

Theory / Review

Best Practices in Family-Centered Early Intervention for Children Who Are Deaf or Hard of Hearing: An International Consensus Statement

Mary Pat Moeller^{*,1}, Gwen Carr², Leeanne Seaver³, Arlene Stredler-Brown⁴, Daniel Holzinger^{5,6}

¹Center for Childhood Deafness

²U.K. Newborn Hearing Screening Programme

³Hands and Voices

⁴University of Colorado

⁵Konventhospital Barmherzige Brueder Linz

⁶Karl Franzens Universitaet Graz

Received June 4, 2013; revisions received June 4, 2013; accepted June 6, 2013

A diverse panel of experts convened in Bad Ischl, Austria, in June of 2012 for the purpose of coming to consensus on essential principles that guide family-centered early intervention with children who are deaf or hard of hearing (D/HH). The consensus panel included parents, deaf professionals, early intervention program leaders, early intervention specialists, and researchers from 10 nations. All participants had expertise in working with families of children who are D/HH, and focus was placed on identifying family-centered practice principles that are specific to partnering with these families. Panel members reported that the implementation of family-centered principles was uneven or inconsistent in their respective nations. During the consensus meeting, they identified 10 agreed-upon foundational principles. Following the conference, they worked to refine the principles and to develop a document that described the principles themselves, related program and provider behaviors, and evidence supporting their use (drawing upon studies from multiple disciplines and nations). The goal of this effort was to promote widespread implementation of validated, evidence-based principles for family-centered early intervention with children who are deaf and hard of hearing and their families.

*Correspondence should be sent to Mary Pat Moeller, Boys Town National Research Hospital, 555 N. 30th Street, Omaha, NE 68131 (e-mail: marypat.moeller@boystown.org).

Background and Purpose

In June 2012, an international panel of experts in early intervention convened in Bad Ischl, Austria, to come to consensus on best practice principles guiding the implementation of family-centered early interventions (FCEIs). The conference organizers were unified in the belief that family-centered practices optimize outcomes for children and families and that there was a need to clearly articulate agreed-upon tenets of this philosophy. Panel members were invited by Drs. Daniel Holzinger and Johannes Fellingner, and the consensus discussion was facilitated by Dr. Mary Pat Moeller. The panel included parents, deaf professionals, early intervention program leaders, early intervention specialists, and researchers from across the world. All participants had expertise in working with families of children who are deaf or hard of hearing (D/HH), and focus was placed on identifying family-centered practice principles that are specific to partnering with these families. Panel members observed that the majority of professionals in their respective countries agree on the major concepts that are foundational to FCEI.

However, the implementation of best practices was judged to be variable and inconsistent at best across the respective nations. This set of agreed-upon guidelines was developed to promote wider implementation of validated, evidence-based principles for FCEI with children who are D/HH and their families. A Call to Action is provided at the end of this document to support this overarching objective.

Several overarching concepts underpin the FCEI process. Fundamentally, interventions must be based on explicit principles, validated practices, and best available research while being respectful of family differences, choices, and ways of doing things. FCEI is viewed as a flexible, holistic process that recognizes families' strengths and natural skills and supports development while promoting the following: (a) joyful, playful communicative interactions and overall enjoyment of parenting roles, (b) family well-being (e.g., enjoyment of the child, stable family relations, emotional availability, optimism about the child's future), (c) engagement (e.g., active participation in program, informed choice, decision making, advocacy for child), and (d) self-efficacy (competent and confident in parenting and promoting the child's development).

Family-professional partnerships are formed and partners collaborate to clarify family values, goals, and aspirations and to respect this input in the intervention process. Interventions are implemented in a manner that is culturally competent, and professionals devote themselves to ongoing continuing education to maintain the highest standards of best practice.

The panel recognized that various nations have different definitions for commonly used terms. An effort was made to avoid terms with varied or controversial interpretations and to adhere to terms with broad, shared understanding. The terms "deaf" and "hard of hearing" (D/HH) are used in this document to represent the entire spectrum of children with varying hearing levels (from mild to profound). The term D/HH is also intended to be inclusive of those from culturally Deaf communities, wherein individuals are considered in the cultural context above and beyond hearing status. Communication development is used broadly to refer to the child's auditory skills, visual skills, receptive and expressive language skills (spoken and/or sign language development), pragmatics, and turn taking.

The panel arrived at consensus on 10 principles guiding FCEI. The first principle deals with the

Best Practice Principle	Provider and/or Program Behaviors
<p>Principle 1: Early, Timely, & Equitable Access to Services Screening and confirmation that a child is D/HH will be effective to the degree that they are linked with immediate, timely, and equitable access to appropriate interventions.</p>	<p>Programs ensure that</p> <ol style="list-style-type: none"> 1. Newborn hearing screening programs are implemented following documented best practices and timelines for follow-up. 2. Follow-up diagnostic services are provided immediately upon referral and are conducted by professionals with pediatric experience. 3. Families are offered comprehensive family support and early intervention programs in a timely manner following newborn hearing screening within a framework of informed choice. 4. Enrollment in early intervention proceeds while audiological follow-up is in progress. 5. Families have access to a coordinated point of entry to early intervention programs. 6. Comprehensive services are offered and available regardless of the family's socioeconomic status, income, or geographic location. 7. Various strategies are used to help families understand the importance of timely follow-up. 8. Transitions from screening or other early identification efforts are timely and consistently monitored to ensure timeliness.

Continued

Related Resources and Evidence Citations

1. Holte, L., Walker, E., Oleson, J., Spratford, M., Moeller, M. P., Roush, P., . . . Tomblin, J. B. (2012). Factors influencing follow-up to newborn hearing screening for infants who are hard-of-hearing. *American Journal of Audiology, 21*, 163–174.
2. Holzinger, D., Fellingner, J., & Beitel, C. (2011). Early onset of family centred intervention predicts language outcomes in children with hearing loss. *International Journal of Pediatric Otorhinolaryngology, 75*, 256–260.
3. Kennedy, C. R., McCann, D. C., Campbell, M. J., Kimm, L., & Thornton, R. (2005). Universal newborn screening for permanent childhood hearing impairment: An 8-year follow-up of a controlled trial. *Lancet, 366*, 660–662.
4. Kennedy, C. R., McCann, D. C., Campbell, M. J., Law, C. M., Mullee, M., Petrou, S., . . . Stevenson, J. (2006). Language ability after early detection of permanent childhood hearing impairment. *New England Journal of Medicine, 354*, 2131–2141.
5. Moeller, M. P. (2000). Early intervention and language development in children who are deaf and hard of hearing. *Pediatrics, 106*, e43.
6. Russ, S. A., Dougherty, D., & Jagadish, P. (2010). Accelerating evidence into practice for the benefit of children with early hearing loss. *Pediatrics, 126*(Suppl. 1), S7–S18.
7. Semenov, Y. R., Yeh, S. T., Seshamani, M., Wang, N. Y., Tobey, E. A., Eisenberg, L. S., . . . CDaCI Investigative Team. (2013). Age-dependent cost-utility of pediatric cochlear implantation. *Ear and Hearing, 35*, 402–412. doi:10.1097/AUD.0b013e3182772c66
8. Spivak, L., Sokol, H., Auerbach, C., & Gershkovich, S. (2009). Newborn hearing screening follow-up: Factors affecting hearing aid fitting by 6 months of age. *American Journal of Audiology, 18*, 24–33.
9. Yoshinaga-Itano, C., & Apuzzo, M. L. (1998). Identification of hearing loss after age 18 months is not early enough. *American Annals of the Deaf, 143*, 380–387.
10. Yoshinaga-Itano, C., Baca, R., & Sedey, A. L. (2010). Describing the trajectory of language development in the presence of severe-to-profound hearing loss: A closer look at children with cochlear implants versus hearing aids. *Otology and Neurootology, 31*, 1268–1274.
11. Yoshinaga-Itano, C., Coulter, D., & Thomson, V. (2000). The Colorado Newborn Hearing Screening Project: Effects on speech and language development for children with hearing loss. *Journal of Perinatology, 20*(Suppl. 1), S132–S137.
12. Yoshinaga-Itano, C., Coulter, D., & Thomson, V. (2001). Developmental outcomes of children with hearing loss born in Colorado hospitals with and without universal newborn hearing screening programs. *Seminars in Neonatology, 6*, 521–529.
13. Yoshinaga-Itano, C., Sedey, A. L., Coulter, D. K., & Mehl, A. L. (1998). The language of early- and later-identified children with hearing loss. *Pediatrics, 102*, 1161–1171.

Evidence Reviews and Position Statements

1. Center for Allied Health Evidence Review Team. (2007). *A systematic review of the literature on EI for children with a permanent hearing loss*. Retrieved July 16, 2013, from <http://www.health.qld.gov.au/healthyhearing/docs/background.pdf>
2. Joint Committee on Infant Hearing. (2007). Year 2007 position statement: Principles and guidelines for early hearing detection and intervention programs. *Pediatrics, 120*, 898–921.
3. NHSP Programme Centre. (2010). Quality standards in the NHS newborn hearing screening programme. Retrieved July 16, 2013, from <http://hearing.screening.nhs.uk/standardsandprotocols/>
4. Joint Committee on Infant Hearing. (2013). Supplement to the JCIH 2007 position statement: Principles and guidelines for early intervention after confirmation that a child is deaf or hard of hearing. *Pediatrics, 131*, e1324–e1349. Retrieved July 16, 2013, from <http://pediatrics.aappublications.org/content/early/2013/03/18/peds.2013-0008.full.pdf+html> & <http://www.asha.org/policy/PS2013-00339/>
5. Schachter, H. M., Clifford, T. J., Fitzpatrick, E., Eatmon, S., MacKay, M., Showler, A., . . . Moher, D. (2002). *A systematic review of interventions for hearing loss in children*. Unpublished document, Health Canada, Ottawa, Ontario, Canada.
6. UK Government Department of Education and Skills. (2003). *Developing early intervention/support services for deaf children and their families: Executive summary* (LEA/0068/2003). Retrieved July 16, 2013, from www.ndcs.org.uk/document.rm?id=3746

Continued

Best Practice Guidelines for Audiology: Infants and Young Children

1. American Speech-Language-Hearing Association. (2004). *Guidelines for the audiologic assessment of children from birth to 5 years of age* [Guidelines]. Retrieved July 16, 2013, from <http://www.asha.org/policy>
2. Bagatto, M. P., Moodie, S. T., Malandrino, A. C., Richert, F. M., Clench, D. A., & Scollie, S. D. (2011). The University of Western Ontario Pediatric Audiological Monitoring Protocol (UWO PedAMP). *Trends in Amplification*, 15, 57–76.
3. American Academy of Audiology. (2003). *Pediatric Amplification Protocol*. Retrieved July 16, 2013, from <http://www.audiology.org/resources/documentlibrary/documents/pedamp.pdf>
4. American Speech-Language-Hearing Association. (2008). *Guidelines for audiologists providing informational and adjustment counseling to families of infants and young children with hearing loss birth to 5 years of age* [Guidelines]. Retrieved July 16, 2013, from <http://www.asha.org/policy/GL2008-00289/>

Best Practice Principle**Provider and/or Program Behaviors****Principle 2: Family/Provider Partnerships****Service providers work in partnership with families to**

A goal of FCEI is the development of balanced partnerships between families and the professionals supporting them. Family–provider partnerships are characterized by reciprocity, mutual trust, respect, honesty, shared tasks, and open communication.

1. Focus on facilitative family–child interactions, rather than child-directed therapies.
2. Focus on family-identified concerns (priorities, hopes, needs, goals, and wishes).
3. Build upon individual family strengths to meet family needs.
4. Recognize and promote the fact that families need to live their typical lives.
5. Work with adults to enhance their confidence and competence in fostering their children’s development.
6. Understand ways in which discrimination, oppression, and stereotyping may affect the provision of services.

Service providers

1. Recognize their own areas of expertise, comfort, and discomfort when working with families from similar or different cultural backgrounds and seek support when needed.
2. Recognize the diversity within cultural groups (i.e., spiritually, views on health and disability, child rearing, help seeking, and family structure).
3. Arrange visits with the families to match family expectations and schedules.
4. Foster family investment and effectiveness, which, in turn, benefits the well-being and development of the child.
5. Implement processes that are flexible, individualized, and responsive to changing needs, preferences, and learning styles of families.
6. Implement participatory help giving, focused on family involvement in achieving desired goals and outcomes.
7. Respond sensitively and empathically in all interactions with families.
8. Provide both informational and emotional support.
9. Recognize the boundaries of their role and expertise and provide referral/access to specialized professionals when needed.
10. Demonstrate both care and concern for families in all interactions.
11. Assume all families as responsible, trustworthy people and treat them as such.
12. Follow through on agreed-upon tasks in a timely manner.

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<ol style="list-style-type: none"> 13. Be a knowledgeable and credible early intervention partner with the family. 14. Listen actively to family members and understand the relationship between their expressed concerns and the real needs that the family is identifying. 15. Support families to feel optimistic about the child's future and to establish and maintain high expectations for the child's development. 16. Support families in ways that match their distinctive nature (e.g., configuration, culture, beliefs, values, emotions, coping skills, and family dynamics).

Related Resources and Evidence Citations

1. American Speech-Language-Hearing Association. (2004). *Knowledge and skills needed by speech-language pathologists and audiologists to provide culturally and linguistically appropriate services* [Knowledge and skills]. Retrieved July 16, 2013, from <http://www.asha.org/docs/html/KS2004-00215.html>
2. American Speech-Language-Hearing Association. (2005). *Cultural competence* [Issues in ethics]. Retrieved July 16, 2013, from <http://www.asha.org/docs/html/PI2011-00326.html>
3. Brotherson, M. J., Summers, J. A., Naig, L. A., Kyzar, K., Friend, A., Epley, P., . . . Turnbull, A. P. (2010). Partnership patterns: Addressing emotional needs in early intervention. *Topics in Early Childhood Special Education, 30*, 32–45.
4. Coker, T. R., Rodriguez, M. A., & Flores, G. (2010). Family-centered care for US children with special health care needs: Who gets it and why? *Pediatrics, 125*, 1159–1167.
5. Department of Education and Skills (UK). (2003). *Developing early intervention/support services for deaf children and their families: Executive summary*. (LEA/0068/2003). Retrieved July 16, 2013, from <http://www.ndcs.org.uk/document.rm?id=3746>
6. Dromi, E., & Ingber, S. (1999). Israeli mothers' expectations from early intervention with their preschool deaf children. *Journal of Deaf Studies and Deaf Education, 4*, 50–68.
7. Dunst, C. J. (2006). Parent-mediated everyday child learning opportunities: I. Foundations and operationalization. *CASEinPoint, 2*, 1–10. Retrieved July 16, 2013, from <http://www.fipp.org/case/caseinpoint.html>
8. Dunst, C. J., & Dempsey, I. (2007). Family-professional partnerships and parenting competence, confidence, and enjoyment. *International Journal of Disability, Development and Education, 54*, 305–318.
9. Dunst, C. J., Trivette, C. M., & Deal, A. G. (1988). *Enabling and empowering families: Principles and guidelines for practice*. Cambridge, MA: Brookline Books.
10. Dunst, C. J., Trivette, C. M., Hamby, D. W., & Bruder, M. B. (2006). Influences of contrasting natural learning environment experiences on child, parent and family well-being. *Journal of Developmental and Physical Disabilities, 18*, 235–250.
11. Dunst, C. J., Trivette, C. M., & Hamby, D. W. (2007). Meta-analysis of family-centered help-giving practices research. *Mental Retardation and Developmental Disabilities Research Reviews, 13*, 370–378.
12. Guralnick, M. J. (2011). Why early intervention works: A systems perspective. *Infants and Young Children, 24*, 6–28.
13. Hintermair, M. (2004). Sense of coherence: A relevant resource in the coping process of mothers of deaf and hard-of-hearing children? *Journal of Deaf Studies and Deaf Education, 9*, 15–26.
14. Hintermair, M. (2006). Parental resources, parental stress, and socioemotional development of deaf and hard of hearing children. *Journal of Deaf Studies and Deaf Education, 11*, 493–513.
15. Ingber, S., & Dromi, E. (2009). Demographics affecting parental expectations from early deaf intervention. *Deafness & Education International, 11*, 83–111.
16. Ingber, S., & Dromi, E. (2010). Actual versus desired family-centered practice in early intervention for children with hearing loss. *Journal of Deaf Studies and Deaf Education, 15*, 59–71.
17. Johnson DeConde, C. (2006). One year's growth in one year, expect no less. *Hands & Voices Communicator, 9*, 3.
18. Mahoney, G. (2009). Relationship Focused Intervention (RFI): Enhancing the role of parents in children's developmental intervention. *International Journal of Early Childhood Special Education, 1*, 79–94.
19. McBride, S., Brotherson, M. J., Joanning, H., Whiddon, D., & Demmitt, A. (1993). Implementation of family-centered services: Perceptions of families and professionals. *Journal of Early Intervention, 7*, 414–430.
20. Mott, D. W., & Dunst, C. J. (2006). Influences of resource-based intervention practices on parent and child outcomes. *CASEinPoint, 2*, 1–8. Retrieved July 16, 2013, from <http://www.fipp.org/case/caseinpoint.html>

Continued

-
21. Odom, S. L., & Wolery, M. (2003). A unified theory of practice in early intervention/early childhood special education: Evidence-based practices. *The Journal of Special Education, 37*, 164–173.
 22. Rush, D. D., & Shelden, M. L. (2005). Evidence-based definition of coaching practices. *CASEinPoint 1*, 1–6. Retrieved July 16, 2013, from <http://www.fipp.org/case/caseinpoint.html>
 23. Temple, B., & Young, A.M. (2008). ‘They know where they can find us . . .’ Service providers’ views on early support and minority ethnic communities. *Disability and Society, 23*, 223–234.
 24. Trivette, C. M., & Dunst, C. (1998). *Family-centered help giving practices*. Asheville, NC: Orelena Hawks Puckett Institute.
 25. Workgroup on Principles and Practices in Natural Environments, OSEP TA Community of Practice: Part C Settings. (2008). *Seven key principles: Looks like/ doesn't look like*. Retrieved July 16, 2013, from http://www.ectacenter.org/~pdfs/topics/families/Principles_LooksLike_DoesntLookLike3_11_08.pdf; selected concepts in the current document were adapted with permission from the Iowa Early Access/Script program retrieved from http://www.educateiowa.gov/index.php?option=com_docman&task=doc_download&grid=1960.
-

Best Practice Principle

Provider and/or Program Behaviors

Principle 3: Informed Choice and Decision Making**Service providers**

Professionals promote the process wherein families gain the necessary knowledge, information, and experiences to make fully informed decisions. This includes educating families regarding special education laws and their rights as defined by these laws. Decision making is seen as a fluid, ongoing process. Families may adapt or change decisions in response to the child’s and families’ changing abilities, needs, progress, and emotional well-being.

1. Recognize that ultimately, decision-making authority rests with the family; collaborate with families to support their abilities to exercise this authority.
 2. Adopt open and flexible policies that effectively endorse a range of communication possibilities.
 3. Share information and experiences from a variety of sources that are comprehensive, meaningful, relevant, and unbiased to enable informed decision making.
 4. Keep in mind that “informed choice” is not synonymous with information that is neutral or functionally descriptive. Rather, evaluative information is essential in that it draws attention to the various risks, benefits, and uncertainties related to particular options.
 5. Inform families about expectations for them that are inherent in implementing various approaches, as well as potential benefits and challenges.
 6. Actively support the family in processes of decision making and self-determination.
 7. Assist families to identify and successfully rely on their abilities and capabilities.
 8. Support families to reach decisions in ways that reflect their individual strengths, resources, needs, and experiences.
 9. Support families to create a vision and plan for their child’s future; assist them in understanding that plans and visions can be altered, if needed.
 10. Provide resources and support family members’ decisions.
 11. Recognize that informed choice is not a one-time decision but an ongoing process.
 12. Fully inform families of their rights ensured by law.
-

Related Resources and Evidence Citations*Guidelines*

1. *Decision making related to communication*. Retrieved July 16, 2013, from http://www.ncbegin.org/index.php?option=com_content&view=article&id=80&Itemid=130
 2. Hands & Voices. *Communication Considerations*. Retrieved July 16, 2013, from <http://www.handsandvoices.org/comcon/index.html>
 3. Seaver, L. (Ed.) (2009). *The book of choice*. Boulder, CO: Hands and Voices. Retrieved July 16, 2013, from <http://www.handsandvoices.org/resources/products.htm#boc>
 4. Carr, G., Young, A. M., Hunt, R., McCracken, W., Skipp, A., & Tattersall, H., (2006). *Helping you choose: Making informed choices for you and your child*. Retrieved July 16, 2013, from <http://www.ihs.manchester.ac.uk/events/pastworkshops/2012/CHRN200312/handbook.pdf>
-

Continued

5. Carr, G., Young, A. M., Hall A. M., Hunt, R., McCracken, W. M., Skipp, A., & Tattersall, H. J. (2006). *Informed choice, families and deaf children: Professional handbook*. Retrieved July 16, 2013, from <http://media.education.gov.uk/assets/files/pdf/i/informed%20choice%20families%20and%20deaf%20children%20-%20professional%20handbook.pdf>
6. Joint Committee on Infant Hearing. (2013). Supplement to the JCIH 2007 position statement: Principles and guidelines for early intervention after confirmation that a child is deaf or hard of hearing. *Pediatrics*, 131, e1324–e1349. Retrieved July 16, 2013, from <http://pediatrics.aappublications.org/content/early/2013/03/18/peds.2013-0008.full.pdf+html>

Evidence Citations

1. Dunst, C. J., Trivette, C. M. & Deal, A. (1988). *Enabling and empowering families: Principles and guidelines for practice*. Cambridge, MA: Brookline Books.
2. Knoors, H. (2007). Educational responses to varying objectives of parents of deaf children: A Dutch perspective. *Journal of Deaf Studies and Deaf Education*, 12, 243–253.
3. Steinberg, A., Bain, L., Li, Y., Delgado, G., & Ruperto, V. (2003). Decisions Hispanic families make after the identification of deafness. *Journal of Deaf Studies and Deaf Education*, 8, 291–314.
4. Storbeck, C., & Calvert-Evans, J. (2008). Towards integrated practices in early detection of and intervention for deaf and hard of hearing children. *American Annals of the Deaf*, 153, 314–321.
5. Young, A. M. (2002). Factors affecting communication choice in the first year of life – assessing and understanding an on-going experience. *Deafness & Education International*, 4, 1–12.
6. Young, A. M., Carr, G., Hunt, R., McCracken, W., Skipp, A., & Tattersall, H. (2006). Informed choice and deaf children—Underpinning concepts and enduring challenges. *Journal of Deaf Studies and Deaf Education*, 11, 322–336.
7. Young, A. M., Jones, D., Starmer, C., & Sutherland, H. (2005). Issues and dilemmas in the production of standard information for parents of young deaf children—Parents’ views. *Deafness & Education International*, 7, 63–76.

Best Practice Principle	Provider and/or Program Behaviors
<p>Principle 4: Family Social & Emotional Support</p> <p>Families are connected to support systems so they can accrue the necessary knowledge and experiences that can enable them to function effectively on behalf of their D/HH children.</p>	<p>Service providers</p> <ol style="list-style-type: none"> 1. Build upon and use both formal (systematic parent–professional partnerships and parent-to-parent support networks) and informal (community organizations, friends, extended family, religious affiliations, play groups) support systems. 2. Understand the ways in which natural networks support the health and well-being of families. 3. Assist families to identify what resources their informal support networks can provide to meet specific needs/concerns. 4. Ensure that families have access to a range of supports so that supports can be individualized to the unique needs of the family. 5. Understand and actively model the practices of reciprocity in order to build networks. 6. Facilitate contacts between families and their communities as a way of strengthening informal capacity. 7. Ensure that all families have access to parent-to-parent support from other families of children who are D/HH. Recognize the key role of parent-to-parent support in promoting social and emotional well-being for families. 8. Support connections between families and adult role models who are D/HH. 9. Provide social and emotional supports to promote the well-being of parents and siblings. Inform parents about and refer them to professional mental health services, if considered appropriate. Recognize the importance of family well-being for child development.

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<p>Early intervention systems</p> <ol style="list-style-type: none"> 1. Recognize and actively support parent organizations and networks for direct parent–peer support opportunities. 2. Incorporate parent leadership into the strategic development and operational function of FCEI systems.

Related Resources and Evidence Citations

1. Ainbinder, J. G., Blanchard, L. W., Singer, G. H., Sullivan, M. E., Powers, L. K., Marquis, J. G., ... the Consortium to Evaluate Parent to Parent (1998). A qualitative study of parent to parent support for parents of children with special needs. *Journal of Pediatric Psychology*, 23, 99–109.
2. Dunst, C. (2005). Foundations for an evidence-based approach to early childhood intervention and family support. *CASEmakers*, 1, 1–6. Retrieved July 16, 2013, from <http://www.fipp.org/case/casemakers.html>
3. Dunst, C. J., & Trivette, C. M. (2009). Meta-analytic structural equation modeling of the influences of family-centered care on parent and child psychological health. *International Journal of Pediatrics*, 2009, 1–9.
4. Dunst, C. J., Trivette, C. M., Gordon, J. J., & Pletcher, L. C. (1989). Building and mobilizing informal family support networks. In G. Singer, & L. Irvin (Eds.), *Support for caregiving families* (pp. 121–139). Baltimore, MD: Brooks Publishing.
5. Hands & Voices. *Guide by your side*. Retrieved July 16, 2013, from <http://www.handsandvoices.org/gbys/index.htm>
6. Hintermair, M. (2000). Hearing impairment, social networks, and coping: The need for families with hearing-impaired children to relate to other parents and to hearing-impaired adults. *American Annals of the Deaf*, 145, 41–53.
7. Hintermair, M. (2004). Sense of coherence: A relevant resource in the coping process of mothers of deaf and hard-of-hearing children? *Journal of Deaf studies and Deaf Education*, 9, 15–26.
8. Hintermair, M. (2006). Parental resources, parental stress, and socioemotional development of deaf and hard-of-hearing children. *Journal of Deaf Studies and Deaf Education*, 11, 493–513.
9. Hoagwood, K. E., Cavaleri, M. A., Serene Olin, S., Burns, B. J., Slaton, E., Gruttadaro, D., & Hughes, R. (2010). Family support in children's mental health: A review and synthesis. *Clinical Child and Family Psychology Review*, 13, 1–45.
10. Jackson, C. W. (2011). Family supports and resources for parents of children who are deaf or hard of hearing. *American Annals of the Deaf*, 156, 343–362.
11. Jackson, C. W., Wegner, J. R., & Trumbull, A. P. (2010). Family quality of life following early identification of deafness. *Language, Speech, and Hearing Services in Schools*, 41, 194–205.
12. Lederberg, A., & Goldbach, T. (2002). Parenting stress and social support in hearing of deaf and hearing children: A longitudinal study. *Journal of Deaf Studies and Deaf Education*, 7, 330–345.
13. Mott, D. W. (2006). Operationalizing resource-based intervention practices. *CASEinPoint*, 2, 1–8. Retrieved July 16, 2013, from <http://www.fipp.org/case/caseinpoint.html>
14. Mott, D. W., & Swanson, J. R. (2006). A research synthesis of resource-based intervention practice studies. *CASEinPoint*, 2, 1–13. Retrieved July 16, 2013, from <http://www.fipp.org/case/caseinpoint.html>
15. Luterman, D. (2006). The counseling relationship. *The ASHA Leader*, 11, 8–9.
16. Quittner, A. L., Cruz, I., Barker, D. H., Tobey, E., Eisenberg, L. S., Niparko, J. K. & CDaCI Investigative Team. (2012). Effects of maternal sensitivity and cognitive and linguistic stimulation on cochlear implant users' language development over four years. *The Journal of Pediatrics*, 162, 343–348 e3.
17. Singer, G. H., Marquis, J., Powers, L. K., Blanchard, L., DiVenere, N., Santelli, B., ... Sharp, M. (1999). A multi-site evaluation of parent to parent programs for parents of children with disabilities. *Journal of Early Intervention*, 22, 217–229.
18. *The Global Coalition of Parents of Deaf/Hard of Hearing Children (GPOD): Recommended Practices for Family Support*. Retrieved July 16, 2013, from <http://www.gpodhh.org>
19. Young, A. M., Temple, B., Davies, L., Parkinson, G., & Bolton, J. (2008). Disabled children (0 to 3 years) and integrated services—The impact of early support. *Health and Social Care in the Community*, 16, 222–233.

Best Practice Principle	Provider and/or Program Behaviors
<p>Principle 5: Family Infant Interaction</p> <p>Families and providers work together to create optimal environments for language learning.</p>	<p>Service providers support families to</p> <ol style="list-style-type: none"> 1. Use everyday routines, play, and typical interactions to promote the child's communicative development. 2. Consistently provide the child with language-rich stimulation during natural interactions with all family members (parents, siblings, extended family members).

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<ol style="list-style-type: none"> 3. Respond with sensitivity to the child's communicative attempts and consistently implement techniques known to facilitate language and communicative development. 4. Provide the child numerous opportunities to actively participate in a rich variety of communicative interactions. 5. Ensure that family communication is accessible to the child. 6. Adapt the level of their language input to nurture their child's language skills (i.e., sensitivity to the child's zone of proximal development). 7. Learn a sign language, if this is the family's choice.
	<p>Service providers</p>
	<ol style="list-style-type: none"> 1. To the extent possible, have fluency and expertise in the family's languages/culture. 2. Have fluency and expertise using the communication approach selected by the family. 3. Promote linguistic accessibility and home languages. 4. Respect and support families' decisions regarding communication methods. 5. Interact in a manner that is respectful of families' culture, beliefs, and attitudes. 6. Provide functional learning opportunities that are based on child and family routines, interest, and enjoyment. 7. Use adult teaching/mentoring strategies to assist families to learn new strengths and abilities, as well as build upon existing knowledge and skills. 8. Provide a supportive and encouraging context for learning. 9. Credit families for their engagement and provision of positive parent-child interactions. 10. Support families to use language stimulation principles known to promote early development. 11. Adhere to best practice principles in this document and published curricular guides, while flexibly meeting the needs of the child and family.

Related Resources and Evidence Citations

1. Aragon, M., & Yoshinaga-Itano, C. (2012). Using Language ENvironment Analysis to improve outcomes for children who are deaf or hard of hearing. *Seminars in Speech and Language, 33*, 340–353.
 2. Calderon, R. (2000). Parental involvement in deaf children's education programs as a predictor of child's language, early reading, and social-emotional development. *Journal of Deaf Studies and Deaf Education, 5*, 140–155.
 3. Cole, E. B., & Flexer, C. A. (2011). *Children with hearing loss: Developing listening and talking, Birth to six* (2nd ed.). San Diego, CA: Plural Publishing.
 4. Cruz, I., Quittner, A. L., Marker, C., DesJardin, J. L., & CDaCI Investigative Team. (2013). Identification of effective strategies to promote language in deaf children with cochlear implants. *Child Development, 84*, 543–559.
 5. Desjardin, J. L. (2005). Maternal perceptions of self-efficacy and involvement in the auditory development of young children with prelingual deafness. *Journal of Early Intervention, 27*, 193–209.
 6. DesJardin, J. L., Ambrose, S. E., & Eisenberg, L. S. (2009). Literacy skills in children with cochlear implants: The importance of early oral language and joint storybook reading. *Journal of Deaf Studies and Deaf Education, 14*, 22–43.
 7. Donovan, M. S., Bransford, J. D., & Pellegrino, J. W. (Eds.) (1999). *How people learn: Bridging research and practice*. Washington, DC: National Academy Press.
-

Continued

8. Hoff, E. (2003). The specificity of environmental influence: Socioeconomic status affects early vocabulary development via maternal speech. *Child Development, 74*, 1368–1378.
9. Hoff, E., & Naigles, L. (2002). How children use input to acquire a lexicon. *Child Development, 73*, 418–433.
10. Hoff-Ginsberg, E. (1994). Influences of mother and child on maternal talkativeness. *Discourse Processes, 18*, 105–117.
11. Ingber, S., Al-Yagon, M., & Dromi, E. (2010). Mothers' involvement in early intervention for children with hearing loss: The role of maternal characteristics and context-based perceptions. *Journal of Early Intervention, 32*, 351–369.
12. Hurtado, N., Marchman, V. A., & Fernald, A. (2008). Does input influence uptake? Links between maternal talk, processing speed and vocabulary size in Spanish-learning children. *Developmental Science, 11*, F31–F39.
13. Huttenlocher, J., Haight, W., Bryk, A., Seltzer, M., & Lyons, T. (1991). Early vocabulary growth: Relation to language input and gender. *Developmental Psychology, 27*, 236–248.
14. Huttenlocher, J., Vasilyeva, M., Waterfall, H. R., Vevea, J. L., & Hedges, L. V. (2007). The varieties of speech to young children. *Developmental Psychology, 43*, 1062–1083.
15. Kahn, R., Stemler, S., & Berchin-Weiss, J. (2009). Enhancing parent participation in early intervention through tools that support mediated learning. *Journal of Cognitive Education and Psychology, 8*, 269–287.
16. Mahoney, G. (2009). Relationship Focused Intervention (RFI): Enhancing the role of parents in children's developmental intervention. *International Journal of Early Childhood Special Education, 1*, 79–94.
17. McBride, S. L., & Brotherson, M. J. (1997). Guiding practitioners toward valuing and implementing family-centered practices. In J. Winton, J. McCollum, & C. Cattlett (Eds.), *Reforming personnel preparation in early intervention* (pp 253–76). Baltimore, MD: Brookes.
18. Pressman, L., Pipp-Siegel, S., Yoshinaga-Itano, C., & Deas, A. M. (1999). Maternal sensitivity predicts language gain in preschool children who are deaf and hard of hearing. *Journal of Deaf Studies and Deaf Education, 4*, 294–304.
19. Pressman, L., Pipp-Siegel, S., Yoshinaga-Itano, C., Kubicek, L., & Emde, R. (2000). A comparison of the link between emotional availability and language gain in young children with and without hearing loss. *The Volta Review, 100* (5), 251–277.
20. Quittner, A. L., Cruz, I., Barker, D. H., Tobey, E., Eisenberg, L. S., Niparko, J. K., & the CDaCI Investigative Team. (2013). Effects of maternal sensitivity and cognitive and linguistic stimulation on cochlear implant users' language development over four years. *The Journal of Pediatrics, 162*, 343–348, e3.
21. Robbins, A. M., Green, J. E., & Waltzman, S. B. (2004). Bilingual oral language proficiency in children with cochlear implants. *Archives of Otolaryngology—Head & Neck Surgery, 13*, 644–647.
22. Rowe, M. L. (2008). Child-directed speech: Relation to socioeconomic status, knowledge of child development and child vocabulary skill. *Journal of Child Language, 35*, 185–205.
23. Schachter, H. M., Clifford, T. J., Fitzpatrick, E., Eatmon, S., MacKay, M., Showler, A., . . . Moher, D. (2002). *A systematic review of interventions for hearing loss in children*. Unpublished document. Ontario, Canada: Health Canada.
24. Snow, C. E. (1972). Mothers' speech to children learning language. *Child Development, 43*, 549–565.
25. Tattersall, H., & Young, A. M. (2003). Exploring the impact on hearing children of having a deaf sibling. *Deafness & Education International, 5*, 108–122.
26. Tomasello, M., & Farrar, M. J. (1986). Joint attention and early language. *Child Development, 57*, 1454–1463.
27. VanDam, M., Ambrose, S. E., & Moeller, M. P. (2012). Quantity of parental language in the home environments of hard-of-hearing 2-year-olds. *Journal of Deaf Studies and Deaf Education, 17*, 402–420.
28. Yoshinaga-Itano, C. (2003). From screening to early identification and intervention: Discovering predictors to successful outcomes for children with significant hearing loss. *Journal of Deaf Studies and Deaf Education, 8*, 11–30.

Best Practice Principle

Provider and/or Program Behaviors

Principle 6: Use of Assistive Technologies and Supporting Means of Communication**Service providers**

Providers must be skilled in the tools, assistive devices, and mechanisms necessary to optimally support the child's language and communication development.

1. Use technical knowledge and skills to support families in managing all devices that promote children's language and communicative interactions. This includes hearing assistance technology (e.g., hearing aids, cochlear implants, frequency-modulated systems), visual technologies (e.g., texting, alerting devices, video relay), and alternative and augmentative communication. Develop family awareness of educational technology (e.g., interactive blackboard) and computer/web-based technologies that their child may access in the future.

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<p>Early intervention systems</p> <ol style="list-style-type: none"> 1. Strive to make all communication approaches accessible to families, which may require engaging in collaborative efforts among programs. 2. Actively support family choices regarding communicative approaches. 3. Use assessments in collaboration with families to determine when there may be a need for a change in or an enhancement to the chosen communication approach(es). 4. Offer communication approaches from providers with the highest level of knowledge and skill. For example: <ol style="list-style-type: none"> a. Indigenous sign languages are made available from native or fluent signers who are able to promote parental use of visual language to support the child's linguistic input and communicative development. b. Listening and spoken language services are made available from providers with high levels of specialized skills and knowledge, supporting the parents' ability to promote the child's auditory, linguistic, and communicative development.

Related Resources and Evidence Citations

1. AG Bell Academy for Listening and Spoken Language. Retrieved July 16, 2013, from <http://www.agbell.org/AGBellAcademy/>
2. Marge, D. K., & Marge, M. (2005). *Beyond newborn hearing screening: Meeting the educational and health care needs of infants and young children with hearing loss in America*. Report and recommendations of the 2004 National Consensus Conference on Effective Educational and Health Care Interventions for Infants and Young Children With Hearing Loss. Syracuse, NY: State University of New York, Upstate Medical University. Retrieved July 16, 2013, from http://www.upstate.edu/pmr/research/beyond_newborn.pdf
3. Moeller, M. P., Hoover, B., Peterson, B., & Stelmachowicz, P. G. (2009). Consistency of hearing aid use in infants with early-identified hearing loss. *American Journal of Audiology, 18*, 14–23.
4. Morford, J., & Mayberry, R. (2000). A reexamination of “early exposure” and its implications for language acquisition by eye. In C. Chamberlain, J. Morford, & R. Mayberry (Eds.), *Language acquisition by eye* (pp. 111–127). Mahwah, NJ: Erlbaum.
5. Napier, J., Leigh, G., & Nann, S. (2007). Teaching sign language to hearing parents of deaf children: An action research process. *Deafness & Education International, 9*, 83–100.
6. Schick, B., Williams, K., & Bolster, L. (1999). Skill levels of educational interpreters working in public schools. *Journal of Deaf Studies and Deaf Education, 4*, 144–155.
7. Joint Committee on Infant Hearing. (2013). Supplement to the JCIH 2007 position statement: Principles and guidelines for early intervention after confirmation that a child is deaf or hard of hearing. *Pediatrics, 131*, e1324–e1349. Retrieved July 16, 2013, from <http://pediatrics.aappublications.org/content/early/2013/03/18/peds.2013-0008.full.pdf+html>
8. Walker, E. A., Spratford, M., Moeller, M. P., Oleson, J., Ou, H., Roush, P., & Jacobs, S. (2013). Predictors of hearing aid use time in children with mild-to-severe hearing loss. *Language, Speech, and Hearing Services in Schools, 44*, 73–88.

Best Practice Principle	Provider and/or Program Behaviors
<p>Principle 7: Qualified Providers</p> <p>Providers are well trained and have specialized knowledge and skills related to working with children who are D/HH and their families. Providers possess the core competencies to support families in optimizing the child's development and child–family well-being.</p>	<p>Early intervention programs</p> <ol style="list-style-type: none"> 1. Identify the core knowledge and skills that are requisite for working with families whose children are D/HH. 2. Develop standards for what constitutes a quality provider and promote both provider assessment and ongoing training to ensure providers' knowledge and skills meet these standards. 3. Ensure that families have access to early intervention providers who have specialized knowledge and skills for working with families of infants and young children who are D/HH.

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<ol style="list-style-type: none"> 4. Provide continuing education for professionals in the form of training and resources needed to maintain currency in core specialized knowledge and skills for FCEI with families of children who are D/HH. 5. Ensure that providers are knowledgeable regarding specific intervention theory and methods and that they implement well-defined interventions based on these theories and methods. 6. Provide supervision, mentoring, and direct observation of practices and provide specific feedback on service-provider performance. 7. Provide access to competent and fluent language models for families who are in the process of learning sign language, which can be accomplished by involving individuals with fluent/native sign language skills and experience in teaching families/parents of infants. 8. Promote professional self-assessment and self-reflection.

Related Resources and Evidence Citations

1. Department of Education and Skills (UK). (2003). *Developing early intervention/support services for deaf children and their families: Executive summary*. (LEA/0068/2003). Retrieved July 16, 2013, from <http://www.ndcs.org.uk/document.rm?id=3746>
2. Jones, T. W., & Ewing, K. M. (2002). An analysis of teacher preparation in deaf education: Programs approved by the Council on Education of the Deaf. *American Annals of the Deaf*, 147, 71–78.
3. Rice, G.B., & Lenihan, S. (2005). Early intervention in auditory/oral deaf education: Parent and professional perspectives. *The Volta Review*, 105, 73–96.
4. Lichtert, G., & van Wieringen, A. (2010). Development of PAN-European competencies of teachers of the deaf through partnerships. Grant agreement Reference: 2009-LDV-PAR-P-407.
5. Marge, D. K., & Marge, M. (2005). *Beyond newborn hearing screening: Meeting the educational and health care needs of infants and young children with hearing loss in America*. Report and recommendations of the 2004 National Consensus Conference on Effective Educational and Health Care Interventions for Infants and Young Children With Hearing Loss. Syracuse, NY: State University of New York, Upstate Medical University. Retrieved July 16, 2013, from http://www.upstate.edu/pmr/research/beyond_newborn.pdf
6. Moeller, M. P., Hoover, B., Putman, C., Arbatitis, K., Bohnenkamp, G., Peterson, B., . . . , Stelmachowicz, P. G. (2007). Vocalizations of infants with hearing loss compared with infants with normal hearing: Part II—Transition to words. *Ear and Hearing*, 28, 628–642.
7. Nittrouer, S., & Burton, L. (2001). The role of early language experience in the development of speech perception and language processing abilities in children with hearing loss. *The Volta Review*, 103, 5–37.
8. Proctor, R., Niemeyer, J. A., & Compton, M. V. (2005). Training needs of early intervention personnel working with infants and toddlers who are deaf or hard of hearing. *The Volta Review*, 105, 113–128.
9. Stredler-Brown, A., & Arehart, K. (2000). Universal newborn hearing screening: Impact on early intervention services. *The Volta Review*, 100 (5), 85–117.

Best Practice Principle	Provider and/or Program Behaviors
<p>Principle 8: Collaborative Teamwork</p> <p>An optimal FCEI team focuses on the family and includes professionals with experience in promoting early development of children who are D/HH. Ongoing support is provided to families and children through transdisciplinary teamwork, whereby professionals with the requisite skills are matched to the needs of the child and family.</p>	<p>Early intervention teams</p> <ol style="list-style-type: none"> 1. Select members based on the unique needs of each family, regardless of professional discipline, and are transdisciplinary in composition and practice. 2. May include, but are not limited to professionals, parents/caregivers, early intervention providers with specialized knowledge and skills in early childhood, providers with knowledge and skills working with families of children who are D/HH (teachers of the D/HH, speech-language pathologists), otolaryngologists, audiologists, service coordinators, individuals who are D/HH (role models/mentors), sign language tutors, social workers/psychologists, and representatives of a family-to-family support network.

Continued

Best Practice Principle	Provider and/or Program Behaviors
	<ol style="list-style-type: none"> 3. May also include, depending on the needs of the child, a physical therapist, occupational therapist, primary care provider (PCP), medical subspecialty providers (e.g., psychiatrist, neurologist, developmental pediatrician), and/or educator with expertise in deaf/blindness. 4. Offer families opportunities for meaningful interactions with adults who are D/HH. <ol style="list-style-type: none"> a. D/HH adults can serve as role models, consultants, and/or mentors to families, offering information and resources and demonstrate enriching language experiences. b. Involve D/HH community members on the team in culturally and linguistically sensitive ways.
	<p>Early intervention team members</p>
	<ol style="list-style-type: none"> 1. Are skilled at working across agencies and across disciplines. 2. Include and consider families as equal team members. 3. Are comfortable with role release and are able to use a variety of consulting techniques. 4. Work as collaborators and clearly understand each agency's resources.
	<p>Early intervention programs</p>
	<ol style="list-style-type: none"> 1. Implement transdisciplinary team models and practices. 2. Achieve transdisciplinary teamwork either within their own programs or through effective collaborations with other professionals and programs. 3. Promote good collaboration and communication between providers and agencies/organizations, whether or not there are multiple disciplines involved; seek out the expertise of other providers/agencies if a child is not making optimal progress and/or a program is no longer meeting child/family needs. 4. Strive to provide access to international supports and promote international information sharing.

Related Resources and Evidence Citations

1. Department of Education and Skills (UK). (2003). *Developing early intervention/support services for deaf children and their families: Executive summary* (LEA/0068/2003). Retrieved July 16, 2013, from <http://www.ndcs.org.uk/document.rm?id=3746>
 2. Hill, P. (1993). The need for deaf adult role models in early intervention programs for deaf children. *Journal of Canadian Educators of the Hearing Impaired (ACEHI/ACEDA)*, 19, 14–20.
 3. Hintermair, M. (2000). Hearing impairment, social networks, and coping: The need for families with hearing-impaired children to relate to other parents and to hearing-impaired adults. *American Annals of the Deaf*, 145, 41–53.
 4. Rogers, K. D., & Young, A. M. (2011). Being a Deaf role model: Deaf people's experiences of working with families and deaf young people. *Deafness & Education International*, 13, 2–16.
 5. Rush, D. D., Shelden, M. L., & Hanft, B. E. (2003). Coaching families and colleagues: A process for collaboration in natural settings. *Infants and Young Children*, 16, 33–47.
 6. Sjoblad, S., Harrison, M., Roush, J., & McWilliam, R. A. (2001). Parents' reactions and recommendations after diagnosis and hearing aid fitting. *American Journal of Audiology*, 10, 24–31.
 7. Watkins, S., Pittman, P., & Walden, B. (1998). The deaf mentor experimental project for young children who are deaf and their families. *American Annals of the Deaf*, 143, 29–34.
-

Continued

Best Practice Principle	Provider and/or Program Behaviors
Principle 9: Progress Monitoring	Service providers work in partnership with families to
FCEI is guided by regular monitoring/assessment of child and family outcomes.	<ol style="list-style-type: none"> 1. Routinely and authentically evaluate individual child's development as well as family satisfaction, self-efficacy, and well-being. Rely on reflective practices, appropriate standardized measures, parent-report scales, authentic assessments, and informal procedures. Authentic assessments with emphasis on strength-based perspective are designed to capture real-life competencies in everyday routines and are helpful in documenting incremental improvements in developmental skills for the purpose of intervention planning. 2. Alter approaches or strategies as needed based on assessment information to enable the child to learn. 3. Use continuous assessment to individually design each specific intervention plan of action. 4. Based on assessment data, examine and reflect on practices, apply new skills, and problem solve challenging situations.
	Service providers
	<ol style="list-style-type: none"> 1. Based on a review of assessment data, promote family members' ability to reflect on their actions to determine effectiveness and develop a plan for refinement. 2. Regularly monitor developmental and family outcomes, using appropriate tools; modify interventions if needed to promote optimal outcomes. 3. Encourage families to evaluate the success of all intervention outcomes. 4. Base assessment practices on explicit developmental principles. 5. Are skilled in methods for conveying "sensitive" information to families.

Related Resources and Evidence Citations

1. Bagnatto, S. J., Neisworth, J. T., & Pretti-Frontczak, K. (2010). *LINKing authentic assessment & early childhood intervention: Best measures for best practices*. Baltimore, MD: Paul H. Brookes Publishing.
2. Bailey, D. B., Hebbeler, K., Spiker, D., Scarborough, A., Mallik, S., & Nelson, L. (2005). Thirty-six-month outcomes for families of children who have disabilities and participated in early intervention. *Pediatrics*, *116*, 1346–1352.
3. Bailey, D. B., McWilliam, R. A., Aytch-Darkes, L., Hebbeler, K., Simeonsson, R. J., Spiker, D., & Wagner, M. (1998). Family outcomes in early intervention: A framework for program evaluation and efficacy research. *Exceptional Children*, *64*, 313–328.
4. Bailey, D. B., Nelson, L., Hebbeler, K., & Spiker, D. (2007). Modeling the impact of formal and informal supports for young children with disabilities and their families. *Pediatrics*, *120*, e992–e1001.
5. Bailey, D. B., Raspa, M., & Fox, L. C. (2012). What is the future of family outcomes and family-centered services? *Topics in Early Childhood Special Education*, *31*, 216–223.
6. Bailey, D. B., Raspa, M., Olmsted, M. G., Novak, S. P., Sam, A. M., Humphreys, B. P., . . . & Guillen, C. (2011). Development and psychometric validation of the Family Outcomes Survey—Revised. *Journal of Early Intervention*, *33*, 6–23.
7. Department of Education and Skills (UK). (2003). *Developing early intervention/support services for deaf children and their families: Executive summary*. (LEA/0068/2003). Retrieved July 16, 2013, from <http://www.ndcs.org.uk/document.rm?id=3746>
8. Hafer, J. C., & Stredler-Brown, A. (2003). Family-centered developmental assessment. In B. Bodner-Johnson & M. Sass-Lehrer, M. (Eds.). *The young deaf or hard of hearing child: A family-centered approach to early education* (pp. 127–149). Baltimore, MD: Paul H. Brookes Publishing.

Continued

9. Hermans, D., Knoors, H., & Verhoeven, L. (2010). Assessment of sign language development: The case of deaf children in the Netherlands. *Journal of Deaf Studies and Deaf Education, 15*, 107–119.
10. Joint Committee on Infant Hearing. (2007). Year 2007 Position Statement: Principles and guidelines for early hearing detection and intervention programs. *Pediatrics, 120*, 898–921.
11. Keilty, B., LaRocco, D. J., & Casell, F. B. (2009). Early interventionists' reports of authentic assessment methods through focus group research. *Topics in Early Childhood Special Education, 28*, 244–256.
12. Niparko, J. K., Tobey, E. A., Thal, D. J., Eisenberg, L. S., Wang, N. Y., Quittner, A. L., Fink, N. E., & the CDaCI Investigative Team. (2010). Spoken language development in children following cochlear implantation. *JAMA, 303*, 1498–1506.
13. Raspa, M., Bailey, D. B. Jr., Olmsted, M. G., Nelson, R., Robinson, N., Simpson, M. E., . . . & Houts, R. (2010). Measuring family outcomes in early intervention: Findings from a large-scale assessment. *Exceptional Children, 76*, 496–510.
14. Rush, D. D., Shelden, M. L., & Raab, M. (2008). A framework for reflective questioning when using a coaching interaction style. *CASEtools, 4*, 1–7. Retrieved July 16, 2013, from <http://www.fipp.org/case/casetools.html>
15. Russ, S. A., Dougherty, D., & Jagadish, P. (2010). Accelerating evidence into practice for the benefit of children with early hearing loss. *Pediatrics, 126*(Suppl. 1), S7–S18.
16. Stredler-Brown, A., & Yoshinaga-Itano, C. (1994). F.A.M.I.L.Y. assessment: A multidisciplinary evaluation tool. In J. Roush & N. Matkin (Eds.), *Infants and toddlers with hearing loss* (pp. 45–49). Baltimore, MD: York Press.
17. Joint Committee on Infant Hearing. (2013). Supplement to the JCIH 2007 position statement: Principles and guidelines for early intervention after confirmation that a child is deaf or hard of hearing. *Pediatrics, 131*, e1324–e1349. Retrieved July 16, 2013, from <http://pediatrics.aappublications.org/content/early/2013/03/18/peds.2013-0008.full.pdf+html>
18. Young, A. (2010). Parental satisfaction, service quality & outcomes. In R. C. Seewald & J. M. Bamford (Eds.), *A sound foundation through early amplification: Proceedings of the 2010 International Conference* (pp. 297–306). Stafa, Switzerland: Phonak AG.

Best Practice Principle

Provider and/or Program Behaviors

Principle 10: Program Monitoring**Early intervention programs**

FCEI programs evaluate provider adherence to best practices and include quality assurance monitors for all program elements.

1. Use quality assurance measures to monitor program components.
2. Provide a means for ensuring/measuring that service providers, programs, and systems are aligned with the principles listed in this consensus document.
3. Include program-wide quality assurance measures, documenting child and family outcomes, knowledge and skills of the interventionists, and family benefit from services.
4. Include parent feedback mechanisms beyond satisfaction measures (e.g., convening focus groups, documentation of changes in knowledge and skill, and monitoring involvement and program components that foster it).
5. Use continuous assessment data and validate program practices through continual evaluation.

Related Resources and Evidence Citations

1. Bagatto, M. P., Moodie, S. T., Seewald, R. C., Bartlett, D. J., & Scollie, S. D. (2011). A critical review of audiological outcome measures for infants and children. *Trends in Amplification, 15*, 23–33.
2. Dumas, J. E., Lynch, A. M., Laughlin, J. E., Phillips-Smith, E., & Prinz, R. J. (2001). Promoting intervention fidelity: Conceptual issues, methods, and preliminary results from the early alliance prevention trial. *American Journal of Preventive Medicine, 20*(Suppl. 1), 38–47.
3. Kovalski, J. F., Gickling, E. E., Marrow, H., & Swank, P. R. (1999). High versus low implementation of instructional support teams: A case for maintaining program fidelity. *Remedial and Special Education, 20*, 170–183.
4. Marge, D. K., & Marge, M. (2005). Beyond newborn hearing screening: Meeting the educational and health care needs of infants and young children with hearing loss in America. Report and recommendations of the 2004 National Consensus Conference on Effective Educational and Health Care Interventions for Infants and Young Children With Hearing Loss. Syracuse, NY: State University of New York, Upstate Medical University. Retrieved July 16, 2013, from http://www.upstate.edu/pmr/research/beyond_newborn.pdf

Continued

5. McWilliam, R. A., Tocci, L., & Harbin, G. L. (1998). Family-centered services: Service providers' discourse and behavior. *Topics in Early Childhood Special Education, 18*, 206–221.
6. Roper, N., & Dunst, C. J. (2006). Early childhood intervention competency checklists. *CASEtools, 2*, 1–14. Retrieved July 16, 2013, from <http://www.fipp.org/case/casetools.html>
7. Rush, D. D., & Shelden, M. L. (2006). Coaching Practices Rating Scale for assessing adherence to evidence-based early childhood intervention practices. *CASEtools, 2*, 1–7. Retrieved July 16, 2013, from <http://www.fipp.org/case/casetools.html>
8. Russ, S. A., Dougherty, D., & Jagadish, P. (2010). Accelerating evidence into practice for the benefit of children with early hearing loss. *Pediatrics, 126*(Suppl. 1), S7–S18.
9. Sexton, J. D., Snyder, P., Lobman, M., Kimbrough, P., & Matthews, K. (1997). A team-based model to improve early intervention programs: Linking preservice and inservice. In P. J. Winton, J. McCollum, & C. Catlett (Eds.), *Reforming personnel preparation in early intervention: Issues, models, and practical strategies* (pp. 495–526). Baltimore, MD: Brookes.
10. Wilson, L. L., & Dunst, C. J. (2006). Checklist for assessing adherence to family-centered practices. *CASEtools, 1*, 1–6.
11. Young, A. M., Gascon-Ramos, M., Campbell, M., & Bamford, J. (2009). The design and validation of a parent-report questionnaire for assessing the characteristics and quality of early intervention over time. *Journal of Deaf Studies and Deaf Education, 14*, 422–435.

fundamental need to provide timely and equitable access to early intervention services. Principles 2–6 focus on the content (what we work on) and the processes (how we work with families) involved in implementing FCEI. Principles 7 and 8 describe the qualifications of providers and the critical importance of teamwork in serving children and families. The final two principles (9 and 10) address the need for assessment-driven practices, both to guide intervention with the child and family and to guide FCEI program-wide evolution. Each principle includes program and provider behaviors, along with supporting resources and evidence citations.

Call to Action

With these Principles in mind, this document may be implemented worldwide with this CALL TO ACTION:

1. Write a letter of endorsement from your agency, organization, or personal point of view for the

Principles Statement and send it to appropriate policy makers in the respective countries.

2. Share the Principles document with colleagues and leaders in your field.
3. Recruit parent leaders in your country to take their necessary part in the thought leadership related to FCEI.
4. Support research agendas through collaboration or examination of practices in your own country.
5. Embed these Principles in legislation, guidelines, consensus papers, and position papers regarding early intervention services and models.

Call to Action adapted from: Global Coalition of Parents of Children who are Deaf or Hard of Hearing (GPOD) Position Statement and Recommendations for Family Support in the Development of Newborn Hearing Screening Systems and Early Hearing Detection and Intervention Systems Worldwide (<http://www.gpodhh.org>).

Consensus Conference Participants/Contributors

Benedict, Beth	United States	Gallaudet University
Binder, Doris	Austria	Institute for Neurology of Senses and Language
Carr, Gwen	United Kingdom	Newborn Hearing Screening Programme
Cutler, Jodi	Italy	Affrontiamo la Sordità Insieme: Dai Genitori ai Genitori
DesGeorges, Janet	United States	Hands & Voices
Fellinger, Johannes	Austria	Institute for Neurology of Senses and Language, University of Vienna
Hintermair, Manfred	Germany	University of Education, Heidelberg
Holzinger, Daniel	Austria	Institute for Neurology of Senses and Language, Konventhospital Linz; Karl Franzens Universität Graz
Koroleva, Inna	Russia	Saint Petersburg State University
Lane, Susan	Canada	BC Early Hearing Program
McDonnell, Teresa	Ireland	Sharing the Journey
Moeller, Mary Pat	United States	Boys Town National Research Hospital
Müllegger-Trečkoiakaitė Daiva	Austria	Association of Parents and Friends of the Hearing-Impaired (Gemeinschaft Eltern und Freunde Hörgeschädigter).
Niparko, John	United States	University of Southern California
Pichler, Alexandra	Austria	Institute of Neurology of Senses and Language
Pittman, Paula	United States	Utah State University; Ski*Hi Institute
Porter, Ann	Australia	Aussie Deaf Kids
Seaver, Leeanne	United States	Hands & Voices
Storbeck, Claudine	South Africa	University of the Witwatersrand
Stredler-Brown, Arlene	United States	University of Colorado
Walker, Pauline	United Kingdom	National Deaf Children's Society
Windisch, Sabine	Austria	Institute of Neurology of Senses and Language
Yoshinaga-Itano, Christie	United States	University of Colorado
Young, Alys	United Kingdom	University of Manchester

Conflicts of Interest

No conflicts of interest were reported.

Acknowledgments

The authors thank Dr. Sophie Ambrose for her input on drafts of this manuscript.