Agency for Healthcare Research and Quality
Advancing Excellence in Health Care

NATIONAL GUIDELINE CLEARINGHOUSE

General

Guideline Title

Best evidence statement (BESt). Evidence based practice for stuttering home programs in speech-language pathology.

Bibliographic Source(s)

Cincinnati Children's Hospital Medical Center. Best evidence statement (BESt). Evidence based practice for stuttering home programs in speech-language pathology. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2012 Nov 13. 7 p. [19 references]

Guideline Status

This is the current release of the guideline.

Recommendations

Major Recommendations

The strength of the recommendation (strongly recommended, recommended, or no recommendation) and the quality of the evidence (1aâ€'5b) are defined at the end of the "Major Recommendations" field.

It is recommended that speech-language pathologists (SLPs) provide services with a home program component for preschool and school age children who stutter to reduce their percent stuttered syllables (%SS) (Franken, Kielstra-Van der Schalk, & Boelens, 2005 [2a]; Jones et al., 2005 [2a]; Lattermann, Euler, & Neumann, 2008 [2a]; Jones et al., 2008 [4a]; Koushik et al., 2011 [4b]; Koushik, Shenker, & Onslow, 2009 [4b]; Millard, Nicholas, & Cook, 2008 [4b]; Miller & Guitar, 2009, [4a]; Trajkovski et al., 2009 [4b]; Yaruss, Coleman, & Hammer, 2006 [4a]).

Definitions:

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
3a or 3b	Fair study design for domain
4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

†a = good quality study; b = lesser quality study

Table of Language and Definitions for Recommendation Strength

Language for Strength	Definition
It is strongly recommended that… It is strongly recommended that… not…	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (*or visa-versa for negative recommendations*).
It is recommended that… It is recommended that… not…	When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation…	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Clinical Algorithm(s)

None provided

Scope

Disease/Condition(s)

Stuttering

Guideline Category

Management

Treatment

Clinical Specialty

Family Practice

Pediatrics

Speech-Language Pathology

Intended Users

Nurses

Physician Assistants

Physicians

Speech-Language Pathologists

Guideline Objective(s)

To evaluate, among preschool and early school age children enrolled in speech-language pathology services for stuttering, if receiving stuttering therapy with a home program component versus receiving stuttering therapy without a home program component leads to less stuttered syllables

Target Population

Children, age 2 and a half to 12 years, who present with a diagnosis of stuttering

Note: Children may have another concomitant disorder but the focus of their treatment is stuttering. Co-existing disorders may include another speech, language or related disorder.

Interventions and Practices Considered

Stuttering therapy with a home program component

Major Outcomes Considered

Percent stuttered syllables (%SS)

Methodology

Methods Used to Collect/Select the Evidence

Searches of Electronic Databases

Description of Methods Used to Collect/Select the Evidence

Search Strategy

- Databases: American Speech and Hearing Association (ASHA), Medline, the Cochrane Library and CINAHL.
- Search Terms: parent, speech therapy, caregiver, home program, fluency, stuttering, Lidcombe, Gradual Increase in Length and Complexity (GILCU) and extended length of utterance
- Limits: English
- Search Dates: January, 2005 to December, 2011; searched for GILCU and extended length of utterance (ELU), without date limits
- Date last search done: April 12, 2012

Number of Source Documents

Not stated

Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

Rating Scheme for the Strength of the Evidence

Table of Evidence Levels

Quality Level	Definition
1a† or 1b†	Systematic review, meta-analysis, or meta-synthesis of multiple studies
2a or 2b	Best study design for domain
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4a or 4b	Weak study design for domain
5a or 5b	General review, expert opinion, case report, consensus report, or guideline
5	Local Consensus

†a = good quality study; b = lesser quality study

Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review

Description of the Methods Used to Analyze the Evidence

Not stated

Methods Used to Formulate the Recommendations

Expert Consensus

Description of Methods Used to Formulate the Recommendations

Not stated

Rating Scheme for the Strength of the Recommendations

Table of Language and Definitions for Recommendation Strength

Language for Strength	Definition
It is strongly recommended that… It is strongly recommended that… not…	When the dimensions for judging the strength of the evidence are applied, there is high support that benefits clearly outweigh risks and burdens (*or visa-versa for negative recommendations*).
It is recommended that… It is recommended that… not…	When the dimensions for judging the strength of the evidence are applied, there is moderate support that benefits are closely balanced with risks and burdens.
There is insufficient evidence and a lack of consensus to make a recommendation…	

Note: See the original guideline document for the dimensions used for judging the strength of the recommendation.

Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

Method of Guideline Validation

Peer Review

Description of Method of Guideline Validation

This Best Evidence Statement has been reviewed against quality criteria by two independent reviewers from the Cincinnati Children's Hospital Medical Center (CCHMC) Evidence Collaboration.

Evidence Supporting the Recommendations

References Supporting the Recommendations

Franken MC, Kielstra-Van der Schalk CJ, Boelens H. Experimental treatment of early stuttering: a preliminary study. J Fluency Disord. 2005;30(3):189-99. PubMed

Jones M, Onslow M, Packman A, O'Brian S, Hearne A, Williams S, Ormond T, Schwarz I. Extended follow-up of a randomized controlled trial of the Lidcombe Program of Early Stuttering Intervention. Int J Lang Commun Disord. 2008 Nov-Dec;43(6):649-61. PubMed

Jones M, Onslow M, Packman A, Williams S, Ormond T, Schwarz I, Gebski V. Randomised controlled trial of the Lidcombe programme of early stuttering intervention. BMJ. 2005 Sep 24;331(7518):659. PubMed

Koushik S, Hewat S, Shenker RC, Jones M, Onslow M. North-American Lidcombe Program file audit: replication and meta-analysis. Int J Speech Lang Pathol. 2011 Aug;13(4):301-7. PubMed

Koushik S, Shenker R, Onslow M. Follow-up of 6-10-year-old stuttering children after Lidcombe program treatment: a phase I trial. J Fluency Disord. 2009 Dec;34(4):279-90. PubMed

Lattermann C, Euler HA, Neumann K. A randomized control trial to investigate the impact of the Lidcombe Program on early stuttering in German-speaking preschoolers. J Fluency Disord. 2008 Mar;33(1):52-65. PubMed

Millard SK, Nicholas A, Cook FM. Is parent-child interaction therapy effective in reducing stuttering. J Speech Lang Hear Res. 2008 Jun;51(3):636-50. PubMed

Miller B, Guitar B. Long-term outcome of the Lidcombe Program for early stuttering intervention. Am J Speech Lang Pathol. 2009 Feb;18(1):42-9. PubMed

Trajkovski N, Andrews C, Onslow M, Packman A, O'Brian S, Menzies R. Using syllable-timed speech to treat preschool children who stutter: a multiple baseline experiment. J Fluency Disord. 2009 Mar;34(1):1-10. PubMed

Yaruss JS, Coleman C, Hammer D. Treating preschool children who stutter: description and preliminary evaluation of a family-focused treatment approach. Lang Speech Hear Serv Sch. 2006 Apr;37(2):118-36. PubMed

Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

Benefits/Harms of Implementing the Guideline Recommendations

Potential Benefits

Clinically, stuttering treatment with a home program is advantageous. Parents are with their children for a majority of the week. With sufficient training by a speech-language pathologist (SLP), they can learn the techniques to carry-over their child's stuttering goals into the everyday environment. Children may improve faster and they may be discharged from therapy sooner because they are stuttering less.

Potential Harms

Not stated

Qualifying Statements

Qualifying Statements

This Best Evidence Statement addresses only key points of care for the target population; it is not intended to be a comprehensive practice guideline. These recommendations result from review of literature and practices current at the time of their formulation. This Best Evidence Statement does not preclude using care modalities proven efficacious in studies published subsequent to the current revision of this document. This document is not intended to impose standards of care preventing selective variances from the recommendations to meet the specific and unique requirements of individual patients. Adherence to this Statement is voluntary. The clinician in light of the individual circumstances presented by the patient must make the ultimate judgment regarding the priority of any specific procedure.

Implementation of the Guideline

Description of Implementation Strategy

An implementation strategy was not provided.

Implementation Tools

Audit Criteria/Indicators

Resources

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

Institute of Medicine (IOM) National Healthcare Quality Report Categories

IOM Care Need

Getting Better

IOM Domain

Effectiveness

Identifying Information and Availability

Bibliographic Source(s)

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Adaptation

Not applicable: The guideline was not adapted from another source.

Date Released

2012 Nov 13

Guideline Developer(s)

Cincinnati Children's Hospital Medical Center - Hospital/Medical Center

Source(s) of Funding

Cincinnati Children's Hospital Medical Center

Guideline Committee

Not stated

Composition of Group That Authored the Guideline

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Team Members/Co-Authors: Irving Wollman, MA, CCC-SLP, Clinical Manager, Division of Speech-Language Pathology

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Financial Disclosures/Conflicts of Interest

Conflict of interest declaration forms are filed with the Cincinnati Children's Hospital Medical Center Evidence-based Decision Making (CCHMC

EBDM) group. No financial or intellectual conflicts of interest were found.

Guideline Status

This is the current release of the guideline.

Guideline Availability

Electronic copies: Available from the Cincinnati Children's Hospital Medical Center Web site.

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

Availability of Companion Documents

The following are available:

- Judging the strength of a recommendation. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Jan. 1 p. Available from the Cincinnati Children's Hospital Medical Center.
- Grading a body of evidence to answer a clinical question. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 1 p. Available from the Cincinnati Children's Hospital Medical Center.
- Table of evidence levels. Cincinnati (OH): Cincinnati Children's Hospital Medical Center; 2008 Feb 29. 1 p. Available from the Cincinnati Children's Hospital Medical Center.

Print copies: For information regarding the full-text guideline, print copies, or evidence-based practice support services contact the Cincinnati Children's Hospital Medical Center Health James M. Anderson Center for Health Systems Excellence at EBDMInfo@cchmc.org.

In addition, suggested process or outcome measures are available in the original guideline document.

Patient Resources

None available

NGC Status

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