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Foundation for Analysis of Early Childhood Intervention for Hearing Loss: Birth to Three

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Foundation for Analysis of Early Childhood Intervention for Hearing Loss: Birth to Three

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Honors Research Project

Submitted to

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Abstract

The purpose of this study is to create a foundation for the analysis of early intervention programs for children with hearing loss ages birth to three. By providing a guide into intervention currently available in the state of Ohio following the public law requirements, parents of children with hearing loss will be better informed and more capable of providing tools to help their children excel. This paper will simplify the language of Ohio public laws regarding services for hearing impaired individuals, explain the benefits of early intervention, and present information on how to locate resources in each county. The paper will conclude with a request to bring more services that are easily accessible for the families and assurance that the tools will be given to ensure the success of improving the quality of life of these children. It will also serve as a platform for other researchers to build upon for future research projects on the topic.

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Introduction

Chapter 1

In a world where communication is readily available, today's society has lost the art of effective communication. Advancements have been made in interaction and communication in written electronic form while at the same time losing sight of the true importance of meaningful communication. This communication is even harder for those who struggle with some sort of impairment. Daily interactions in a personal face to face manner define relational and social interactions that can define one's ability to thrive (Constantinescu et al., 2015). Therefore, it is crucial that interactional and communication skills are learned and developed at a very young age to foster future communication abilities. According to the Joint Committee on Infant Hearing (JCIH), hearing-impaired children are more likely to have deficits in communication, cognition, reading and social-emotional development unless they are given the proper chances to learn languages in a way they can comprehend (Year 2007 Position Statement, 2007). Hearing loss can severely hinder one's ability to develop these necessary skills. The providing of a screening exam to detect hearing loss at birth and then follow up with necessary intervention is a state-mandated law. Efforts are made to provide interventions to families with hearing-impaired children, but often there are barriers that the family faces before the law-mandated interventions are provided. In a research article by The Commonwealth Fund, "...despite the clear benefits of early intervention, up to 90 percent of eligible children never receive these services" (Jimenez et al., p.1, 2013). It goes on to explain that this is due in large part to difficulties in contacting early intervention providers as well as communication problems between the families and pediatricians to set up the interventions. This also includes the failure to fully explain the referral process on the side of the intervention specialist.

Despite many advancements as a society, very little has been done in the way of research regarding available programs to help and guide families who find themselves raising a hearing-impaired child in a world in which everyday communication is done through sound. The situation is that sometimes other disabilities take precedence over hearing loss and this may cause less funding for programs and services that provide therapy and counseling to these individuals and their families. The author of this project researched the available resources for information on early intervention. These programs focused mainly on what is available in Northeast Ohio serving the Portage County area, such as The Ohio Department of Disabilities, Help Me Grow, the local Health department and The Children with Medical Handicaps Program (BCMh). The representatives that responded to the calls stated that any information being sought could be found online and that one should follow the links.

Intervention is crucial to help foster the necessary tools for the families and is the key toward helping improve the quality of life for children with hearing deficits. There are many different methods and means of intervention such as in house therapy, Audiology or hearing services and counseling for the family. (Overview of Early Intervention, 2014). The resources currently available need to be made more readily accessible, and more services need to be offered to help maximize the potential for language and social development. The benefits of early intervention to optimize the crucial stage of neuroplasticity of the developing brain have numerous positive effects in any child with a hearing loss. “Hearing loss in babies has been called a “neurodevelopmental emergency.” This is because there is an optimal time in a baby’s brain development for important, meaningful auditory neural connections to form – and that time is during the first three years of life (especially the first year)” (Anderson, 2011).

According to the Hearing Health Foundation, not only is hearing loss the second most prevalent health issue around the world, but “the number of people with hearing loss is more than those living with Parkinson’s, epilepsy, Alzheimer’s and diabetes combined” (Hearing Loss & Tinnitus Statistics, 2017). This most certainly is an issue that cannot go unnoticed and the more society is educated on the importance and positive aspects of early intervention, the more humanity as a whole will greatly benefit.

Many parents are extremely concerned for the well being of their children. All parents want the best for their children and are concerned with their offspring’s well-being and happiness as put by the The Glendon Association in their article “About Parent-Child Relationships.” Therefore, it is a major positive that early intervention is available in every state and territory of the United States due to The Individuals with Disabilities Education Act (IDEA). This law has made it possible for everyone to be afforded the opportunities of proper care and intervention no matter where the families reside. It also allows mainstreaming in regular classes if accommodations to the disability are made. So, it allows the child to be in a regular public school setting if they are able to tolerate the work load with their accommodations, in this case with hearing aids or someone helping them. It guarantees that children will have an appropriate education in a public school in the least restrictive environment possible for their disability. For some people, this means working in the special education room, while for others it means just having something to help them in a regular class. No child will ever have to be relocated away from family and friends in order to receive the care they deserve. Outlined in Part C of IDEA, it states that these children with hearing loss will receive the intervention that they need to succeed in life:

“IDEA was originally enacted by Congress in 1975 to ensure that children with disabilities have the opportunity to receive a free appropriate public education, just

like other children. The law has been revised many times over the years” (Overview of Early Intervention, 2014).

This law has laid the groundwork and foundation for intervention as it is known today, which will be described in more detail later in this paper. It is a step toward correct care, but healthcare workers and legislators must continue to expand and further their knowledge in order to better respond to those children with a hearing loss.

Chapter 2

Early Childhood Intervention

What is early intervention?

In the case of good parenting, one would hope that the goal is to help create an environment for the child to grow and learn to the best of their ability. However, this is made more difficult if there is a disability involved. Each disability is unique to the individual child, and all disabilities need to be individually assessed and monitored in order to be correctly treated. This is where intervention comes into play: ensuring that the appropriate therapy can be implemented and the possibility for that child to reach maximum quality of life according to their own personal needs and abilities is increased.

According to Center for Parent Information and Resources, the exact definition for early childhood intervention is as follows:

“Early intervention is a system of services that helps babies and toddlers with developmental delays or disabilities. Early intervention focuses on helping eligible babies and toddlers learn the basic and brand-new skills that typically develop during the first three years of life” (Overview of Early Intervention, 2014).

There are several skills that are essential to a child’s development and the same article goes on to explain the five major aspects, starting with the physical aspect that includes movement such as reaching, rolling, crawling, and walking. This is followed by cognitive skills such as learning and problem solving and self-help which involves being able to take care of one’s self such as eating and dressing. Communication skills are very vital as it has to do with not only talking and listening, but actually understand what the meaning behind what they are hearing. Finally, being social and having healthy emotional skills such as feeling secure and happy is a major part in being able to attain a high quality of life. (Overview of Early Intervention, 2014). As this shows, it is very crucial that early intervention be put in place to

help these children achieve the typical developmental skills required for daily living, as these skills are the foundation for further learning. They can be considered the stepping stones onto the next learning period of the child's life. Each family dynamic is unique, and the services that are provided need to assist the family in meeting what they consider their priorities, all while respecting cultural and personal values of the family. The goal of every therapist is not to be the sole teacher, but rather to teach the parents how to assist their child by implementing the tools provided. In the article "Overview of Early Intervention," the author states that services based toward family education are meant to teach the members of the family how to "understand the special needs of their child and how to enhance his or her development" (2014). Not every child will be able to hit the same developmental milestones at the same time, but early intervention helps them reach their maximum potential and then maintain this maximum level while moving onto the next goal.

Though there are many disabilities, this project's focus on children age birth to three years with a hearing disability aims to educate and build a foundation for further study. How does this intervention for a child with hearing loss look? According to Walker, Spratford, Ambrose, Holte, and Oleson (2017):

"The Joint Committee on Infant Hearing recommends the "1-3-6" benchmarks: hearing screening by 1 month of age, confirmation of hearing loss (HL) by 3 months of age, hearing aid (HA) fitting within 1 month of confirmation of HL, and entry into early intervention by 6 months of age (JCIH, 2007)" (Walker et al., 2017).

The benchmarks are points at which the child should have already seen crucial developmental potential. Children with HL can be considered behind by developmental standards.

Another danger to the child's development is if they have a mild or slight hearing loss. For less severe HL cases, the sense of urgency for invention may not be present and

proper steps to reach the benchmarks are lax. Though the therapist is a mediator, the parent is the advocate to getting proper intervention for the child's benefit. If they are unaware of the importance of this and how the hearing loss is affecting their child, the outcome could be a debate on whether or not the child should even be enrolled into early intervention. On the other hand, if the enrollment process is completed but the child's consistent use of proper amplification through a hearing device is not strongly reinforced by the parents, it can have adverse effects. (Walker et al., 2017). In the same article, it was mentioned that one of the families in the study reported services were not recommended because the child was "higher functioning" (Walker et al., 2017). Even the slightest hearing loss should receive early intervention to ensure the child is developmentally on track and able to reach essential milestones in their life.

Who benefits from early intervention?

As stated above, there are many benefits to early intervention. However, who exactly is the beneficiary and how does that qualify this specific topic for further study and promotion? The first and possibly most important category of those who benefit is the children themselves. As mentioned above, early intervention helps to set the foundation for the learning and development of lifelong skills to being a successful member of society by reaching developmental milestones. The sooner the child is involved, the better the chance of their full developmental potential being reached. One of the many prominent principles of early intervention is that it capitalizes on the crucial early plasticity of cognitive development. The focus of early intervention during this period is to reduce the likelihood of experiencing multiple language and learning delays (Walker et al., 2017). These findings have been affirmed through research to show improved overall social and academic skills in relation to typical hearing children. Constantinescu, Phillips, Davis, Dornan, and Hogan (2015) on page 154 provided an example of a research study in the following:

“Studies in the last decade have provided an evidence base for listening and spoken language early intervention, establishing it as a successful approach for young children with hearing loss. Specifically, it has been demonstrated that children who participated in this early intervention attained speech, language, vocabulary, self-esteem, mathematics and reading skills on par with peers with typical hearing”.

In addition to benefits in developmental aspects, the child also sees a positive outcome from a healthy relationship between the family and intervention specialist. The more the family repeats techniques and resources used in intervention, the greater the chance of the child emulating lessons learned into their daily routine. The Joint Committee on Infant Hearing (JCIH) goes on to say that, as time progresses, the child involved with the early intervention benefits greatly from the model provided between their family and the intervention specialist; being able to witness and experience the positive aspects of this relationship that advocates for their rights in all settings helps to foster independence and self-advocacy (Year 2007 Position Statement, 2007). The family can build a stronger bond with their child while encouraging them to utilize and adopt practices and techniques for developmental growth. Therefore, benefits can be seen not only through the child, but the family and intervention specialist as to what methods have produced results for the child’s individual needs.

Who qualifies for early intervention?

Finding good quality intervention is a challenge in itself but finding out who qualifies for benefits and how much they receive is another hurdle all together. The first step is for the infant to be administered a hearing screening to determine if there is a loss of hearing. This is found in the position statement of the Joint Committee on Infant Hearing stating that “To maximize the outcome for infants who are deaf or hard of hearing, the hearing of all infants should be screened at no later than 1 month of age” (Year 2007

Position Statement, p. 1, 2007). This screening is typically given on the second day of the child's birth, before the parent and child are released from the hospital. If a hearing loss is detected, a referral to an Audiologist is made to run more tests to find out the severity of the diagnosis. After the doctor writes up an evaluation of the findings, the process begins for applying for intervention services.

After the screening is run and a hearing loss found, JCIH mandates that, no matter the degree, any form of permanent hearing loss should make the child eligible for early intervention services (Year 2007 Position Statement, 2007). It is very important that every child receive the screening so as to detect any hearing loss. Even at just a day old, a hearing screening is possible and "All infants should have access to hearing screening using a physiologic measure at no later than 1 month of age" (Year 2007 Position Statement, 2007). Once a child is diagnosed, they become eligible to receive the early intervention services from birth until their third birthday. Some rare cases require the early intervention to be received past the third birthday, but only if regular intervention has not produced a noticeable change in ability. In some cases, it is known from the moment of birth that a child will require early intervention services in order for the essential developmental aspects to be reached. This would be for children who are diagnosed at birth with a specific condition. An example of this could be for those born with an illness, had a low birth weight, or had required surgery. This instance would normally mean that the parents would be given a referral for a local intervention specialist before leaving the hospital.

While a hearing loss can be detected before the newborn leaves the hospital, other instances may not be caught until a few months later. Some children may experience setbacks and delays in hearing as they develop, which can make it difficult to understand on a cognitive level what is occurring. The Center for Parent Information and Resources states that "For these children, a visit with a developmental pediatrician and a thorough

evaluation may lead to an early intervention referral” (Overview of Early Intervention, 2014). The article goes on to encourage parents that they do not have to wait for a referral to begin early intervention. If the parent is concerned in any way about the development of the child, local programs should be contacted and an evaluation requested. This is all in the hopes that the child will be able to thrive and grow as best they can no matter the hearing loss. It also encourages parents to be proactive in the development of their children.

Who pays for early intervention?

Many parents question the affordability of interventions that their child desperately needs. This is a legitimate concern for families as costs of medical expenses in the United States have continued to increase in recent years. The IDEA is the federal law that requires schools to serve the educational needs of eligible students with disabilities. However, each state has the right to decide and distribute the necessary funding for these programs so that they are in accordance with the federal law. One of the first steps in IDEA is that the state of Ohio looks to the local education agency to take into account the number of children that are in need of services within the system. Then, a means to fund each fiscal year within that local educational agency is put in place in order to meet the requirements under the sub clause of Ohio law thereby establishing an annual method by which that educational agency makes the distributions from the high cost fund during that fiscal year (IDEA, 2004). In other words, depending on the income of the family, the families could possibly count on being free of charge under IDEA part C. Specifically services such as “Child Find services; evaluations and assessments; the development and review of the IFSP [Individual Family Service Plan]; and service coordination” (Overview of Early Intervention 2014). An individual family service plan is a plan for special services in early intervention for young children with developmental delays. However, it only applies to children from birth to three years old. After a child turns three years old, an Individualized Education Program

(IEP) is put into place and is normally written by the educational system in which the child is enrolled. Each state has its own rules and regulations regarding on how payment for these services will be obtained. Some states may require families to pay for certain services through their medical insurance while other states cover these costs. “Each state has established its own rules and guidelines for Individuals with Disabilities Education Act qualification” (Getting Help Through The Individuals, p. 1, 2017). The level of assistance a family receives is typically based upon the family’s income is per year. When applying for Part C of IDEA, it is required that the family grants permission to access insurance in order to determine on how much funding will be granted for the early intervention services .

Services cannot be denied to a child with hearing loss just because the family is unable to pay. The state is responsible to make every effort to be able to ensure that the child is provided the services needed: “(C) Ratable reductions.--If the amount available for allocations under this paragraph is insufficient to pay those allocations in full, those allocations shall be ratably reduced, subject to subparagraph (B)(i)” (IDEA, SEC. 611, 2004). Families can find hope in the fact that, once every avenue has been exhausted to pay for the services, their state is required to ensure services continue to be administered.

Chapter 3

Laws/Organizations

Individuals with Disabilities Education Act 2004

It is impossible to be able to navigate the system of early intervention without understanding how the laws and organizations work. It is crucial to help families understand current legislature and organizations, work with what is available, and to go through the intervention process with as little stress as possible. The terms that have been used thus far involved with early intervention come from laws of the United States, namely the IDEA that allows implementation and early intervention with all disabilities. The IDEA helps to guide how early interventions and special education are provided to children with any disabilities from birth to age twenty-one.

The IDEA was created in 1986 to further the development of young children with a disability while, at the same time, minimizing the possibility for delay in developmental aspects. It is hoped that assisting in development of young children with disabilities would reduce educational cost as the child enters the school system. IDEA parts B and C pertain to this topic. Part C specifies early intervention for infants aged birth to three that require intervention for a developmental delay (IDEA, 2004). It was made to create a foundation and standard for each state to build upon within the education, health and human resources services, but it was never meant to be a stand-alone program. Each individual state then takes IDEA and develops their own policies based on the standard requirements. In most instances, the state goes beyond the federal requirements because much is left up to the state's discretion based on what specific needs are present. In the same regard, the state cannot be inconsistent with what is mandated by IDEA, and states will be audited if indiscretions arise.

Each state has, according to federal law, the responsibility to set up a supervision system to monitor what has been implemented by the Individuals with Disabilities Education Improvement Act (IDEA) of 2004 through the local education agencies (LEAs). This ensures that the state is accountable to continuously be improving and following the guidelines laid out by the law (Ohio's System of General Supervision, 2011). This is meant not to police the system but rather be a guide to always be able to provide relevant and effective intervention. Therefore, the state of Ohio has broken their responsibilities up to ensure compliance in accordance with Federal Law. It is broken down is in eight manageable components of supervision that are created to help "a) ensure compliance with federal and state regulations and b) improve services and results for students with disabilities" (Ohio's System of General Supervision, p. 3, 2011). Within the state of Ohio, the regions are broken down into support teams and each region is responsible for their area. They represent the school districts within the designated geographical regions. The following is House Bill 115 that calls for this support system to make sure that the student achievement is reached without hindering other school programs.

"The Educational Regional Services System (ERSS)...establishes the Educational Regional Service System (ERSS) and requires the creation of a coordinated, integrated and aligned system to support state and school district efforts to improve school effectiveness and student achievement. It is the intent of the general assembly that the educational regional service system would reduce the unnecessary duplication of programs and services and provide for a more streamlined and efficient delivery of educational services without reducing the availability of the services needed by school districts and schools." (State Support Team 5, p. 1, 2017).

A map of the regions in Ohio can be found in Appendix A and contains the regions in which counties belong to so that families can find out who is in charge of their county. The Regional State Support Team Mission is “to provide regional districts with Leadership, Technical Assistance, and High Quality Professional Development in the service areas of School Improvement, Literacy, Early Learning & School Readiness, and Special Education Compliance” (State Support Team 5, p. 1, 2017).

Early Hearing Detection and Intervention 2007/ Joint Commission of Infant Hearing

“The Joint Committee on Infant Hearing (JCIH) endorses early detection of and intervention for infants with hearing loss. The goal of Early Hearing Detection and Intervention (EHDI) is to “maximize linguistic competence and literacy development for children who are deaf or hard of hearing” (Year 2007 Position Statement, p. 1, 2007). These two laws work interchangeably together and are best explained this way. They are both prevalent to parents with a hearing-impaired child. The Early Hearing Detection and Intervention, or EHDI, refers to the screening test that is required for every newborn determine whether or not there is a hearing loss before being discharged from the hospital. For the infants who do not pass the screening, a diagnosis and another evaluation are given before the child’s three-month checkup. If it is determined that intervention is needed, the infant is enrolled in early intervention before they are six months of age. This is federal law in all fifty states and is a part of The Joint Committee on Infant Hearing (JCIH) regulations that are currently in place. The JCIH recommends the “1-3-6” benchmarks as mentioned before regarding infant wellness visits. Children who have hearing loss of any kind are entitled to EHDI to maximize their competence and development (Early Hearing Detection and Intervention, 2017). Since the time that the JCIH has been used, an enormous amount of advancements have been made and the United States has witnessed a significant increase in the hearing screening of infants. Working together with professional

organizations such as hospitals and medical homes has created better technology for this cause (ex. hearing amplification devices) and breakthroughs in early intervention. (Year 2007 Position Statement, 2007). There is a checklist in Appendix B that can be used to determine how well EHDI programs are meeting the JCHI standards. This helps to make sure that everyone is following the guidelines and to ensure the most benefit in these programs.

Benefits of Early Intervention

Early intervention not only helps to improve the development of a child but enhances their outlook on life and gives them the tools to achieve their goals, as well. It also provides the assistance and support system for families of children with hearing loss and acts as an advocate in the educational system. This creates the foundation for the child to improve the skills he or she has and helps them find greater opportunities to continue to grow and learn. Constantinescu et al. (2015) provide proof in this by stating that social inclusion has been labeled by early intervention providers as the main outcome of early intervention. This outcome has been noted in policy documents from the Council of Australian Governments, 2009; and the United Nations, 2006. This goal of social inclusion has a very important impact on the individual's life in areas such as their mental health and economic participation.

When people within a society feel valued and important, that culture flourishes with a higher quality of living. The powerful knowledge that can build civilizations all starts with the individual and what he or she strives for. The infant with a hearing loss that receives early intervention finds it easier to conquer daily activities, making living less stressful and creating a feeling of belonging. As social beings, we desire to be in connection with one another and as a part of a whole community.

“Because as humans, we need to belong. To one another, to our friends and families, to our culture and country, to our world. Belonging is primal, fundamental to our sense of happiness and well-being. Belonging is a psychological lever that has broad consequences, writes Walton. Our interests, motivation, health and happiness are inextricably tied to the feeling that we belong to a greater community that may share common interests and aspirations” (Enayati, p. 1, 2012).

In the same article, Enayati goes on to state that, if someone is experiencing isolation and low social status that can harm their well-being, or even just a moment of feeling excluded, these individuals show a lower IQ performance as well as a lack of self-control. Even if the intervention is brief, the outcomes are lasting and increase the client’s health and happiness. Also, the article mentioned that “it (the intervention) also prevented them (the clients) from taking many daily adversities personally and interpreting them to mean that they didn't belong in general” (Enayati, p. 1, 2012).

How to Find Services in Your Area

When a family would consider finding an early intervention solution, more than likely they would first find themselves at the Ohio Department of Developmental Disabilities website. On this site, it has a tab dedicated to the early intervention of young children. Also found under this tab is a link to a website ohioearlyintervention.org where resources in the state can be found. The website breaks down by county where to find a person of contact to inquire about early intervention services. The website also has a link for state contacts regarding hearing disabilities and provides forms and documentation that may be required for services to be obtained.

Another online resource available to families is the Ohio Department of Health’s website. When searching for early intervention on the site, it provides a link for helpmegrow.org for further assistance. Once the family member reaches the redirected

site, they will find that it will then redirect them once more to the above mentioned ohioearlyintervention.org for a detailed look at early intervention services and how to obtain them. Another way they may utilize the website is to search the programs list to find one suitable for their child's needs. Upon review of the programs, they might find the link for The Children with Medical Handicaps Program (BCMh). The role of BCMh is to find payment options and funding for families for services as well as quality health professionals to assist in intervention. However, to qualify for BCMh, they have to be recommended by a licensed health professional that would be knowledgeable of services in the area.

Call to Action – Need More Services

Sometimes in life it is easy to take for granted the small things such as hearing the sound of a familiar voice or a musical note. In today's society, the pace is very fast and intense and it can be hard to slow down and take time to appreciate all this life has to offer. It is difficult to imagine a life without even one of these senses helping to interpret these experiences. Sound is used to enhance and support the other senses and, as a society, communication is focused on the written and spoken language. However, as shown above the lack of timely intervention can cause a significant hurdle in effective communication.

The earlier that the hearing loss can be detected and early intervention implemented, the more positive the developmental results will be. This better the chance to improve quality of life and help to integrate the child into the next step of life. Interacting in the world today is done primarily by verbal and written communication. Children in their first few years of life learn the necessary skills to communicate with those around them. This period of life is more crucial for their development than any other time due to critical neuro pathways being pruned away if not in use. It is for this reason that it is of the utmost importance to identify and begin intervention for those children who are

diagnosed with hearing loss as soon as possible. The sooner they can begin learning and interacting with those around them, the better their opportunity for an easier transition into society. However, this opportunity should not just be afforded to those who are wealthy or of privileged status. Rather, any child who has hearing loss should be afforded the opportunity to reach their full developmental and growth potential. The foundations laid by the existing laws and programs are a great start to intervention of these children with hearing loss. Despite the ground work that has been set for these children, more can and must be done. Evaluating the effectiveness of these programs that are in place and making sure they are properly funded is key to the success of the children who enroll in them. Every child is different along with the individual needs that they require. The programs utilized in these instances must be able to meet the needs of each child and family who takes part in them.

Conclusion

Overall, the main driving force of this study is to improve the quality of life of those with hearing loss by early, affordable, and effective intervention. It is imperative that the resources in place are used to their best capability and are constantly improved as new and better methods are discovered. Every day, there are more children being born who will experience hearing loss who may not have the quality of life they deserve had it not been for the intervention they receive. Early detection gives these children the tools they need to function in society at the highest capacity possible. The improvement of these programs and determining their validity will assist in future intervention methods and higher success rates of children who enter these programs. The children depend on these programs to lay the foundations upon which they function in society as well as the families who use the tools they are given to help improve their child's quality of life. Early intervention is all

about giving children the best chance to reach for their goals and aspirations through effective communication.

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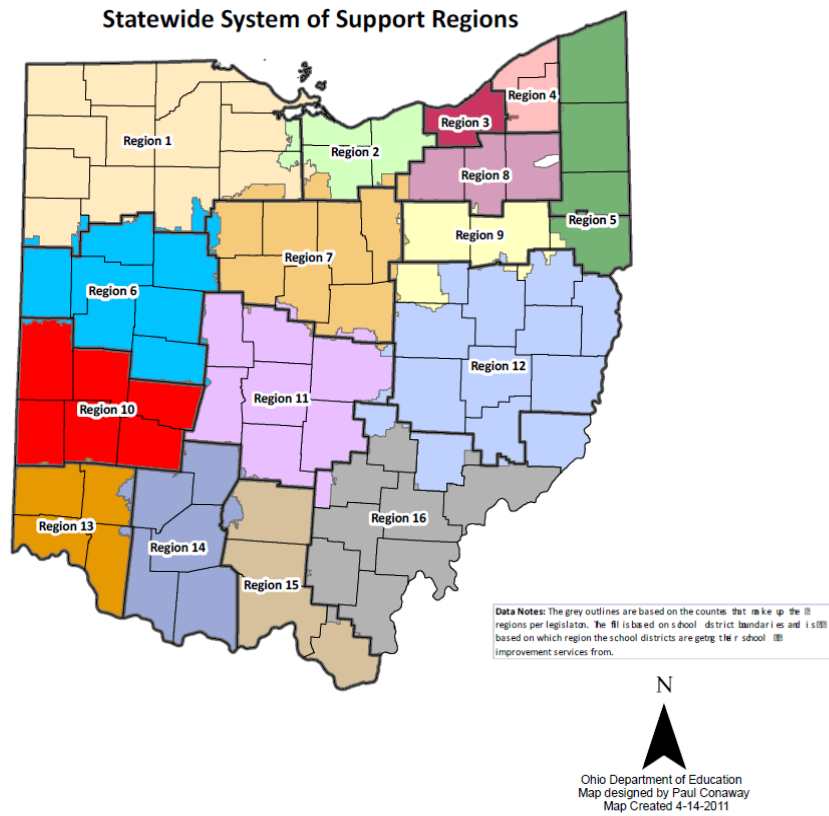
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Appendix A



Appendix B

Ohio’s State Support Teams

Resource from *Access Audiology* electronic newsletter

Vol. 6, No. 6, November-December 2007:

Early Hearing Detection and Intervention

<http://www.asha.org/members/aud/access-aud-online/AAUD1107>

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Early Hearing Detection and Intervention Program Checklist

This checklist may be used to determine how well EHDI programs are meeting the Joint Committee on Infant Hearing (JCIH) recommendations. The categories JCIH designated as having key updates in the 2007 Position Statement define the areas for examining existing programs. For each “No” answer, a review of that program component is suggested to determine the feasibility of modifying the current program to reach the recommended guidelines.

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1. Definition of targeted hearing loss							
<ul style="list-style-type: none"> • Does your program’s definition of hearing loss targeted for identification through your newborn hearing screening include congenital <ul style="list-style-type: none"> ○ sensory hearing loss that is unilateral or bilateral? ○ permanent conductive hearing loss that is unilateral or bilateral? ○ neural hearing loss that is unilateral or bilateral? 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No	Yes	No	Yes	No
Yes	No						
Yes	No						
Yes	No						
2. Hearing-screening and rescreening protocols							
<ul style="list-style-type: none"> • Does your program refer infants who do not pass AABR screenings in the NICU directly to an audiologist for rescreening? 	<table border="0"> <tr> <td>Yes</td> <td>No</td> </tr> </table>	Yes	No				
Yes	No						

<ul style="list-style-type: none"> • Are infants rescreened bilaterally upon referring the initial hearing screening even if only one ear fails the initial screening? 	Yes No
<ul style="list-style-type: none"> • When infants are readmitted in the first month of life when there are conditions associated with potential hearing loss (for instance, hyperbilirubinemia that requires exchange transfusion or culture-positive sepsis), is a repeat hearing screening performed before hospital discharge? 	Yes No
<ul style="list-style-type: none"> • Does your program have a mechanism to screen home births and other out-of-hospital births? 	Yes No
<ul style="list-style-type: none"> • Does your state have written collaborative agreements with border states for sharing hearing screening results and follow-up information? 	Yes No
<ul style="list-style-type: none"> • Does your program have a mechanism in place to contact families to arrange for a hearing screening for babies who are missed or otherwise discharged before a hearing screening has been performed? 	Yes No
<ul style="list-style-type: none"> • Does your program’s infant discharge summary contain information about hearing screening status for infants who are transferred? 	Yes No
3. Diagnostic audiology evaluation	
<ul style="list-style-type: none"> • Do you have a list of professionals in your area who provide <ul style="list-style-type: none"> ○ diagnostic services to infants and young children who are deaf or hard of hearing in your area? ○ sedated ABR testing? ○ unседated ABR testing? ○ amplification services? 	Yes No
<ul style="list-style-type: none"> • Do you know which of your referral sources accept Medicaid? 	Yes No
<ul style="list-style-type: none"> • Do you know which referral sources have interpreters available? 	Yes No
<ul style="list-style-type: none"> • Does your program provide ABR testing as part of the complete diagnostic hearing evaluation for children younger than 3 for confirmation of permanent hearing loss? 	Yes No
<ul style="list-style-type: none"> • Does your program recommend hearing reevaluations for infants with risk indicators based on their relative likelihood of a delayed-onset hearing loss? 	Yes No
<ul style="list-style-type: none"> • Who provides ongoing surveillance for infants and young children with risk indicators for late onset or progressive hearing loss? 	Yes No

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4. Medical evaluation	
<ul style="list-style-type: none"> • Do you have a list of referral sources in your area that provide <ul style="list-style-type: none"> ○ genetics consultations for infants and young children with hearing loss and their families? ○ otolaryngology services? ○ vision evaluations? 	Yes No
<ul style="list-style-type: none"> • Do you know which of your referral sources accept Medicaid? 	Yes No
<ul style="list-style-type: none"> • Do you know which of your referral sources have interpreters available? 	Yes No
<ul style="list-style-type: none"> • Are your medical referral sources aware of the single list of risk factors for congenital and acquired hearing loss? 	Yes No
5. Early intervention	
<ul style="list-style-type: none"> • Are all families of infants with any degree of bilateral or unilateral hearing loss eligible for early intervention services? 	Yes No
<ul style="list-style-type: none"> • Do you have a current list of professionals providing early intervention services appropriate for infants and young children who are deaf or hard of hearing and their families, including (but not limited to) audiologists, speech-language pathologists, and educators of the deaf? 	Yes No
<ul style="list-style-type: none"> • Does your program have access to a single point of entry for specialty services for infants and young children with hearing loss? 	Yes No
<ul style="list-style-type: none"> • Do your early intervention services provide both home-based and center-based options for families of infants and young children with hearing loss? 	Yes No
<ul style="list-style-type: none"> • Do your early intervention service providers ensure that infants and young children with hearing loss receive routine developmental assessments at 6 month intervals throughout the first 3 years of life? 	Yes No
6. Surveillance and screening in the medical home	
<ul style="list-style-type: none"> • Are the professionals providing the medical home for your infants familiar with the AAP pediatric periodicity schedule outlining regular surveillance of developmental milestones, auditory skills, parental concerns, and middle-ear status that should be performed in the medical home with validated assessment tools at 9, 18, and 24–30 months of age? 	Yes No

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<ul style="list-style-type: none"> • Are infants and young children who do not pass the speech-language portion of the global screening referred for speech-language evaluations and audiology assessments? 	Yes No
7. Communication	
<ul style="list-style-type: none"> • Does your program provide results of the initial hearing screening to parents and the infants' medical home? 	Yes No
<ul style="list-style-type: none"> • Are communications with parents confidential and presented in a caring and sensitive manner, preferably face-to-face? 	Yes No
<ul style="list-style-type: none"> • Are parents provided the appropriate follow-up and resource information when further screening or assessment is needed? 	Yes No
<ul style="list-style-type: none"> • Are materials that are disseminated to families providing accurate information at an appropriate reading level and in a language that they are able to comprehend? 	Yes No
<ul style="list-style-type: none"> • Does your program ensure that each infant is linked to a medical home? 	Yes No
<ul style="list-style-type: none"> • Is information at each stage of the EHDI process communicated to families in a culturally sensitive and understandable format? 	Yes No
<ul style="list-style-type: none"> • Is individual hearing screening information, diagnostic information, and habilitation information conveyed promptly to the medical home and to the state EHDI coordinator? 	Yes No
<ul style="list-style-type: none"> • Are families of infants and young children with confirmed permanent hearing loss provided information regarding all communication options and available hearing technologies in a complete and unbiased manner? Are informed family choices and desired family outcomes used to guide the decision-making process? 	Yes No
8. Information infrastructure	
<ul style="list-style-type: none"> • Has your state implemented data management and tracking systems as part of an integrated health information system to monitor the quality of EHDI services and to provide recommendations for improving systems of care? 	Yes No
<ul style="list-style-type: none"> • Is there an effective link between health care providers and educational service providers to ensure successful transitions and to determine outcomes of infants and young children with hearing loss for purposes of planning and establishing public health policy? 	Yes No