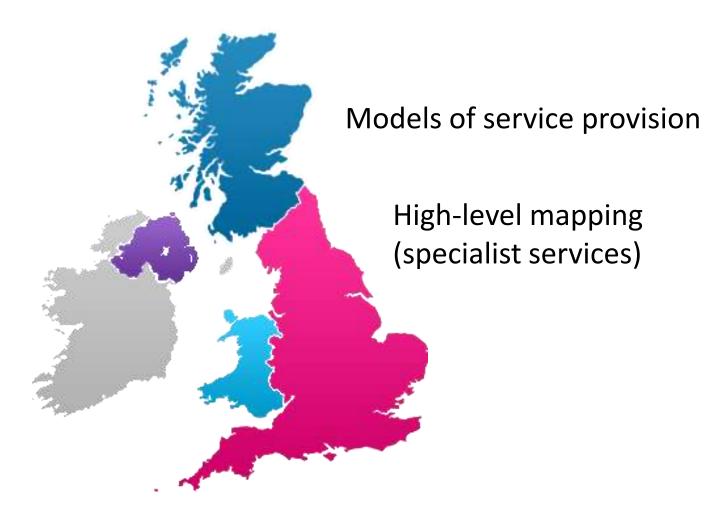


# Understanding current AAC service provision in the UK





# What mapping?





Key elements of service provision





# Manchester Metropolitan University

Improved access to evidence about AAC





Researchers

### **AAC Evidence Base website**





Medical professionals



Family members



Charities





Education professionals

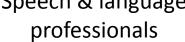
People who use AAC

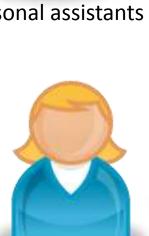


Personal assistants



Speech & language





Companies





# AAC Evidence Base website - terminology and structure

- Exclusive and confusing
- Medical, legal, social perspectives

### Implementation:

 How will we use terminology to help people navigate the site?





# AAC Evidence Base website - content

- A glossary of terms, definitions and conditions
- User experiences in the form of case stories
- Published case stories
- Fact sheets
- Technical specifications of AAC systems & devices
- Assessment studies
- Intervention studies
- Service provision, funding and policy studies
- Discussion forum

# Prototype: Home Page



### **AACknowledge**

the AAC evidence base

Search

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🌈 Search this site:

Search

Home

Case Stories FA05 Factsheets

**Summaries** 

Glossary

publications

- · listed by title
- listed by author
- · listed by keyword

#### Aspirations

- employment
- role models
- advocacy
- outcomes

#### Types of Support

- assessment
- therapy
- education
- training

#### Access and Equipment

- ace-centre-SpeechBubble
- · access and equipment

#### Reports and Legislation

funding

### Welcome to AACknowledge, the AAC Evidence Base







knowledae

Welcome!

Michelle Test

Turn Point symbols off

· Log out

Colours

Text

Search by Abbreviation





some tags to search topics



access and equipment acquired condition adults advocacy aided

Hide

sclerosis (ALS) aphasia apraxia Asperger syndrome aspirations assessment augmentative and alternative

communication

communication

amyotrophic lateral

laws. By logging in to the website you are doing so on the basis that you agree to these conditions. Welcome to the site! The aim of this site is to provide answers to your questions about augmentative and alternative communication (AAC), based on a range of evidence and in a variety

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of accessible formats. We hope it will answer those questions quickly and easily and allow users of this website to filter information most relevant to them, e.g. just plain language summaries on aphasia. We think we're almost there, so it is very important for us to capture feedback from potential users of this resource at this stage of its development so that we can deliver a useful, usable and accessible AAC resource in the longer term.

Your feedback is extremely important to help us identify corrections, improvements and further requirements and if we can get the background framework correct then we can enjoy steadily increasing the contents of this resource. Your comments will help us achieve that and we appreciate the time taken by those who have contributed already and helped to shape both the content and structure of the site to date. We have checked the content across the site as far as possible but recognise that there will be oversights and we welcome feedback on typos or anything you spot.

Where you see this image you will find help on how to use the site. You can return to the homepage at any time by pressing the site logo or the home tab; you will then see the full range of routes through the site.



### Case Stories



Search this site: different formats Case Stories FAQ5 Factsheets Summaries Glossary to meet different stakeholder needs **Case Stories** case stories look for relevant case stories AAC case stories from different personal and professional perspectives. · Adam's experiences with different AAC systems Bill's experiences after a strok · Craig's experiences of getting into work · Funding a communication aid for my son · Heidi's experiences with facilitated communication · Jeff's experiences after leaving school · Jim with locked-in syndrome, using eye gaze · Mark's experiences in day centres · Terry using a communication aid after a stroke · Tids and the care system Adam's experiences with different AAC systems > Printer-friendly version some tags to search topics

access and equipment acquired condition adults advocacy aided communication amyotrophic lateral sclerosis (ALS) aphasia apraxia Asperger

#### assessment

augmentative and alternative communication (AAC) autism (ASD) brain injury / head injury (TBI) brain tumour cerebral palsy (CP) charities children communication impairments complex communication needs (CCN) congenital condition dementia developmentallearning disability dysarthria dysphagia dysphasia dyspraxia education employment eye gaze funding government hightech Huntington's disease (HD) laryngectomy locked-in syndrome low-tech medical conditions motor neurone(e) disease (MND) multimedia multiple sclerosis (MS)

### easy to find content-related resources

# Case Story Example



Home » Case Stories

#### Adam's experiences with different AAC systems







different AAC perspectives

I am a speech and language therapist and want to share the story of a young man with you. 'Adam' is now nearly 19 and I have known him since he was seven. He has always been a friendly young man who likes to help. He gets his message across to you by taking you by the hand to something he wants, or by pulling at your jersey and pointing to things. He uses his voice well and by that you can tell when he is happy, concerned, uncertain, angry and a range of other emotions.

Over the years we have tried lots of different AAC systems with Adam and to begin with they all seem to be good and people are interested in them. He has used picture symbols on cardboard or in books; he has used light tech devices with recorded words and sounds associated with activities. One thing that does happen quite a bit is that if Adam gets upset he tends to throw things. This is one of the reasons why we moved away from using light tech AAC - not because of fear of it getting broken or potentially hurting someone but that when this happens it makes Adam inconsolably upset for a considerable period of time after the incident.

Recently, we have found that what works best for him is to use digital photographs which he helps to take, print off and then put in his communication book. He takes great delight in sharing his book with people and recently has used it spontaneously to ask to do something, or see someone. This is a huge leap forward for Adam. What is slightly sad though, is that I think we (Adam's family, Adam, me and his class teacher) are coming under pressure to go for a technological solution again. Perhaps that may be helpful in the future but for now I do wish 'low tech' was seen to be as valuable as high tech!

Things you may want to look into: picture symbols, communication book

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### easy to find same-format resources

tags: assessment

training

high-tech

low-tech

up

augmentative and alternative communication (AAC)

< Case Stori there is a vast array of AAC equipment which mirrors the individual needs of people who may use AAC and to determine the right specification for an individual they should have a specialised assessment which considers a number of equipment options

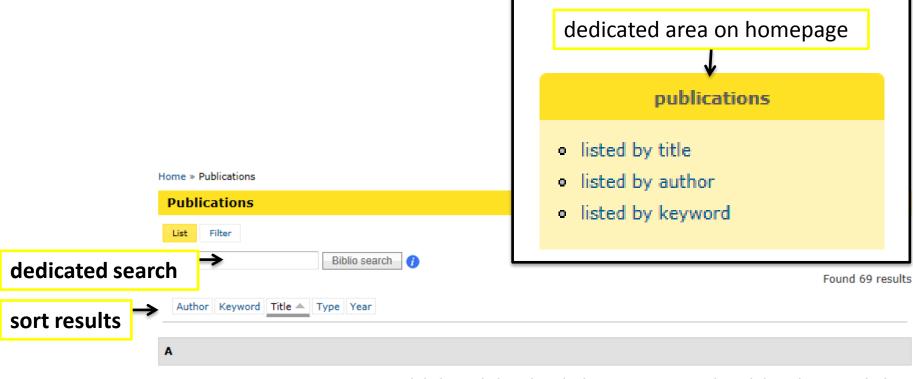
Bill's experiences after a stroke >

Printer-friendly version



## **Publications**





AAC and ICF: A good fit to emphasize outcomes, Fried-Oken, Melanie, and Granlund Mats , AAC: Augmentative and Alternative Communication, Mar, Volume 28, Issue 1, p.1-2, (2012) Abstract

AAC for adults with acquired neurological conditions: a review, Beukelman, David R., Fager Susan, Ball L., and Deitz A., Augmentative and Alternative Communication, Volume 23, Issue 3, p.230-242, (2007) Abstract

An AAC personnel framework: Adults with acquired complex communication needs, Beukelman, David R., Augmentative And Alternative Communication, 2008, Vol.24(3), pp.255-267, Volume 24, Issue 3, p.255-267, (2008) Abstract

AAC strategies for people with primary progressive aphasia without dementia: Two case studies, Cress, Cynthia J., and King Julia M., AAC: Augmentative and Alternative Communication, Dec, Volume 15, Issue 4, p.248-259, (1999) Abstract



## **Summaries**



Home » Summaries

#### Summary: AAC for adults with acquired neurological conditions









AC, ad

adult

cquired

condition

This article is about people who have grown up with typical speech and language skills. They have lost those skills for a number of reasons, as detailed below.

It is a summary of AAC for adults with acquired neurological conditions: a review (2007)

Authors: Beukelman, D.R., Fager, S., Ball, L., & Deitz, A.

Published: Augmentative and Alternative Communication Journal

Bibliography: http://www.aacknowledge.org.uk/biblio/aac-adults-acquired-neurological-conditions-review

#### Why was the review carried out?

It aimed to provide an update on the use of AAC technologies associated with a range of acquired medical conditions that impact on speech and communication. This review was based on USA statistics, research studies and service provisions, although it refers to studies completed in other parts of the world.

#### What did they look at?

They looked at the typical use of AAC systems in people with medical diagnoses of: ALS (a form of motor neuron disease, a condition that gets worse over time); TBI (a range of brain traumas); Brain Stem Trauma (an aspect of the brain that is involved in control of reflexive (e.g. breathing) and voluntary movement). This may be called 'Locked-in-Syndrome' in many individuals. This often means that people are anarthric – cannot say anything, rather than dysarthric – produce slurred and distorted speech; and Dementia (a progressive loss of thinking and language skills). They also looked at speech and language diagnoses: Aphasia (a speech and language difficulty usually following a stroke); and PPA (a form of aphasia that gets worse and may eventually be related to dementia).

#### What did they find out?

ALS: This has several characteristics that can make communication more challenging. These include: slurring of speech with eventual loss of the movement control to produce speech, breathing co-ordination difficulties and low volume of speech. They found that as things progress there is evidence that ventilation support and nutrition support can have a positive impact on quality of life experiences including both life expectancy and the length of time that AAC might be used. Research suggests a good uptake of AAC (95%) when recommended; and in those who rejected it there were often additional difficulties, e.g. dementia. One study suggests that 100% of those with ALS used AAC to within weeks or days of their death. It is reported that AAC supports offered to the individual with ALS and their family members gave a greater sense of social closeness and understanding.

different formats to meet different stakeholder needs

link to article in Publications



# Glossary



Home » site glossary

#### medical conditions



condition





diagnosed disease

acquired condition – a disease or condition/characteristic that is not congenital but develops after birth; common adult-acquired conditions include stroke/CVA, brain injury/brain tumour, MND, MS, Parkinson's disease and Huntington's disease: see also congenital

congenital condition – a disease or condition/characteristic that is present at birth developmental condition; see also acquired condition

amyotrophic lateral sclerosis (ALS) – the most common degenerative disease of for the form of MND that involves upper and lower motor neuron(e)s: see also moto

http://www.hawking.org.uk/living-with-als.html

and

- http://www.mndassociation.org/
- http://www.mndscotland.org.uk/№

**Asperger syndrome** – Asperger syndrome is a form of autism, where people have difficulties with understanding and processing language: see also ASD

http://www.autism.org.uk/₺

autism (ASD) – a congenital condition that affects people in a spectrum of ways (a inability to understand how to interact socially: see also Asperger syndrome

http://www.autism.org.uk/₺

#### core AAC terms







terms

These core terms are defined on the main Communication Matters

website: http://www.communicationmatters.org.uk/page/resources/glossary

- · aided communication
- · augmentative and alternative communication
- ISAAC
- · person who uses AAC
- · unaided communication
- · voice output communication aid

tags: aided communication VOCA unaided communication





# **Looking forward**

- Launch the AAC Knowledge website
- Publish & disseminate final research report (April 2013)
- Report to the Big Lottery Fund
- Influence policy & decision-makers
- Continue to support AAC research in the UK





# **Supporting AAC research**

- AAC Knowledge website
- Case study database
- Research Involvement Network



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#### Research

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- UK Research



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#### Research Involvement Network







Research Involvement Network

#### How can I get better help and support for people who use AAC? Take part in research!

Communication Matters has set up the Research Involvement Network to support and encourage research into Augmentative and Alternative Communication (AAC) in the UK by building a list of people who are interested in taking part in research. The Network was launched in September 2011.

Research is a process of gathering information and analysing it to increase our understanding of a topic or problem. Research can establish facts, solve problems or develop new theories. Findings from research into AAC could help the Government, the NHS and local authorities to understand better what services are needed. Research evidence could help practitioners to improve services and support for people who use AAC to communicate. Communication Matters believes it is important that more people who use AAC are involved in research as this will make research more relevant and more likely to be used.

You can help to ensure that our research will be directly relevant to the people who can benefit from it most, by sharing your knowledge and experience.

We are currently recruiting members in the UK. We are particularly keen to recruit more people who use AAC and family members and carers of people who use AAC. The first person who uses AAC to become a member of the Research Involvement Network was Simon Stevens (pictured right).

Read on to find out how you can join...

#### Who can join the Network?

- · People who use AAC, both adults and children
- . Family members and carers of people who use AAC
- · Practitioners from the fields of health, education and social care





# Questions







### THANK YOU

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 @Katie\_JH