

<b>Title</b>	<b>Augmentative and Alternative Communication (AAC)</b>
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<b>Reference</b>	Technology Review Report 014/2012, online: <a href="http://www.moh.gov.my/technology_reviews/221">http://www.moh.gov.my/technology_reviews/221</a>

## Aim

To assess the safety, efficacy / effectiveness, cost-effectiveness and organizational issues relating to the use of Augmentative and Alternative Communication (AAC) systems to enhance communication among people with speech and language impairments in Ministry of Health hospitals.

## Conclusions and results

The search strategies yielded 18 articles related to AAC intervention for people with speech and language impairments. None of the studies retrieved reported on safety issues with regards to AAC intervention to enhance communication among people with speech and language impairments.

### Communication skills

- There was fair to good level of evidence to suggest that AAC intervention was associated with improvement in communication skills for individuals with developmental disabilities such as autism spectrum disorder, Down syndrome, cerebral palsy, mental retardation and patients with acquired neurological condition such as amyotrophic lateral sclerosis, traumatic brain injury, locked-in syndrome and aphasia.
- There was limited low level of evidence to suggest that AAC intervention has the potential to improve symptom communication for patients in the intensive care unit.

### Speech production

- There was limited but good level of evidence to suggest that AAC intervention do not impede speech production; instead studies reported an increase in speech production.

## Acceptance of AAC intervention

- There was limited fair level of evidence to suggest that a high percentage of individuals with amyotrophic lateral sclerosis and traumatic brain injury accepted the AAC intervention as recommended by their speech language pathologist.

### Preferences of AAC options

- There was limited fair level of evidence to suggest that individuals with speech and language disabilities have their own preference for the different AAC types.
- The type of AAC systems appropriate for an individual depends on several factors such as individual's motor, visual, cognitive, and language abilities which may be either unaided, low-technology or high-technology AAC systems.

### Training

- There was limited evidence to suggest that pre-service programs / training (basic professional training) for speech language pathologist / speech therapist on AAC may not be adequate for them to provide comprehensive AAC services after graduation.

### Cost/Cost-effectiveness

- There was no evidence on the cost-effectiveness of AAC systems.

## Methods

Electronic databases were searched through Ovid interface: Ovid MEDLINE, EBM Reviews-Cochrane Central Register of Controlled Trials, EBM Reviews -Cochrane database of systematic reviews, EBM Reviews - HTA, EBM Reviews - Database of Abstracts of Reviews, EBM Reviews- NHS Economic Evaluation database. Searches were also run in PubMed, Horizon Scanning databases, FDA website for published reports. There was no limit in the search. Relevant articles were critically appraised using Critical Appraisal Skills Programme (CASP) and graded according to US/Canadian preventive services task force.

## Further research/reviews required

More high quality clinical research is warranted.

## Written by

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