

1 **Clinical Practice Guideline: Auditory Integration Therapy – Facilitated**  
2 **Communication**

4 **Date of Implementation: July 20, 2017**

6 **Product: Specialty**

9 Related Policies: 10 CPG 149: Sensory Integrative (SI) Therapy 11 CPG 165: Autism Spectrum Disorders 12 CPG 166: Speech-Language Pathology/Speech Therapy 13 Guidelines 14 CPG 257: Developmental Delay Screening and Testing 15 CPG 287: Stuttering Devices and Altered Auditory Feedback 16 (AAF) Devices 17 CPG 288: Augmentative and Alternative Communication 18 (AAC) and Speech Generating Devices (SGD) 19 CPG 289: Voice Therapy
---

20 **GUIDELINES**

21 American Specialty Health, Inc. (ASH) considers auditory integration therapy (AIT) or  
22 facilitated communication (FC) therapy unproven for any indication because their  
23 effectiveness has not been established.

25 Summary Evidence in the published, peer-reviewed scientific literature is not sufficient to  
26 support the efficacy of auditory integration therapy (AIT) or facilitated communication  
27 (FC) for autism, mental retardation, developmental delays, behavioral disorders, or any  
28 other indications. The peer-reviewed literature fails to demonstrate that these interventions,  
29 compared with other treatments or with no treatment, provides clinically relevant, long-  
30 term improvements in health outcomes. The role of these interventions in the management  
31 of these conditions or other indications is not known at this time.

33 **DESCRIPTION/BACKGROUND**

34 **Auditory Integration Training (AIT)**

35 Auditory integration therapy or training (AIT) refers to listening to music that has been  
36 computer modified to remove frequencies to which an individual demonstrates  
37 hypersensitivities and to reduce the predictability of auditory patterns. The individual  
38 listens via headphones to a program of specially filtered and modulated music with wide  
39 frequency range. The treatment program consists of 20 half-hour sessions during a 10- to  
40 12-day period, with two sessions daily. Auditory thresholds are determined via  
41 audiograms. The audiogram is then reviewed for evidence of hyperacusis (i.e., an abnormal  
42 sensitivity to sound). A clinical history of sound sensitivities and behavior is also reviewed.

1 Audiograms are repeated midway and at the end of the training session to document  
2 progress and to determine whether further treatment sessions are necessary. AIT is usually  
3 provided by a speech-pathologist or audiologist. Auditory integration training (AIT) aims  
4 to address the sensory problems which are said to cause discomfort and confusion in people  
5 with learning disabilities, including autism spectrum disorders. These hypersensitivities are  
6 believed to interfere with an individual’s attention, comprehension, and ability to learn.  
7 Thus, it has been proposed for improving abnormal sound sensitivity in these individuals  
8 with behavioral disorders, including autism spectrum disorders. Berard, whose method is  
9 the most widely studied, theorizes that auditory distortions may result in such behavioral  
10 disturbances as autism spectrum disorders, learning disabilities, depression, and  
11 aggressiveness. Berard suggests that AIT treats these distortions by exercising the middle  
12 ear muscles and auditory nervous system similar to physical therapy retraining muscles for  
13 orthopedic conditions. An audiogram, frequently the first step in the Berard method of AIT,  
14 is believed to help identify the presence of the auditory abnormalities and is used to monitor  
15 possible changes as a result of treatment. Berard claims that following AIT, children's  
16 audiograms that previously had peaks and valleys, demonstrating areas of hyper- and  
17 hyposensitivity, are “flattened,” reflecting the elimination of auditory distortions and,  
18 subsequently, an improvement in behavioral abnormalities. According to Berard, optimal  
19 treatment consists of two half-hour sessions per day separated by a minimum of 3 hours,  
20 for 10 consecutive working days. A 2-day weekend interruption is acceptable. Despite  
21 current practice in the United States, Berard does not recommend follow-up sessions or  
22 any modifications to this treatment regimen. Results are evaluated by reviewing the  
23 audiogram obtained at the end of the 20 sessions and behavior changes at other post-  
24 treatment intervals.

### 25 26 **Facilitated Communication (FC)**

27 Facilitated Communication (FC) is a method of providing assistance to a nonverbal person  
28 by typing out words using a typewriter, computer keyboard, or other communication  
29 device. FC involves supporting the individual’s hand to make it easier for him or her to  
30 indicate the letters that are chosen sequentially to develop the communicative statement.  
31 Facilitated communication bills itself as a way to allow individuals with autism, intellectual  
32 disability, or a condition like cerebral palsy to communicate by means of a “facilitator.”  
33 Facilitators provide pressure to the hand, wrist, or arm, guiding the individual to letters,  
34 words, or pictures—typically on a keyboard, smartphone, or tablet. Whereas a prompt is  
35 an accepted educational technique to initiate an action (as distinct from “hand-over-hand,”  
36 which is used to teach the action itself outside an attempt to communicate), facilitation is  
37 typically provided throughout the communication process. Proponents claim that this  
38 manual prompting by a trained facilitator provides expressive language abilities to a wide  
39 range of individuals, including those with severe intellectual disabilities or autism. FC has  
40 been at the center of a growing controversy, because several scientific studies have  
41 suggested that facilitators may unintentionally influence the communication, perhaps to the  
42 extent of actually selecting the words themselves.

## 1 EVIDENCE AND RESEARCH

### 2 Auditory Integration Training (AIT)

3 Although at least three AIT methods currently exist, the Berard method has emerged as the  
 4 most commonly used in the United States and has been described most often in professional  
 5 literature, which is limited. The Agency for Healthcare Research and Quality (AHRQ)  
 6 published a comparative effectiveness review of therapies for children with autism  
 7 spectrum disorders. Among the allied health therapies in the review was auditory  
 8 integration therapy. The research provided little support for its use. Specifically, two fair-  
 9 quality studies of auditory integration showed no improvement associated with treatment.  
 10 AHRQ also published a comparative effectiveness review on interventions for adolescents  
 11 and young adults with ASD. Among the allied health therapies, studies of music therapy  
 12 reported some improvements in social skills using invalid measures, thus there is little  
 13 support for its use. Sinha et al. (2004) completed a Cochrane Database Systematic Review  
 14 to determine the effectiveness of AIT or other methods of sound therapy in individuals  
 15 with autism spectrum disorders (ASD). Randomized controlled trials of adults or children  
 16 with ASD were included using AIT or other sound therapies involving listening to music  
 17 modified by filtering and modulation. Control groups could be no treatment, waiting list,  
 18 usual therapy or placebo equivalent. Outcomes sought were changes in core and associated  
 19 features of ASD, auditory processing, quality of life and adverse events. Meta-analysis was  
 20 attempted but deemed inappropriate at present due to heterogeneity. No trials assessing  
 21 sound therapies other than AIT were found. Six RCTs of AIT, including one cross-over  
 22 trial, were identified with a total of 171 individuals aged 3-39 years. Four trials had fewer  
 23 than 20 participants. Seventeen different outcome measures were used. Only two outcomes  
 24 were used by three or more studies: Aberrant Behaviour Checklist (ABC) (5) and Fisher's  
 25 Auditory Problems Checklist (FAPC) (3). Three studies (Bettison, 1996; Zollweg, 1997;  
 26 Mudford, 2000) did not demonstrate benefit of AIT over control conditions. The remaining  
 27 trials (Veale, 1993; Rimland, 1995; Edelson, 1999) reported improvements at 3 months for  
 28 the AIT group based on improvements of total mean scores for the ABC, which is of  
 29 questionable validity. Rimland (1995) also reported improvements at 3 months in the AIT  
 30 group for ABC subgroup scores. No significant adverse effects of AIT were reported.  
 31 Based on these results, authors concluded that more research is needed to inform parents',  
 32 caregivers' and practitioners' decision making about this therapy for individuals with  
 33 autism spectrum disorders. In 2011, Sinha published an update to the 2004 Cochrane  
 34 review of AIT and other methods of sound therapy. At this time, authors identified six  
 35 randomized controlled trials of auditory integration therapy and one of Tomatis therapy,  
 36 involving a total of 182 individuals aged three to 39 years. Two were cross-over trials. Five  
 37 trials had fewer than 20 participants. Twenty different outcome measures were used and  
 38 only two outcomes were used by three or more studies. Again, meta-analysis was not  
 39 possible due to very high heterogeneity or the presentation of data in unusable forms. The  
 40 same conclusions were determined as the 2004 review for the AIT studies. The study  
 41 addressing Tomatis therapy (Corbett, 2008) described an improvement in language with  
 42 no difference between treatment and control conditions and did not report on the behavioral

1 outcomes that were used in the auditory integration therapy trials. Again, authors  
2 concluded that there is no evidence that auditory integration therapy or other sound  
3 therapies are effective as treatments for autism spectrum disorders. As synthesis of existing  
4 data has been limited by the disparate outcome measures used between studies, there is not  
5 sufficient evidence to prove that this treatment is not effective. However, of the seven  
6 studies including 182 participants that have been reported to date, only two (with an author  
7 in common), involving a total of 35 participants, report statistically significant  
8 improvements in the auditory integration therapy group and for only two outcome  
9 measures (Aberrant Behaviour Checklist and Fisher's Auditory Problems Checklist). As  
10 such, there is no evidence to support the use of auditory integration therapy at this time.  
11 Given these findings, the published peer-reviewed scientific literature does not support the  
12 efficacy of AIT for the treatment of patients with learning disabilities, autism, and other  
13 behavioral disorders.

14  
15 The American Academy of Pediatrics (AAP) published a statement noting that as yet, there  
16 are no good controlled studies to support the use of AIT for children with autism. It is also  
17 noted that, until further information is available, the use of these treatments does not appear  
18 warranted at this time, except within research protocols (AAP, 1998/2006/2010). American  
19 Speech-Language-Hearing Association (ASHA) prepared an evidenced-based technical  
20 report regarding AIT (ASHA, 2004). They noted that, despite approximately one decade  
21 of practice, this method has not met scientific standards for efficacy and safety that would  
22 justify its inclusion as a mainstream treatment for a variety of communication, behavioral,  
23 emotional, and learning disorders. The American Academy of Audiology believes AIT by  
24 any name to be entirely investigational. The Academy believes that prospective, systematic  
25 research of this technique is needed to demonstrate its efficacy. Pursuant to Principle 5 of  
26 the Code of Ethics, the Academy believes that the experimental status of this technique  
27 must be clearly explained to consumers before they are entered into treatment. The  
28 Educational Audiology Association (EAA) issued a position statement regarding AIT  
29 (EAA, 1997). They stated that “Auditory integration therapy has not been proven to be a  
30 viable treatment for any disability. Only inconsistent, uncontrolled, anecdotal evidence has  
31 been provided to support claims of changes in auditory performance.” In addition, the  
32 position statement noted that without controls to protect against excessively loud auditory  
33 stimuli, AIT may cause harm to the auditory system. The American Academy of Child and  
34 Adolescent Psychiatry (AACAP)’s practice parameter for “The assessment and treatment  
35 of children and adolescents with autism spectrum disorder” stated that “There is a lack of  
36 evidence for most other forms of psychosocial intervention, although cognitive behavioral  
37 therapy has shown efficacy for anxiety and anger management in high functioning youth  
38 with ASD. Studies of sensory oriented interventions, such as auditory integration training,  
39 sensory integration therapy, and touch therapy/massage, have contained methodologic  
40 flaws and have yet to show replicable improvements”. The National Institute for Health  
41 and Clinical Excellence (NICE) published guidelines for the management and support of  
42 children and young people on the autism spectrum (NICE, 2013). The recommendations

1 for treatment address interventions that should not be used for autism in children and young  
2 people including auditory integration training to manage speech and language. Li et al.  
3 (2018) investigated the efficacy of AIT for children with ASD compared with those in  
4 control group by using meta-analysis. Outcome of interest included childhood autism  
5 rating scale (CARS), autism behavior checklist (ABC), intelligence quotient (IQ), and  
6 autism treatment evaluation checklist (ATEC). Thirteen RCTs with 976 children with ASD  
7 were included for analysis. Results showed that children with ASD had significantly lower  
8 ABC scores and ATEC scores in AIT group compared with that in control group. The  
9 analysis of pooled statistics put forward AIT could increase the IQ score when compared  
10 with that in control group. A negative association was found about CARS scores between  
11 AIT group and control group. In conclusions, AIT can reduce the score of ABC and ATEC  
12 and can increase the IQ score among children with ASD in Chinese. Therefore, it is  
13 recommended for Chinese children with ASD to receive AIT. Several study limitations  
14 existed and thus, findings need confirmation with improved study design.

15  
16 Shahrudin et al. (2022) mapped the evidence from the relevant studies regarding the use of  
17 music and sound-based intervention for autism spectrum disorder (ASD) using a scoping  
18 review study design. Four major themes emerged from 39 studies that matched the  
19 inclusion criteria as follows: 1) forms of sound therapy discussing methods of sound  
20 therapy and stimulus used, 2) duration of the intervention explain in terms of listening time  
21 and total listening sessions, 3) clinical characteristics of the intervention exploring the main  
22 interest of sound therapy study in ASD, and 4) evidence for the intervention effectiveness  
23 looking into the positive, negative, and mixed findings of previous studies. Each theme  
24 was explored to identify the knowledge gaps in sound-intervention therapy. This review  
25 demonstrated the need for further studies to address several issues including identifying  
26 the effectiveness of sound-therapy intervention for ASD according to the individual sound  
27 types, the minimum duration for ASD sound-therapy intervention and more details on the  
28 use of technology, and clinical features of the sound-therapy intervention. These elements  
29 are important to further demonstrate the effectiveness of sound therapy intervention for  
30 ASD children.

31  
32 Auditory integration training (AIT) devices do not have FDA approval for treating medical,  
33 behavioral, or emotional disorders. The FDA has banned the importation of AIT devices  
34 such as AudioKinetron (SAPP, France) and Electronic Ear (Tomatis Electronics, France).

### 35 36 **Facilitated Communication (FC)**

37 Facilitated Communication (FC) is a technique whereby individuals with disabilities and  
38 communication impairments allegedly select letters by typing on a keyboard while  
39 receiving physical support, emotional encouragement, and other communication supports  
40 from facilitators. The validity of FC stands or falls on the question of who is authoring the  
41 typed messages--the individual with a disability or the facilitator. Thus, FC has been at the  
42 center of debate because several scientific studies have suggested that facilitators may

1 unintentionally influence the communication, perhaps to the extent of actually selecting  
2 the words themselves. Tostanoski et al. (2013) reviewed the history and damage caused by  
3 facilitated communication (FC) and highlights the parallels between FC and the Rapid  
4 Prompting Method (RPM). FC involves a therapist (or facilitator) supporting the hand of a  
5 person with autism while a message is typed on a letter board. Authors state that FC is  
6 widely acknowledged to be a pseudoscientific, unsafe, and unethical treatment for people  
7 with autism. RPM is a more recent intervention for people with autism that involves the  
8 facilitator holding and moving the letter board while the individual with autism moves their  
9 own hand. Those who espouse the perceived benefits of FC and RPM make strikingly  
10 similar claims of hidden intelligence and extraordinary communication abilities in people  
11 with autism following treatment. Authors conclude clients, proponents, and practitioners  
12 of RPM should demand scientific validation of RPM in order to ensure the safety of people  
13 with disabilities that are involved with RPM. Saloviita et al. (2014) studied the authorship  
14 of messages produced through facilitated communication (FC) for all users of FC in two  
15 comprehensive schools in a small city in Finland. The participants were 11 children with  
16 intellectual disabilities, including autism, all having used FC from 1-3 years. The test  
17 conditions involved open and blind information-passing tasks in which the participants  
18 were directed to write down the contents of written or pictorial stimuli. The results failed  
19 to validate FC as a method of communication for any participant or facilitator. An analysis  
20 of the messages produced under the FC condition revealed a large degree of facilitator  
21 influence on the content of the messages produced. Additionally, FC impaired the  
22 performance of the two participants who had previously demonstrated some independent  
23 writing skills. Schlosser et al. (2014) reported a synthesis of the peer-reviewed literature  
24 on the question of authorship in FC. The International Society for Augmentative and  
25 Alternative Communication (ISAAC) formed an Ad Hoc Committee on FC and charged  
26 Schlosser et al. (2014) to synthesize the evidence base related to this question in order to  
27 develop a position statement. The authors considered synopses of systematic reviews, and  
28 systematic reviews, which were supplemented with individual studies not included in any  
29 prior reviews. Additionally, documents submitted by the membership were screened for  
30 inclusion. The evidence was classified into articles that provided (a) quantitative  
31 experimental data related to the authorship of messages, (b) quantitative descriptive data  
32 on the output generated through FC without testing of authorship, (c) qualitative descriptive  
33 data on the output generated via FC without testing of authorship, and (d) anecdotal reports  
34 in which writers shared their perspectives on FC. Only documents with quantitative  
35 experimental data were analyzed for authorship. Results indicated unequivocal evidence  
36 for facilitator control: messages generated through FC are authored by the facilitators rather  
37 than the individuals with disabilities. Hence, FC is a technique that has no validity. Based  
38 on these results, there is insufficient evidence found in the medical literature regarding the  
39 effectiveness of this therapy.

40  
41 Associations have a long history stating their lack of support for FC. In 1994, the American  
42 Psychological Association (APA) declared that there was no scientific evidence proving

1 that FC worked—and that it constituted “immediate threats to the individual civil and  
 2 human rights” of the person being facilitated. One of the primary concerns, both scientific  
 3 and ethical, was the issue of “authorship”: whether the thoughts being expressed truly arise  
 4 from the facilitated, and not the facilitator. The American Speech-Language-Hearing  
 5 Association and the American Academy of Pediatrics joined in and by the late ‘90s,  
 6 facilitated-communication proponents were largely dismissed as faith-healers or even  
 7 predators. The May Institute’s National Autism Center, considered to be among the very  
 8 best resources regarding evidence-based treatment of autism, found in both 2009 and again  
 9 in 2015 in its National Standards Project that there is “little or no evidence in the scientific  
 10 literature.” The International Society for Augmentative and Alternative Communication,  
 11 in its own review of the science around FC, concluded in 2014 that all indications are that  
 12 authorship stems from the facilitator, and not the facilitated. The AACAP published a  
 13 policy statement regarding facilitated communication that states, “Studies have repeatedly  
 14 demonstrated that FC is not a scientifically valid technique for individuals with autism or  
 15 mental retardation. In particular, information obtained via FC should not be used to confirm  
 16 or deny allegations of abuse or to make diagnostic or treatment decisions” (AACAP,  
 17 1993/2008). The AAP has published a statement regarding two treatments proposed for  
 18 autism: AIT and facilitated communication. According to the AAP, there is good scientific  
 19 data showing FC to be ineffective; therefore, its use is not an accepted treatment at this  
 20 time. Currently available information does not support the claims of proponents that these  
 21 treatments are efficacious. Its use does not appear warranted at this time, except within  
 22 research protocols. (AAP, 1998/2006/2010). AHRQ also published a comparative  
 23 effectiveness review on interventions for adolescents and young adults with ASD. Among  
 24 the allied health therapies, studies assessing facilitated communication noted little  
 25 communication improvement associated with facilitation and some evidence of facilitator  
 26 influence on participants’ responses.

27  
 28 The Scottish Intercollegiate Guidelines Network (SIGN): The updated SIGN national  
 29 clinical guideline on assessment, diagnosis and interventions for autism spectrum disorders  
 30 states that facilitated communication should not be used as a means to communicate with  
 31 adults, children and young people with ASD (2016). In 2016, NICE updated the clinical  
 32 guideline, diagnosis and management of adults on the autism spectrum. The guideline  
 33 recommendations for psychosocial interventions for the core symptoms of autism state to  
 34 not provide facilitated communication for adults with autism. There is insufficient evidence  
 35 found in the medical literature regarding the effectiveness of this therapy. Hemsley et al.  
 36 (2018) conducted a systematic review of the literature on FC published between 2014 and  
 37 2018 to inform the 2018 update of the 1995 American Speech-Language Hearing  
 38 Association Position Statement on FC. In total, 18 studies met the inclusion criteria. There  
 39 were no new empirical studies and no new descriptive quantitative studies addressing the  
 40 authorship of messages delivered using FC. Three new qualitative studies qualified for  
 41 inclusion; these did not first establish authorship. Of the 15 new commentary papers on FC  
 42 located, 14 were critical and one was non-critical. There are no new studies on authorship

1 and there remains no evidence that FC is a valid form of communication for individuals  
2 with severe communication disabilities. There continue to be no studies available  
3 demonstrating that individuals with communication disabilities are the authors of the  
4 messages generated using FC. Furthermore, there is substantial peer-reviewed literature  
5 that is critical of FC and warns against its use.

6  
7 Heyworth et al. (2022) presents an analysis of the research arguing for-and against-the use  
8 of FC, combined with the lived experience knowledge of autistic adults who utilize FC, to  
9 rehabilitate its current standing as discredited and unevidenced in a perspective article.  
10 Debate surrounding the validity of the method of supported typing known as facilitated  
11 communication (FC) has been continuous since its inception in the 1990s. Views are  
12 polarized on whether FC can be considered an authenticated method for use by people with  
13 complex communication needs (CCN) or significant challenges in speech, language, and  
14 communication. By considering extant qualitative and quantitative studies, as well as  
15 personal accounts of the use of this particular Augmentative and Alternative  
16 Communication (AAC) method, the authors argue that the current dismissal of FC is rooted  
17 in ableist and outdated approaches. Authors conclude that FC research should be  
18 reconsidered and reconducted using current best practice autism research approaches,  
19 including coproduction and a presumption of autistic communication competence, to  
20 assess its validity as a potential AAC method for autistic individuals.

21  
22 An UpToDate review on "Evaluation and treatment of speech and language disorders in  
23 children" (Carter and Musher, 2018) states that "Investigational therapies – Facilitated  
24 communication, auditory integration training (AIT), sensory integration (SI) therapy, and  
25 Fast ForWord are examples of controversial practices that have not been validated in large,  
26 controlled trials".

## 27 28 **PRACTITIONER SCOPE AND TRAINING**

29 Practitioners should practice only in the areas in which they are competent based on their  
30 education, training and experience. Levels of education, experience, and proficiency may  
31 vary among individual practitioners. It is ethically and legally incumbent on a practitioner  
32 to determine where they have the knowledge and skills necessary to perform such services  
33 and whether the services are within their scope of practice.

34  
35 It is best practice for the practitioner to appropriately render services to a member only if  
36 they are trained, equally skilled, and adequately competent to deliver a service compared  
37 to others trained to perform the same procedure. If the service would be most competently  
38 delivered by another health care practitioner who has more skill and training, it would be  
39 best practice to refer the member to the more expert practitioner.

40  
41 Best practice can be defined as a clinical, scientific, or professional technique, method, or  
42 process that is typically evidence-based and consensus driven and is recognized by a



1 majority of professionals in a particular field as more effective at delivering a particular  
 2 outcome than any other practice (Joint Commission International Accreditation Standards  
 3 for Hospitals, 2020).

4  
 5 Depending on the practitioner’s scope of practice, training, and experience, a member’s  
 6 condition and/or symptoms during examination or the course of treatment may indicate the  
 7 need for referral to another practitioner or even emergency care. In such cases it is prudent  
 8 for the practitioner to refer the member for appropriate co-management (e.g., to their  
 9 primary care physician) or if immediate emergency care is warranted, to contact 911 as  
 10 appropriate. See the *Managing Medical Emergencies (CPG 159 – S)* policy for  
 11 information.

### 12 13 **References**

14 American Academy of Audiology (AAA). Position Statement. Auditory integration  
 15 training. October 2010

16  
 17 American Academy of Child and Adolescent Psychiatry (AACAP). (2014). Practice  
 18 parameters for the assessment and treatment of children and adolescents with autism  
 19 spectrum disorders. Retrieved May 10, 2023 from  
 20 [http://www.jaacap.com/article/S0890-8567\(13\)00819-8/pdf](http://www.jaacap.com/article/S0890-8567(13)00819-8/pdf)

21  
 22 American Academy of Child & Adolescent Psychiatry (AACAP). Policy statement  
 23 facilitated communication. Approved by Council, October 20, 1993. Reviewed June  
 24 2008. Retrieved May 10, 2023 from  
 25 [https://www.aacap.org/aacap/policy\\_statements/2008/facilitated\\_communication.aspx](https://www.aacap.org/aacap/policy_statements/2008/facilitated_communication.aspx)

26  
 27 American Academy of Pediatrics (AAP). Auditory integration training and facilitated  
 28 communications for autism. *Pediatrics*. 1998 Aug;102 (2 Pt 1):431-3.[reaffirmed May  
 29 2006; Feb 2010; retired July 2017]. Retrieved on May 10, 2023 from  
 30 <http://pediatrics.aappublications.org/content/102/2/431.full>

31  
 32 American Academy of Pediatrics (AAP). Committee on Children with Disabilities.  
 33 Auditory Integration Training and Facilitated Communication for Autism. *Pediatrics*.  
 34 1998;102 (2): 431-3

35  
 36 American Academy of Pediatrics (AAP) [Web site]. Prescribing therapy services for  
 37 children with motor disabilities. June 2004. Reaffirmed September 2017

38  
 39 American Academy of Pediatrics, Zimmer M, Desch L. Section On Complementary And  
 40 Integrative Medicine; Council on Children with Disabilities. Sensory integration  
 41 therapies for children with developmental and behavioral disorders. *Pediatrics*.  
 42 2012;129(6):1186-9

- 1 American Speech-Language-Hearing-Association (ASHA). (2004). Auditory Integration  
2 Training. Retrieved on May 10, 2023 from [http://www.asha.org/policy/TR2004-](http://www.asha.org/policy/TR2004-00260/)  
3 [00260/](http://www.asha.org/policy/TR2004-00260/)  
4
- 5 Berard, G. (1995). Concerning length, frequency, number, and follow-up AIT sessions  
6 (Available from The Society for Auditory Intervention Techniques, 1040 Commercial  
7 St. S.E., Suite 306, Salem, OR 97302). *The Sound Connection Newsletter*, 2(3), 5–6  
8
- 9 Berard, G. (1993). *Hearing equals behavior*. New Canaan, CT: Keats Publishing  
10
- 11 Carter J, Musher K. Evaluation and treatment of speech and language disorders in children.  
12 UpToDate. Waltham, MA: UpToDate; reviewed December 2018. Retrieved on May  
13 10, 2023 from [https://www.uptodate.com/contents/evaluation-and-treatment-of-](https://www.uptodate.com/contents/evaluation-and-treatment-of-speech-and-language-disorders-in-children)  
14 [speech-and-language-disorders-in-children](https://www.uptodate.com/contents/evaluation-and-treatment-of-speech-and-language-disorders-in-children)  
15
- 16 Hemsley B, Bryant L, Schlosser RW, Shane HC, Lang R, Paul D, Banajee M, Ireland M.  
17 (2018). Systematic review of facilitated communication 2014–2018 finds no new  
18 evidence that messages delivered using facilitated communication are authored by the  
19 person with disability. *Autism & Developmental Language Impairments*, 3: 1–8  
20
- 21 Heyworth M, Chan T, Lawson W. Perspective: Presuming Autistic Communication  
22 Competence and Reframing Facilitated Communication. *Front Psychol.*  
23 2022;13:864991. Published 2022 Mar 10. doi:10.3389/fpsyg.2022.864991  
24
- 25 Joint Commission International. (2020). *Joint Commission International Accreditation*  
26 *Standards for Hospitals (7th ed.)*: Joint Commission Resources  
27
- 28 Li, N., Li, L., Li, G., & Gai, Z. (2018). The association of auditory integration training in  
29 children with autism spectrum disorders among Chinese: a meta-analysis. *Bioscience*  
30 *reports*, 38(6), BSR20181412. <https://doi.org/10.1042/BSR20181412>  
31
- 32 Lounds Taylor, J., Dove, D., Veenstra-VanderWeele, J., Sathe, N. A., McPheeters, M. L.,  
33 Jerome, R. N., & Warren, Z. (2012). *Interventions for Adolescents and Young Adults*  
34 *With Autism Spectrum Disorders*. Agency for Healthcare Research and Quality (US).  
35 [https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/autism-](https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/autism-adolescents_research.pdf)  
36 [adolescents\\_research.pdf](https://effectivehealthcare.ahrq.gov/sites/default/files/pdf/autism-adolescents_research.pdf)  
37
- 38 National Institute for Clinical Excellence (NICE). Autism spectrum disorder in under 19s:  
39 support and management. National Clinical Guideline Number 170. London, UK;  
40 NICE; August 2013; June 2021. Retrieved on May 10, 2023 from  
41 <https://www.nice.org.uk/guidance/cg170>

- 1 National Institute for Health and Clinical Excellence (NICE). Autism spectrum disorder in  
 2 adults: diagnosis and management. London (UK): National Institute for Health and  
 3 Clinical Excellence (NICE); 2012 Jun; 2016; 2021 Aug. (NICE clinical guideline; no.  
 4 142). Retrieved on May 10, 2023 from <https://www.nice.org.uk/guidance/cg142>  
 5
- 6 Saloviita, T., Leppänen, M., & Ojalampi, U. (2014). Authorship in facilitated  
 7 communication: an analysis of 11 cases. *Augmentative and alternative communication*  
 8 (*Baltimore, Md. : 1985*), 30(3), 213–225.  
 9 <https://doi.org/10.3109/07434618.2014.927529>  
 10
- 11 Schlosser, R. W., Balandin, S., Hemsley, B., Iacono, T., Probst, P., & von Tetzchner, S.  
 12 (2014). Facilitated communication and authorship: a systematic review. *Augmentative*  
 13 *and alternative communication (Baltimore, Md. : 1985)*, 30(4), 359–368.  
 14 <https://doi.org/10.3109/07434618.2014.971490>  
 15
- 16 Shahrudin FA, Dzulkarnain AAA, Hanafi AM, et al. Music and Sound-Based Intervention  
 17 in Autism Spectrum Disorder: A Scoping Review. *Psychiatry Investig.*  
 18 2022;19(8):626-636. doi:10.30773/pi.2021.0382  
 19
- 20 Sinha, Y., Silove, N., Hayen, A., & Williams, K. (2011). Auditory integration training and  
 21 other sound therapies for autism spectrum disorders (ASD). *The Cochrane database of*  
 22 *systematic reviews*, 2011(12), CD003681.  
 23 <https://doi.org/10.1002/14651858.CD003681.pub3>  
 24
- 25 Scottish Intercollegiate Guidelines Network (SIGN). Assessment, diagnosis and  
 26 interventions for autism spectrum disorders. A national clinical guideline. Edinburgh  
 27 (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2016 June. (SIGN  
 28 publication; no. 145)  
 29
- 30 Tostanoski, A., Lang, R., Raulston, T., Carnett, A., & Davis, T. (2014). Voices from the  
 31 past: comparing the rapid prompting method and facilitated  
 32 communication. *Developmental neurorehabilitation*, 17(4), 219–223.  
 33 <https://doi.org/10.3109/17518423.2012.749952>  
 34
- 35 Warren, Z., Veenstra-VanderWeele, J., Stone, W., Bruzek, J. L., Nahmias, A. S., Foss-  
 36 Feig, J. H., Jerome, R. N., Krishnaswami, S., Sathe, N. A., Glasser, A. M., Surawicz,  
 37 T., & McPheeters, M. L. (2011). *Therapies for Children With Autism Spectrum*  
 38 *Disorders*. Agency for Healthcare Research and Quality (US)