

2018

Version 2018.02

# Language Development Services Guidelines Ontario Infant Hearing Program



Ministry of Children and Youth  
Services

April 2018

## ACKNOWLEDGEMENTS

The Ontario Infant Hearing Program - Language Development Services Guidelines were developed in consultation with researchers, service providers, and representatives from the Ministries of Children and Youth Services (MCYS) and Education.

MCYS would like to thank the many professionals who have provided thoughtful input throughout the development of this document.

## CORRESPONDENCE

Vanessa Martin, MCISc, Aud (C), Reg. CASLPO

Program Consultant

Early Intervention Policy and Programs Unit

Strategic Policy and Planning Division

Ministry of Children and Youth Services

101 Bloor Street West, 3<sup>rd</sup> Floor

Toronto, ON

M5S 2Z7

Tel: 416-327-4872

Email: [Vanessa.Martin@ontario.ca](mailto:Vanessa.Martin@ontario.ca)

## CONTENTS

Acronyms in this Document.....	3
Introduction .....	4
Vision and Guiding Principles .....	9
The Language Development Pathway .....	11
Interprofessional Collaboration .....	122
Roles and Responsibilities of IHP Professionals .....	144
Oversight and Administrative Roles and Responsibilities.....	144
Service Provider Roles and Responsibilities .....	155
Operationalizing the Language Development Pathway .....	20
P1: Confirm permanent hearing loss .....	20
P2: Initiate medical consultations and community referrals as necessary .....	20
P3: Gather and share information about language development.....	21
P4: Identify the language development pathway .....	23
P5: Identify the child’s language development team.....	255
P6: Create a communication development plan .....	255
P7: Implement language development services .....	277
P8: Measure language development progress .....	277
P9: Re-assess, re-evaluate, and re-establish goals and objectives to school entry .....	31
Summary.....	32
References.....	33
Appendices .....	39
Appendix A: Glossary of Terms .....	39
Appendix B: Language Development for Children who are D/deaf or hard of hearing .....	42
Appendix C: Language Development Services Shared Decision Aid and Support Material for Professionals .....	44

## ACRONYMS IN THIS DOCUMENT

ASL	American Sign Language
CDP	Communication Development Plan
CSP	Coordinated Service Planning
DSB	District School Board
D/HH	D/deaf or hard of hearing
EHDI	Early Hearing Detection and Intervention
FSW	Family Support Worker
IHP	Infant Hearing Program
LSQ	Langue des signes québécoise
LDP	Language Development Pathway
MCYS	Ministry of Children and Youth Services
PDSB	Provincial and Demonstration Schools Branch
PHL	Permanent Hearing Loss
PSL	Preschool Speech and Language
RHPA	Regulated Health Professions Act, 1991
SLP	Speech-Language Pathologist

## INTRODUCTION

### PURPOSE AND APPLICATION

The purpose of the Language Development Services Guidelines is to describe and provide operational guidance for the delivery of language development services within the Ontario Infant Hearing Program (IHP), in order to support proactive and timely services for participating families. This document is for all professionals supporting language development services through the IHP. It is intended to formalize multidisciplinary teamwork, enable family-centred services, and facilitate knowledge of roles and responsibilities.

These Guidelines set out MCYS' expectations for the delivery of language development services across the province and aim to improve consistency of implementation across program regions. These Guidelines replace the Guidelines for Communication Development Services (2012) and the Framework for Language Development Services (2009).

Additional resources provided in this document include:

- A Glossary of Terms (See Appendix A);
- Language Development for Children who are D/deaf or hard of hearing, which provides supplementary information and research for service providers (See Appendix B); and
- A Language Development Services Shared Decision Aid with Accompanying Support Material for Professionals (See Appendix C).

This document should be used in conjunction with the IHP Language Development Services Guidelines - Questions & Answers as well as language development outcome tools. Other related IHP documents include the IHP Guidance Document and Protocols.

For the remainder of this document, “parent” or “family” will be used to refer to all caregivers of the child, which includes, but is not limited to grandparents, foster parents, and other legal guardians.

## HEALTHY CHILD DEVELOPMENT

Literature on developmental health trajectories demonstrates that early detection of risks and challenges, and timely support of children, youth and families, lay a critical foundation for healthy development and improve long-term outcomes across the lifespan (Halfon et al., 2014; Hertzman, 2010). These studies recognize the need for early identification, service delivery, and provision of resources and support for children showing signs of developmental concerns to eliminate or reduce the likelihood of poor developmental outcomes or minimize adverse childhood experiences. Optimizing development in this period can be accomplished by ensuring the child is exposed to developmentally enriching and enhancing environments (Baker, 2010). A delay in one or more domains of development (e.g., cognitive functions, speech functions, mobility) can have significant long-term effects on children's functional behaviour and skills (World Health Organization, 2013). There is also widespread scientific and clinical consensus that investments in optimizing early development pays off through upstream prevention of health problems, increasing social benefits, etc.

---

### MINISTRY OF CHILDREN AND YOUTH SERVICES HEALTHY CHILD DEVELOPMENT PROGRAMS

Identifying risks early in a child's life results in improved opportunities for success. MCYS provides funding for healthy child development programs to maximize the potential of children with a developmental concern and prepare them for success in school and in life. The majority of these programs support children and their families in the preschool years.

Healthy Child Development Programs are delivered by transfer payment agencies, which include Children's Treatment Centres, hospitals, public health units and community agencies. These programs provide screening, assessment and intervention services, and respond to risks to healthy development. The IHP is one of these programs, as well as the Healthy Babies Healthy Children Program, Infant Development Program, Blind-Low Vision Program, and the Preschool Speech and Language (PSL) Program.

Other MCYS programs include Coordinated Service Planning (CSP) through which families of children with multiple and/or complex special needs may receive support so that their children's services are coordinated and documented in a single plan, called a Coordinated Service Plan. For more information about CSP, see the *Interprofessional Collaboration* section. Through the integration of rehabilitation services, service providers are working together in new ways to reduce duplication and provide seamless, efficient, and effective rehabilitation services to improve the health outcomes for children and youth with special needs within a family-centred service system. These include communicating and collaborating within a broader, integrated, family-centred system, with early years service providers, child care service providers, educators, and a range of professionals/paraprofessionals serving children and youth within education, health, and community-based settings.

## OVERVIEW OF THE ONTARIO INFANT HEARING PROGRAM

The IHP is an evidence-based Early Hearing Detection and Intervention (EHDI) program that was implemented in 2001 to mitigate the impact of early childhood permanent hearing loss (PHL) on language development in young children.

The program aims to:

1. Screen all newborns, regardless of the presence of associated risk indicators for early PHL, to determine the need for further hearing assessment;
2. Identify babies with PHL using diagnostic techniques;
3. Provide intervention with technology (hearing devices), if appropriate and if the family chooses;
4. Provide language development and family support; and
5. Monitor and evaluate the impact of the intervention (Bagatto & Moodie, 2016).

These components are based on currently available evidence and on family-centred care principles (Joint Committee on Infant Hearing, 2007; Moeller et al., 2013; Muse et al., 2013). Families constitute the most influential environment for children, especially in the early years (Bagatto & Moodie, 2016). From the prenatal through early childhood period, parents shape their children's physical, emotional, and cognitive development. Tharpe and Dickinson (2011) state that before any intervention or management can be initiated, parents, caregivers, and professionals must all be aware of the value of early language development. Kuhl & Rivera-Gaxiola (2008) point to the importance of language input to early brain development. If families do not recognize that a risk of developmental, social, or academic problems exists, it is likely that efforts to provide services may not be as successful as they otherwise would be.

Timely, appropriate, and effective family-centred intervention supports language development (Tomblin et al., 2015). Families benefit when professionals understand the family's context, learn the factors that influence their decision-making, and then adapt their interactions in ways that best meet the needs of the family. Family-centred service recognizes that each child and family is unique; that the family is the constant in the child's life; and that the family has expertise in their child's abilities and needs (CanChild, n.d.). In recognizing that parents play a central role in the early identification of developmental concern, parents as the best observers of their children's development are best suited to raise concerns with professionals, thereby receiving information and resources that their children may require. Cairney et al. (2016) identify the need and importance of engaging parents in conversation about their child's development, not only to identify any developmental concern(s), but also to provide the appropriate information that is needed to support their child's development and address their concerns. In working with families, there is a need to develop a culture that is built on relationship, values the importance of parent reporting of developmental concern, and strives for capacity building of both parents and providers in child development.

One goal of an EHDI program is to support to the fullest extent possible, the linguistic competence and literacy development of children with PHL. Therefore, the IHP aims to support families so that children identified with PHL develop language, to the best of their ability, by the time they enter

school. Families are supported by service providers to provide a language-rich environment through their daily routines so that their child can acquire language (See Appendix A for more information about PHL). For the remainder of this document, children with PHL participating in the IHP will be referred to as D/deaf or hard of hearing (D/HH).

---

## IHP LANGUAGE DEVELOPMENT SERVICES

The IHP supports children who are D/HH to develop language, to the best of their ability, by the time they enter school. As an intervention program, the IHP funds language development services in either:

1. **Signed language:** which, for the purposes of the IHP is American Sign Language (ASL) or Langue des signes québécoise (LSQ) or
2. **Spoken language:** which, for the purposes of the IHP is English or French, or other languages, if available.

IHP service providers will be responsive to the unique, cultural needs of the communities they serve, including Indigenous communities. IHP service providers will also provide French language services to Francophone families as required by the French Language Services Act, 1990.

IHP services are not designed to support development of a child's bilingualism in spoken and signed language. If a family wishes for their child to also develop the second language (that has not been chosen as the primary language in the IHP), they will be directed to other community programs or online resources.

For some children with additional challenges (e.g. Autism, impaired vision) or other complex factors (e.g. delayed hearing aid fitting, uniquely challenging family circumstances), it may be unclear if the child will be best supported through the IHP using spoken or signed language. In these cases, the family, with the support of service providers, may decide to implement a temporary trial period using both signed and spoken language until a decision is made on the primary language pathway.

A child is eligible to receive language development services through the IHP until entry to school (as early as junior kindergarten entry or up to grade one entry). Children who are not enrolled in a publicly-funded school may continue to receive services through the IHP up until entry into grade one. At school entry, a child may be eligible for school-based services for students who are D/HH. The child's team will support a warm transfer<sup>1</sup> from IHP services to school-based services so that the transition is as seamless as possible.

---

<sup>1</sup> A "warm transfer" is a transition process in which one service provider does not end service until the next provider begins providing service so that there are no gaps in service delivery. A "warm transfer" will be such that service providers involved in the service transition will share information directly with one another and develop joint plans to review service plans, goals and progress as the child moves between these services.



Prior to school entry, if assessment indicates that a child is achieving age-appropriate (i.e. actual age) language development milestones, the child should be discharged from active language development services (e.g., ongoing language development services from a Speech-Language Pathologist or ASL/LSQ Consultant, regular team meetings). The IHP is moving toward monitoring all children using new outcome measurement tools, until school entry. See the IHP Language Development Services Guidelines Questions & Answers for more information.

Audiology services (e.g., hearing assessments, hearing aid management) are provided to children, through the IHP, until they are six years of age. In most IHP regions, Family Support Worker services are available for children and their families, until age six/grade one entry.

MCYS provides the IHP through its partnerships with transfer payment agencies across the province. Audiology and Family Support Worker services are provided through 12 Lead Agencies. Spoken language services that are initiated through the IHP are coordinated through the Lead Agencies (e.g., public health units, hospitals, and Children's Treatment Centres) and provided through the PSL Program. Silent Voice Canada is the ASL Service Provider Agency for the IHP province-wide and LSQ services are coordinated by the Eastern Ontario IHP (also a Lead Agency). Through these organizations, a number of multidisciplinary service providers (e.g., ASL/LSQ Consultants, Speech-Language Pathologists, Audiologists, Family Support Workers) collaborate with the family and with each other, to support the language development of the child. Three Designated Training Centres (Humber River Hospital, The Children's Hospital of Eastern Ontario, and Western University) support IHP Audiologists by providing professional expertise, evaluation, consultation, and other services. See the *Roles and Responsibilities* section, for more information about the various professionals supporting the child through the IHP.

## LANGUAGE DEVELOPMENT PATHWAY VISION AND GUIDING PRINCIPLES

The following Vision and Guiding Principles have been developed to establish a common understanding among IHP professionals of the expectations and goals for language development service delivery.

### VISION

- Children are supported to develop language to the best of their ability by the time they enter school, so that they are ready to learn.
- All children identified with PHL will have timely access to quality and evidence-based intervention that will support language development.
- Children and their families will receive services that are family-centred and reflect their unique needs and strengths. Services will be adapted based on changing circumstances and priorities of the child and family.
- Family members are key partners in contributing towards their child's success in developing language. Family members are actively engaged throughout the decision-making process, as members of the parent-professional partnership team. They identify their child's goals, participate in team meetings, and provide opportunities for their child to learn to use language at every opportunity within their natural family environment.
- Multidisciplinary service providers will collaborate to best support the needs of the child and family.
- Families will be supported in preparing for their child's transition to school (and other transitions, such as child care services) so they can make informed decisions about supports and services available to their child. The transition to school process will be coordinated and seamless, supported by a collaborative team of professionals.

## GUIDING PRINCIPLES

### **Child and family-centred services**

Families are the most important influences on the growth and development of their children. Families are actively engaged in language development goal setting and intervention planning. Services will be delivered in ways that acknowledge the family as the central decision maker for the child and best suited to raise child concerns. Informed choice is a key element.

### **Coordinated and collaborative**

Language development services will be integrated and coordinated with other services that a child may be receiving. Families will experience inter-professional partnership among the members of the child's team with mechanisms in place to support regular information sharing and collaboration.

### **Flexible and responsive**

Children and their families will receive timely and individualized language development services in accordance with their needs, strengths and goals. The approach to intervention will be guided by a Communication Development Plan, which is an individualized service plan that will be documented. The plan will be developed in partnership with the family. Services will be flexible, proactive, and continually responsive to the child's needs and strengths. The CDP will reflect service changes that may be required in response to a child's progress and evolving needs.

### **Outcomes-driven services**

Approach to service delivery is outcome driven and evidence-based. Service providers involved with the child and family are required to measure a child's language development progress, in collaboration with other members of the child's team. The team (which includes the family) will discuss potential changes to the child's plan if the child is not making progress. This will be documented in the Communication Development Plan.

### **Inclusive**

Families have the opportunity to access language development services that are inclusive, culturally sensitive, and responsive to their child's individual needs and strengths. Services will respect each family's individual needs and circumstances. Professionals will be knowledgeable about the ways in which social, linguistic, cultural, racial and ability differences are valued parts of our diverse society.

### **Service excellence**

Children and their families will be provided with quality language development services that are supported by best practices, based on evidence (where possible), and delivered by trained service providers.

## THE LANGUAGE DEVELOPMENT PATHWAY

### OVERVIEW

The IHP Language Development Pathway (LDP) is comprised of the nine steps summarized in the table below (Coutu et al., 2015). While the pathway intends to capture the process for providing language development services, the sequence of steps may not occur exactly as outlined below (e.g., some steps may be initiated or occur at the same time). The steps may not be sequential and are not intended to describe separate and/or different appointments. The table provides an overview of the service providers who may be supporting a child who is D/HH and their family, during each step in the process. It is not intended to be exhaustive of all professionals who may be working with a child and/or their family. IHP service providers may not be involved exactly as outlined below.

#	Step <i>Some steps may be initiated or occur at the same time</i>	Key IHP Professionals Who May Be Involved
P1	Confirm permanent hearing loss of the child	<ul style="list-style-type: none"> <li>• Audiologist</li> </ul>
P2	Initiate medical consultations and community referrals as necessary	<ul style="list-style-type: none"> <li>• Audiologist</li> <li>• Family Support Worker</li> </ul>
P3	Gather and share information about language development	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Audiologist</li> <li>• Family Support Worker</li> <li>• Speech-Language Pathologist</li> </ul>
P4	Identify the language development pathway	<ul style="list-style-type: none"> <li>• Audiologist</li> <li>• Family Support Worker</li> </ul>
P5	Identify the child's language development team	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Audiologist</li> <li>• Family Support Worker</li> <li>• Speech-Language Pathologist</li> </ul>
P6	Create a Communication Development Plan	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Audiologist</li> <li>• Family Support Worker</li> <li>• Speech-Language Pathologist</li> </ul>
P7	Implement language development services	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Speech-Language Pathologist</li> </ul>
P8	Measure language development progress	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Audiologist</li> <li>• Speech-Language Pathologist</li> </ul>
P9	Re-assess, re-evaluate, and re-establish goals and objectives to school entry	<ul style="list-style-type: none"> <li>• ASL/LSQ Consultant</li> <li>• Audiologist</li> <li>• Family Support Worker</li> <li>• Speech-Language Pathologist</li> </ul>

## INTERPROFESSIONAL COLLABORATION

A number of multidisciplinary professionals collaborate with the family and with each other, to support children who are D/HH to reach their full potential. Family members are a key part of the parent-professional partnership team.

As described in the *Overview of the Ontario Infant Hearing Program* section, children who are D/HH are eligible to receive services through the IHP as well as other publicly-funded programs. For example, children who are D/HH and their families may be receiving preschool services from the Ministry of Education's Provincial and Demonstration Schools Branch (PDSB) Preschool Home Visiting Program or through local District School Boards.

Professionals will collaborate towards a seamless provision of services for children and their families. For example, service providers will develop local processes to support a "warm transfer" of services between providers so that there are no gaps in service delivery.

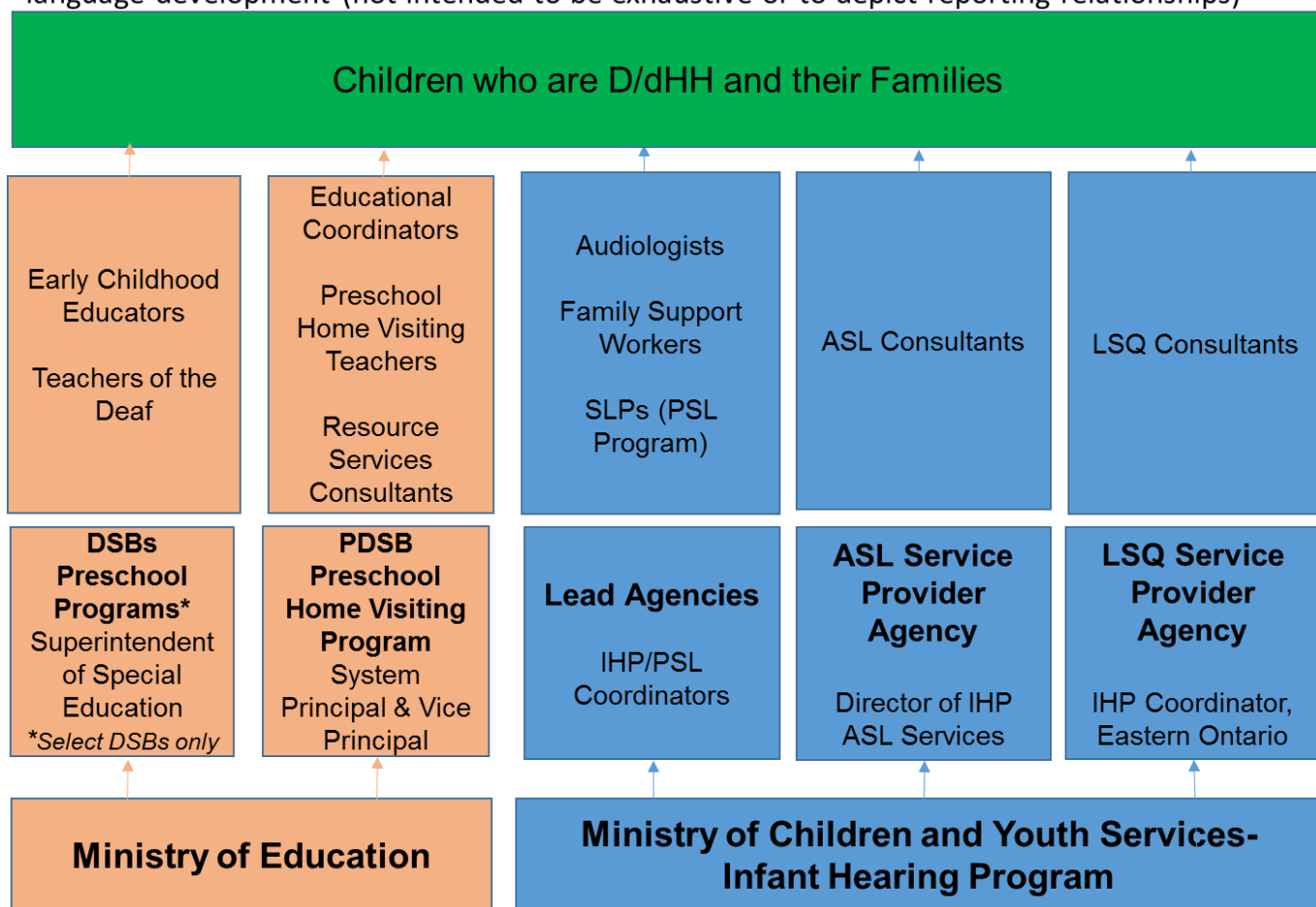
Professionals serving children and youth with multiple and/or complex special needs are expected to collaborate as part of a Coordinated Service Planning team when the child or youth is receiving CSP services and their family requests the participation of the professional.

The overall target population for Coordinated Service Planning is families of children and youth with multiple and/or complex special needs whose need for service coordination goes beyond the scope of interprofessional collaboration to address and who would benefit from the added support provided by Coordinated Service Planning. This could be due to the breadth and cross-sectoral nature of a child/youth's service needs and/or potential challenges in coordinating services because of factors affecting the whole family.

IHP service providers may be requested by families to participate in their child's CSP team, including participating in CSP meetings and working towards common goals set in the Coordinated Service Plan. With appropriate consent from the family, CSP team members will communicate with each other, and the Service Planning Coordinator, in an effort to ensure they are integrating practice and service delivery for children, youth and families.

For more information on Coordinated Service Planning, please refer to the Coordinated Service Planning Policy and Program Guidelines (MCYS, MCSS, EDU & MOHLTC, 2017).

Figure 1: Overview of professionals who **may** be supporting children and their families with language development (not intended to be exhaustive or to depict reporting relationships)



## ROLES AND RESPONSIBILITIES OF IHP PROFESSIONALS

The following section outlines the roles and responsibilities of professionals who may have either an oversight or service delivery role in the IHP. This is not an exhaustive list of all professionals who may be supporting a child and/or their family.

---

### OVERSIGHT AND ADMINISTRATIVE ROLES AND RESPONSIBILITIES

The Director of IHP ASL Services and 12 IHP Coordinators oversee the delivery of language development services. While they are not part of a child's team of IHP service providers and are not involved in clinical decision-making, they work closely with each other and with service providers (within and outside the IHP) in an administrative capacity, to ensure timely and proactive resolution of issues when they arise. For more information, see the roles and responsibilities of these individuals, below.

#### DIRECTOR OF IHP ASL SERVICES (Affiliation: MCYS- Infant Hearing Program)

---

The role of the Director of IHP ASL Services, in collaboration with the IHP Coordinators, (where applicable) is to:

- Represent the ASL Service Provider Agency as the accountable lead for delivering and reporting to MCYS on ASL language development services within all IHP regions;
- Facilitate integrated service system planning, within and outside the IHP, to ensure effective ASL language development service delivery within all IHP regions;
- Implement, adhere to, and monitor implementation of the IHP language development services policies to ensure consistent, quality service delivery;
- Communicate IHP's language development services policies to the ASL Service Provider Agency, other agencies and service providers, and families;
- Initiate the provision of ASL language development services, in collaboration with the IHP Coordinators as soon as possible, once a referral is received;
- Ensure that systems and processes are in place for the child's team to monitor, proactively address and resolve issues or concerns about a child's language development progress (e.g., occurrence of the child's team meetings every six months); and
- Ensure that systems and processes are in place to monitor that the families of children who are receiving both spoken and signed language development services during a trial period, are being supported to move toward a single language pathway in the IHP (For more information about the trial period, see Step P8).

Note: The roles and responsibilities above also apply to the IHP Coordinator in the Eastern Ontario Region who provides oversight for the delivery of LSQ language development services.

## INFANT HEARING PROGRAM COORDINATOR (Affiliation: MCYS- Infant Hearing Program)

---

The role of the IHP Coordinator, in collaboration with the Director of IHP ASL Services and PSL Coordinator, (where applicable) is to:

- Represent the Lead Agency as the accountable lead for delivering and reporting to MCYS on IHP language development services within the region;
- Facilitate integrated service system planning, within and outside the IHP, to ensure effective program delivery within the IHP region;
- Implement, adhere to, and monitor implementation of the IHP language development services policies and other IHP protocols to ensure consistent, quality service delivery;
- Communicate IHP's language development services policies to the Lead Agency, other agencies and service providers, and families in the IHP region;
- Initiate the provision of language development services, in collaboration with the Director of IHP ASL Services/PSL Coordinator, as soon as possible, once a referral is received;
- Ensure that systems and processes are in place within the IHP region for the child's team to monitor, proactively address and resolve issues or concerns about a child's language development progress (e.g., occurrence of the child's team meetings every six months); and
- Ensure that systems and processes are in place within the IHP region to monitor that the families of children who are receiving both spoken and signed language development services during a trial period, are being supported to move toward a single language pathway in the IHP (For more information about the trial period, see Step P8).

---

## SERVICE PROVIDER ROLES AND RESPONSIBILITIES

The section below outlines the service providers that support language development services for children in the IHP and their respective roles and responsibilities. In addition to the specific elements of their roles, all members of the child's team of service providers are expected to:

- Provide family-centred service by maintaining regular communication and information-sharing with the family and facilitating connections to other service providers;
- Participate in inter-professional collaboration to share information with other members of the child's team of service providers (within and outside the IHP);
- Communicate with other service providers on the child's team if there are concerns about the child's progress so that a team meeting can be coordinated to collaborate on a revised plan for the child; and
- Contribute to developing and updating the child's CDP based on the child's progress and changing needs.

Note: The role descriptions that follow are not intended to be exhaustive or prescriptive for all service providers.



## AMERICAN SIGN LANGUAGE (ASL)/ LANGUE DES SIGNES QUÉBÉCOISE (LSQ) CONSULTANT (Affiliation: MCYS- Infant Hearing Program)

---

ASL/LSQ Consultants are trained to support and provide sign language development services for children in the IHP. While ASL/LSQ Consultants do not teach ASL/LSQ to families, they support families with strategies for providing a language-rich environment for their child to develop ASL/LSQ. ASL/LSQ Consultants assess ASL/LSQ language functions, language development milestones, and help prevent language delays.

When a family chooses sign language development services for their child, the role of the ASL/LSQ Consultant is to:

- Conduct an initial assessment and develop a plan for services, based on the child and family's needs;
- Employ a variety of strategies to encourage language-rich environments through ASL/LSQ language development (e.g., language instruction, connect to resources in the local community, language/early literacy development through play, or others as appropriate);
- Assess the child's language development progress every six months, using at a minimum, MCYS-mandated outcome measurement tools;
- Coordinate CDP meetings (if identified by the team as the person to do so), in collaboration with other team members; and
- Participate in CDP meetings.

If there are concerns about a child's language development progress:

- Coordinate a team meeting to discuss the child's progress and a revised plan; and
- Coordinate with team members to implement the revised plan and continue to monitor the child's progress.

If there continue to be concerns about a child's language development progress after the child's team has made reasonable efforts to meet and implement coordinated strategies to try and address the concerns:

- Notify the Director of IHP ASL Services of the family's case so that he/she is aware of the concerns and can identify if there are other steps that the Director of IHP ASL Services can take to facilitate progress; and
- Ensure that the Director of IHP ASL Services is kept informed of the child's progress.

## AUDIOLOGIST (Affiliation: MCYS- Infant Hearing Program)

---

Audiologists who provide services for children in the IHP are regulated health care professionals under the Regulated Health Professions Act, 1991 (RHPA) who are trained to confirm the presence or absence of PHL as early as possible following universal newborn hearing screening. Audiologists assess auditory function, treat and prevent auditory dysfunction to develop, maintain, rehabilitate or augment auditory and communicative functions. Audiologists evaluate the need for and recommend assistive technologies to support the child's access to sound, if chosen by the family.

Following the confirmation of PHL, the role of the IHP Audiologist is to work with families to:

- Describe audiological testing and results, counsel, and explain the impact of the hearing loss on the child's speech and language development;
- Offer to connect the family with services from a Family Support Worker (FSW);
- Provide information about intervention strategies, which involves assistive technologies (e.g., hearing aids, cochlear implants, FM systems) and language development support (e.g., spoken or signed language development services);
- Prescribe, verify, and monitor the impact of assistive listening technologies provided to the child; and
- Connect the family to other IHP service providers and resources (e.g., other families of children who are D/HH who are receiving spoken or signed language development support, if available) to provide support and help guide decision-making about intervention choices.

Note: More than one session may be required for the family to gather the necessary information to understand their child's hearing level, its impact on their child's development, and how the intervention strategies may or may not impact the goals they have for their child.

Following the information gathering and sharing sessions, the role of the IHP Audiologist in collaboration with other professionals, is to:

- Support the family to make an informed decision about which language pathway will be supported through the IHP using the Language Development Services Shared Decision Aid and accompanying support material; and
- Provide services related to assistive technology (e.g., evaluation, prescription, verification, and monitoring).

Once a family chooses a language development pathway to be supported by the IHP (i.e. spoken or signed), the role of the IHP Audiologist is to:

- Communicate the language development service to the IHP Coordinator (or other lead agency representative, as applicable) in order for it to be initiated;
- Coordinate CDP meetings (if identified by the team as the person to do so), in collaboration with other team members; and
- Participate in CDP meetings, as necessary.

## FAMILY SUPPORT WORKER (Affiliation: MCYS- Infant Hearing Program)

---

Family Support Workers (FSW) who provide services to children in the IHP are regulated health care professionals (Registered Nurses) under the RHPA or regulated professionals (Registered Social Workers) under the Social Work and Social Service Work Act, 1998. FSWs are trained to assess and support families and provide counselling. When a family chooses to receive FSW services, the role of the FSW is to:

- Work with the child and family to assess their strengths, needs, supports, goals, circumstances, and priorities;
- Assist the family as they begin to adjust to their child's confirmation of PHL, and if appropriate, provide supportive counseling;
- Support the family's understanding of the information provided by the IHP Audiologist, including the child's hearing level and its impact on language development, and refer back to the IHP Audiologist for clarification, as appropriate;
- Help families understand the services provided under the IHP;
- Work collaboratively with the IHP Audiologist to share information and ensure consistent messaging is shared with families about the child's hearing level and intervention strategies;
- Support a family's decision-making related to their child's language development (e.g., facilitating connections with other parents of children who are D/HH, if available);
- Provide linkages to other professionals and organizations, based on the family's needs and goals for their child; (e.g., PDSB Preschool Home Visiting Program, play groups)
- Support the family in accessing resources (e.g., exploring funding options, locating child care);
- Coordinate CDP meetings (if identified by the team as the person to do so), in collaboration with other team members;
- Participate in CDP meetings;
- Work collaboratively with service providers (within and outside the IHP, for example with the Service Planning Coordinator for Coordinated Service Planning<sup>2</sup>) to develop a coordinated plan of support for the child and family that reflects an understanding of the family's unique situation (e.g., emotional state, finances, language, etc.); and
- Support families during transitions, in collaboration with other team members (e.g., to child care, to school).

The FSW will remain involved until the family decides that support is no longer needed. Re-involvement may occur at the request of the family, IHP Audiologist, and/or other IHP team members.

---

<sup>2</sup> Family Support Workers may refer families to Coordinated Service Planning (CSP) if they believe their needs are complex and beyond the scope of regular interprofessional collaboration. If the family is interested, and consent, their information should be shared with the Coordinating Agency for intake. Family Support Workers may be requested by families to participate in initial CSP goal setting meetings and to continue to be involved as a member of the child's Coordinated Service Planning team.

## SPEECH-LANGUAGE PATHOLOGIST (Affiliation: MCYS- Preschool Speech and Language Program)

---

Speech-Language Pathologists (SLP) that provide services for children in the IHP are regulated health care professionals under the RHPA. SLPs are trained to support development of spoken language through listening and development of communication skills. SLPs assess audition, language (receptive and expressive), speech, cognitive-communication, behaviour, and communication. They maintain, rehabilitate or augment oral motor or communicative functions. SLP services are funded through the PSL Program and therefore, SLPs may report to PSL Coordinators.

When a family chooses spoken language development services for their child, the role of the SLP is to:

- Conduct an initial assessment and develop a plan for services, based on the child and family's needs;
- Employ a variety of strategies to encourage communication skills through different therapy approaches (e.g., auditory verbal therapy (avt) approach, speech and language therapy, or others as appropriate);
- Assess the child's language development progress every six months, using at a minimum, MCYS-mandated outcome measurement tools;
- Coordinate CDP meetings (if identified by the team as the person to do so), in collaboration with other team members; and
- Participate in CDP meetings.

If there are concerns about a child's language development progress:

- Coordinate a meeting with the family and other team members to discuss the child's progress and a revised plan; and
- Coordinate with team members to implement the revised plan and continue to monitor the child's progress.

If there continue to be concerns about a child's language development progress after the child's team has made reasonable efforts to meet and implement coordinated strategies to try and address the concerns:

- Ensure the IHP Coordinator is notified of the family's case so that he/she is aware of the concerns and can identify if there are other steps that the IHP Coordinator can take to facilitate progress; and
- Ensure that the IHP Coordinator is kept informed of the child's progress.

### LANGUAGE DEVELOPMENT PATHWAY IMPLEMENTATION

The following section describes MCYS' expectations for how each step in the LDP is intended to be operationalized. These Guidelines promote consistent implementation of the LDP and provision of service across the province.

### IDENTIFYING A TEAM LEAD

Within each step of the LDP, team members must work together to identify a "lead" who will be responsible for coordinating and communicating with other team members to provide family-centred service. The name and contact information for the team lead should be documented (e.g., in a child's CDP). Lead team members may change over time, depending on the stage of the child and family within the LDP and the respective roles of team members. Families may take on a leadership role depending on their capacity, readiness, and desire to do so. As team member roles evolve throughout the process, the team must discuss changes in lead roles during points of transition so that accountability for coordination and communication among team members is maintained.

### P1: CONFIRM PERMANENT HEARING LOSS

The first step in the language development pathway is confirmation of PHL, which is identified and confirmed by an IHP Audiologist. Protocols for the hearing assessment of infants and young children within the IHP are applied for this purpose. In accordance with the guidelines for EHDI programs and the IHP, a comprehensive audiological evaluation should be completed by three months corrected age whenever possible.

Findings from audiological and medical investigations may inform planning for intervention strategies. Within the IHP, the initiation of early intervention services should occur as soon as possible after confirmation of PHL and as close as possible to six months corrected age. Intervention includes language development services and assistive technology, if chosen by the family.

The Audiologist will offer the family the optional involvement of a Family Support Worker for additional support.

### P2: INITIATE MEDICAL CONSULTATIONS AND COMMUNITY REFERRALS AS NECESSARY

Upon confirmation of a child's PHL, a medical evaluation by an otolaryngologist may help inform intervention strategies. In addition to the IHP Audiologist and otolaryngologist, other medical professionals may include primary care physicians, ophthalmologists and geneticists. The professionals involved may vary, depending on the specific needs of the child and family. Once again, the Audiologist may offer to connect the family to an FSW, who will provide additional support and facilitate referrals to community supports, as needed.

### P3: GATHER AND SHARE INFORMATION ABOUT LANGUAGE DEVELOPMENT

The IHP Audiologist provides language development information to parents in a timely manner after confirmation of PHL, based on the family's stage of readiness. The IHP Audiologist should offer the involvement of other service providers (e.g., SLPs, ASL/LSQ Consultants) to support information sharing on language development and informed decision-making by families. These may or may not be the same service providers who will later support the family with language development services. Service providers are expected to collaborate to ensure that consistent messaging is provided to the family. To help provide family-centred service, families should be asked if there are other individuals supporting the child/family who they feel should be included in these discussions (e.g., family member, other professionals).

---

#### INFORMATION AND TOPICS TO DISCUSS WITH FAMILIES

The service provider's role at this stage is to offer information on the importance of language acquisition and development in the early years within a language-rich context (Bagatto & Moodie, 2016; Kuhl & Rivera-Gaxiola, 2008; Mayberry, Chen, Witcher, & Klein, 2011; Pénicaud et al., 2013). Parents express the need for timely access to understandable information and support that remains relevant as the child grows (Allen, 2015; Bagatto & Moodie, 2016; Humphries et al., 2016).

The following information and topics may be important to discuss with families. The topics below may be covered by different service providers, depending on their scopes of practice and areas of expertise. Please note that this is not an exhaustive list. See the resources in Appendix C that may support service providers in these discussions with families.

##### Importance of Early Language Acquisition and Development

- Typical language acquisition requires consistent access to high quality and quantity of language input within the early years whether the language is spoken or signed.
- The brains of infants analyze linguistic and visual input and make use of this information in language acquisition, even before they begin babbling.
- Typical language and literacy milestones (spoken and/or signed) during infancy and the preschool years.

##### Implications of PHL on Language Development

- Results of their child's hearing assessment (e.g., type and degree of hearing loss, hearing loss in one ear or both ears) and the importance of language input to early brain development (Kuhl & Rivera-Gaxiola, 2008).
- Factors that enable the achievement of successful language acquisition.
- Outcomes for children who are D/HH when provided with timely and appropriate access to intervention(s) (Allen, Letteri, Choi, & Dang, 2014; Tomblin et al., 2015).

## Spoken and Signed Language Development

- **Signed language** is achieved by combining hand shapes, face movements, body movements, and other grammatical features to form signs and sentences (Valli, Lucas & Mulrooney, 2005). Therefore, sign languages use the visual system for receptive language and manual articulators (e.g., hands, face, and body) for expressive language). **ASL/LSQ** are the signed languages supported by the IHP.
- **Spoken language** is achieved by articulating words and sentences using the vocal tract for expression and by using hearing to receive the spoken language of others. Therefore, spoken languages use the aural senses for receptive language and oral articulators for expressive language (Traxler, 2012). **English/French** (or other languages, if available) are the spoken languages supported by the IHP.
- Language-rich environments include (Allen, 2015; Hardin et al., 2014; Singleton & Newport, 2004):
  1. consistent and sustained access to the language in a naturally occurring context;
  2. repetition of the language;
  3. opportunities for interaction with the language in and outside the home;
  4. child initiated and directed dialogues (Hirsh-Pasek & Golinkoff, 2015); and
  5. visible access for either signed or spoken language.
- While a language-rich environment requires language models for the child, it is not necessary for the model's language to be as fluent as a native user of the language (Singleton & Newport, 2005; Snodden, 2016) in the early stages of language acquisition.
- Families will be supported in their understanding of:
  - Language development services that a child will receive from service providers once a decision is made about the language method that will be supported through the IHP;
  - Methods of regular measurement and monitoring of the child's progress to support families in decision-making over time and as their child grows; and
  - Other services and supports available.

## Unique Determinants (Facilitators/Barriers) to Language Development

- Families constitute the most influential environment for children, especially in the early years where positive well-being is stressed (Allen et al., 2014; Lippman, Moore, & McIntosh, 2011) to promote healthy identity development (Wolsey, Clark, van der Mark, & Suggs, 2017; Snodden & Underwood, 2014), thereby creating a positive identity to develop resilience (Leigh, 2009).
- The social-emotional wellbeing of the child who is D/HH may be supported by participation in the Deaf culture/community (Wolsey et al., 2017) and families may benefit from connections with community-based D/HH resources and supports (Moeller et al., 2013).

- Among the variables to be considered when making language decisions are: the child, degree of hearing loss, age of identification, additional challenges (e.g., Autism, impaired vision) or other complex factors (e.g., delayed hearing aid fitting, uniquely challenging family circumstances), parenting style, available support for language development, knowledge of the family (e.g., culture, values), other contexts (e.g., child care), bilingualism/multilingualism and any other additional information that could represent a facilitator or potential obstacle to language development.

The information above may be shared with families by various service providers (e.g., Audiologist, ASL/LSQ Consultants, FSW, and SLPs) in a variety of ways including, meeting with families to discuss information, sharing materials and resources, providing connections to other families of children who are D/HH (if available), and through other methods as applicable and available.

Evidence-based resources and information in the appendices may support discussions and information-sharing with families, including:

- Language Development for Children who are D/HH (Appendix B); and
- A Language Development Services Shared Decision Aid with Accompanying Support Material for Professionals (Appendix C).

#### P4: IDENTIFY THE LANGUAGE DEVELOPMENT PATHWAY

##### IHP LANGUAGE DEVELOPMENT SERVICES SHARED DECISION AID

Once the IHP Audiologist, FSW, and other service providers have shared information with the family (step P3), the IHP Audiologist can use the IHP Language Development Services Shared Decision Aid and support material (See Appendix C) to facilitate discussions with families and support their decision-making about accessing either signed or spoken language development services through the IHP. Shared decision-making aims to bring together IHP service providers and families in order to better understand the knowledge, experiences and values that may influence a family's goal setting for their child.

Decision aids are supplemental, guidance tools used in clinical practice that provide unbiased, evidence-based information to individuals making health and/or health-service related decisions (IPDAS, n.d.; Stacey et al., 2014). They support decision-making by making the decision more explicit, providing balanced information to be considered, and helping people clarify what is most important in their own circumstances (IPDAS, n.d.; Stacey et al., 2014). They are best used as a supplement to a collaborative conversation with individuals and families, and provide a means to incorporate care-provider expertise, insights, and views in order to make evidence-based decisions that are aligned with patient and family preferences (IPDAS, n.d.; O'Connor, Stacey & Jacobsen, 2012; O'Connor, Jacobsen & Stacey, 2002). Therefore, the IHP Language Development Services Shared Decision Aid should not be used as a standalone resource for families. Rather, it is a tool to be used by service providers in discussions with families about considerations that will inform



decision-making about a language pathway that will be supported by the IHP. Providing families with the relevant, objective and evidence-based information they need to make the best decisions for their children and their families is a process, not a one-time event (Beckley, 2016). The Decision Aid is also a tool that service providers and families can revisit if there is a need to reconsider a child's language pathway through the IHP.

In addition to supporting information-sharing and shared decision-making with families, another objective of the Decision Aid and support material is to ensure consistent messaging from all service providers about signed and spoken language. For example, the Decision Aid and supplementary Frequently Asked Questions, include common questions from families about spoken and signed language development with corresponding, evidence-based responses that can support service providers in these discussions.

As initiated in step P3, families may benefit from continued access to consultations with other team members, in addition to the Audiologist and FSW, so that families feel supported in making informed decisions.

---

## DECIDING WHICH LANGUAGE DEVELOPMENT SERVICES WILL BE PROVIDED TO THE CHILD THROUGH THE IHP

At this point in the language development pathway, the family is supported to make a decision about the language development service that they would like for their child to receive through the IHP. Parents will be made aware that their child's progress will be assessed over time. Changes will be made if language development expectations are not being achieved, or if the family revises their goals for their child.

A trial period of both signed and spoken language development services may be considered for children who have additional challenges (e.g., Autism, impaired vision) or other complex factors (e.g., delayed hearing aid fitting, uniquely challenging family circumstances), that make it less clear which language pathway through the IHP will best support the child. Since the IHP is designed as a language intervention program for either spoken or signed language, the trial period option should only be considered in extenuating cases and in place for a limited period of time. In these cases, parents and service providers (e.g., Audiologist, SLP, ASL/LSQ Consultant) may decide to implement a temporary trial period during which both signed and spoken language development services will be provided. Service providers will measure and assess the child's language development progress over time in order support decision-making about whether a spoken or signed language pathway will be supported through the IHP. If a family wishes for their child to also develop the second language (that has not been chosen as the primary pathway in the IHP), they will be referred to other community programs or online resources. Please see step P8 for additional information on the timelines for assessment during the trial period.

For children with profound bilateral hearing loss, especially those children waiting for cochlear implants, there is some evidence that early exposure to natural sign language and natural ways to use visual communication such as eye gaze, joint attention, or child-directed signing can assist in

language development while they wait for cochlear implants, and may support their early spoken language and literacy development after they have been implanted (Chen Pichler, Lee, & Lillo-Martin, 2014; Davidson, Lillo-Martin & Chen Pichler, 2014; Hassanzadeh, 2012; Knoors & Marschark, 2012). In these cases, an initial decision may be made to support early language development using spoken and signed language. With continued assessment and team meetings (see Figure 2), a primary pathway for language development services will be selected.

Once the family has chosen the language pathway to be supported through the IHP, the Audiologist or FSW informs the IHP Coordinator (or other lead agency representative, as applicable).

## **P5: IDENTIFY THE CHILD'S LANGUAGE DEVELOPMENT TEAM**

### **INITIATING SERVICES FROM AN SLP OR ASL/LSQ CONSULTANT**

Once the referral is received by the lead agency, the steps to engage the necessary service provider(s) (ASL/LSQ Consultant, SLP) are initiated, as soon as possible. The IHP Coordinator will either initiate ASL development services through the Director of IHP ASL Services or spoken language development services through a PSL Coordinator, where applicable. Once an ASL Consultant or SLP is identified to work with the family, the family will be contacted to arrange an initial appointment.

If a family requests LSQ language development services, IHP Coordinators are to contact MCYS to initiate service delivery.

## **P6: CREATE A COMMUNICATION DEVELOPMENT PLAN**

As soon as possible after the child's team of language development service providers has been established (step P5), the Communication Development Plan (CDP) must be developed. The CDP is a written document that explicitly describes the language and communication goals that the family has for their child. Goal setting is a fundamental component of language development intervention programs. When goals are meaningful for the family and specifically stated, outcomes are better achieved (Enderby & John, 2015).

The child's team (e.g., family, Audiologist, SLP, ASL/LSQ Consultant, FSW) will collaborate to determine who will take the lead in developing the child's CDP. The family may take on a leadership role in the CDP process over time, depending on their capacity, readiness, and desire to do so.

To develop the child's first CDP, the team lead organizes a team meeting. Although an in-person meeting is preferable, videoconferencing, teleconferencing or other forms of communication may be used to accommodate geographical and/or logistical challenges. Other family members and professionals (e.g., Communicative Disorder Assistant, Physiotherapist, Occupational Therapist, Provincial and Demonstration Schools Branch Preschool Home Visiting Teacher, local District School Board Teacher of the Deaf) are to be included as appropriate for the child and family. All members of a child's team should participate in goal setting. The family has the most in-depth and complete

knowledge of the child's needs and strengths and the professionals possess the knowledge, training, and expertise in their scopes of practice to support the language development goals for the child.

The CDP could include the following components (not an exhaustive list):

- current date;
- name and age of the child;
- names of family members;
- names of the individuals participating in the planning process;
- name of the team lead;
- key characteristics of the child and family (e.g., strengths, needs) that may inform services;
- family's language development goals for their child, a statement of how each goal is to be met, service provider(s) responsible for working with the child/family on each goal, date of accomplishment of each goal;
- description of child's language intervention services (type, names/contact information for service providers, setting);
- other programs and services that the child is receiving support from, that could support achievement of language development goals;
- dates of team meetings and CDP review, comments or revisions made at review (based on assessment results); and
- parent signature.

Children participating in the IHP may also be receiving services and supports from other programs and organizations. In these cases, it may be appropriate for the CDP to be aligned with a larger planning document or meeting (e.g., an Individual Education Plan from the child's DSB preschool services, Individual Family Education Plan from the Provincial and Demonstration Schools Branch Preschool Home Visiting Program). The CDP may also include broader goals for the child (language development or otherwise) related to the other services and supports that the child is receiving. This alignment will support service efficiency and integration. For children and/or families with multiple, complex needs the emphasis on language development goals, their associated timelines and prominence in a larger planning document will vary.

Coordinated Service Planning is available for children with multiple and/or complex special needs and their families. A Service Planning Coordinator is accountable for developing and monitoring a single Coordinated Service Plan (CSP) and connecting the family with services and supports that will meet their needs. The child's team of professionals (within and outside the IHP) may have a role in either referring the family to Coordinated Service Planning and/or participating in the CSP process in order to align goals in the child's CDP.

The CDP should be updated a minimum of every six months or more often if required. CDP updates should involve input from the family and all professionals on the child's team.

## P7: IMPLEMENT LANGUAGE DEVELOPMENT SERVICES

As described in the *Roles and Responsibilities* section, interventions for facilitating a child's early spoken language development will be provided by an SLP and interventions for facilitating a child's early signed language development will be provided by an ASL/LSQ Consultant.

In order to provide family-centred and seamless service, IHP service providers are expected to collaborate, as appropriate, with other professionals (within and outside the IHP), who may be supporting the child and/or family (e.g., Communicative Disorder Assistant, Service Planning Coordinator, Teacher of the Deaf).

## P8: MEASURE LANGUAGE DEVELOPMENT PROGRESS

Consistent with other MCYS healthy child development programs, assessment of a child's progress is to be undertaken every six months. The purpose of progress review is to assess the level of attainment of language development milestones using evidence-based indicators.

ASL/LSQ Consultants and SLPs are responsible for administering the MCYS-mandated outcome tools so that the language development progress of the child can be assessed. Simultaneously, Audiologists assess the child's auditory progress in support of language development. Team meetings are to be held every six months (or more often, if there are concerns) to discuss the child's progress with the family, update the child's CDP, and make modifications if required. This process creates opportunities for reflection, consideration of the child's language development progress and re-evaluation of the family's goals for their child, which may evolve over time. Meetings also allow team members to acquire a more holistic understanding of the child, their family, and broader circumstances that may inform service delivery. The language development pathway may be re-examined and additional supports may be identified through this process.

Team meetings may take place in person or remotely. If there are no concerns with a child's language development progress, team meetings are still expected to occur every six months so that the child's progress can be discussed with the family. When coordinating team meetings, the team lead should consult the family regarding other individuals supporting the child/family who they feel should be included in these discussions (e.g., family member, other professional). If there are no concerns about a child's progress, the Audiologist's participation may not be required. However, when there are concerns about a child's progress, services may be informed by assessments of the child's auditory progress and access to sound. In these cases, the team lead should request the Audiologist's participation in a team meeting. IHP Coordinators and/or the Director of IHP ASL Services are not expected to attend team meetings, unless there is a specific need for them to do so, and with appropriate consent from the family.

Please see Figure 2 for a visual depiction of the assessment timelines.

---

## TRIAL PERIOD ASSESSMENT TIMELINES

If in step P4, the team decided that the IHP would support language development using both spoken and signed language, for a trial period, service providers must collaborate to support the family in timely decision-making in order to move toward a single pathway using IHP resources.

The general recommendation for length of time for a trial period for spoken and signed language development is as follows (see Figure 2):

1. The family and team of professionals make a decision that spoken and signed language services will be provided for a trial period of 6 months. Spoken and signed language development services for the child are initiated.
2. After six months of both spoken and signed language service delivery, language development is assessed by the SLP and ASL/LSQ Consultant using the MCYS-mandated outcome tools and others as required. If possible, growth scores could be documented for both signed and spoken language to allow for comparison when assessing progress. A team meeting is to be held so that assessment information can be discussed with the family. The meeting can take place in person or remotely. One of the goals of this meeting is to discuss the child's progress and re-evaluate the need for both language development services. The Language Development Services Decision Aid and support material (Appendix C) may be used to facilitate parent decision-making and goals, based on assessment results.
3. If a decision to pursue a single language development service through the IHP is not made at the six month meeting, the trial period involving language development services for both spoken and signed language may continue for another six months.

After six additional months another team meeting with the family is to occur to discuss the most recent language development assessment results and re-evaluate the need for both language development services. The Decision Aid (Appendix C) may, once again, be used by the team to facilitate parental decision-making and goals. At this point (12 months since both language development services have been provided), families should strive to arrive at a decision with the team about a primary language pathway that will be supported by the IHP.

4. Only in extenuating circumstances (e.g., children with additional challenges and/or complex factors) is a decision to be made at the 12-month meeting to continue with both signed and spoken language development services if the primary language that would best support the child through the IHP still remains unclear.

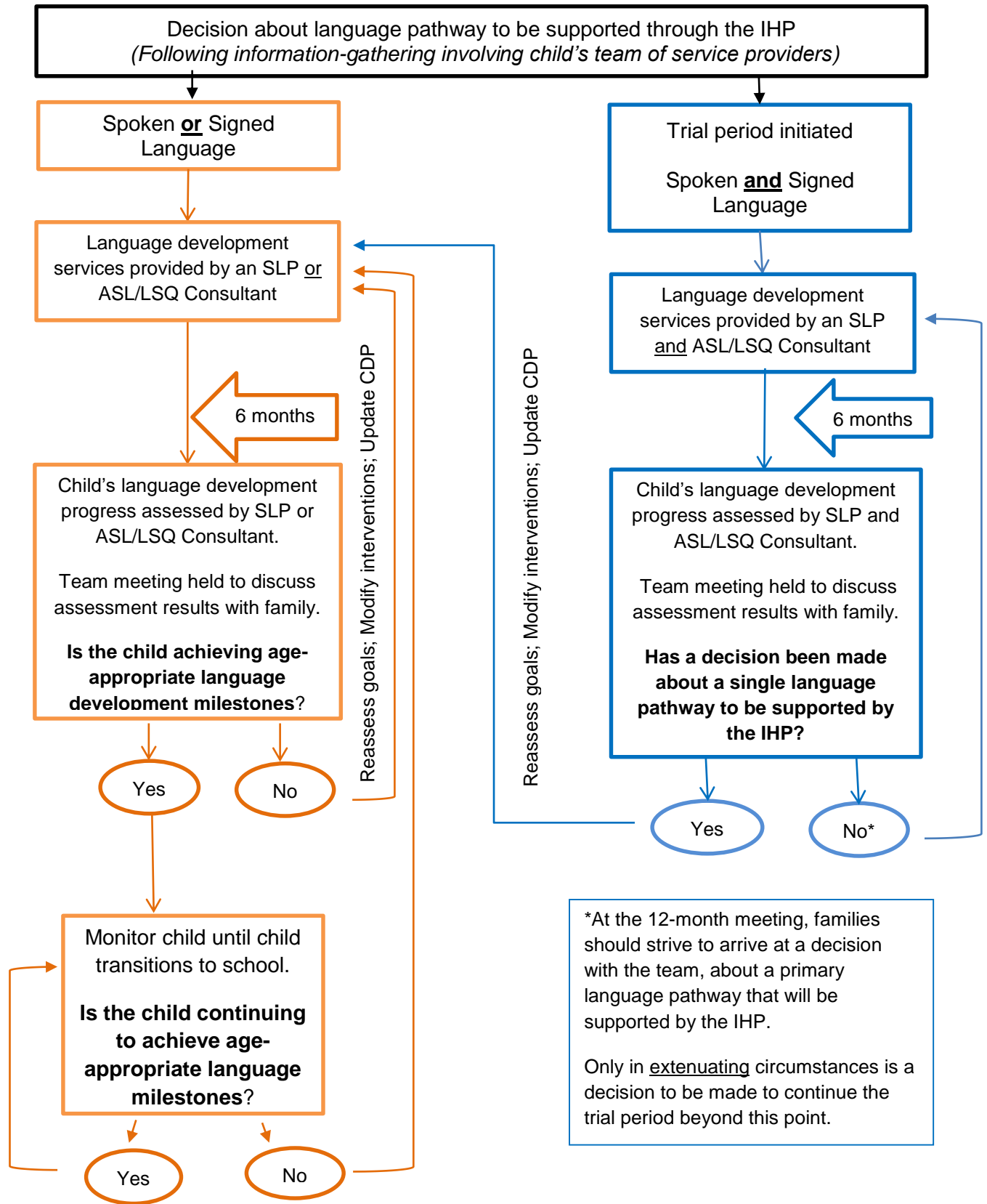
The team will document the decision in the child's CDP and follow-up meetings are to occur at six month intervals until a decision about a primary language development services pathway is made.

In these extenuating circumstances, SLPs and/or ASL Consultants should notify the IHP

Coordinator and/or Director of IHP ASL Services of the family's case so that they are aware and can identify if there are other steps that they can take to facilitate decision-making. SLPs and ASL Consultants should ensure that the IHP Coordinator and/or Director of IHP ASL Services are kept informed of the status of the trial period.

Parents who wish for their child to develop both spoken and signed language, will be directed to community or web-based/online resources outside of the IHP for continued development of the second language (spoken or signed language).

**Figure 2: Language Development Services – Delivery & Assessment Timelines**



## P9: RE-ASSESS, RE-EVALUATE, AND RE-ESTABLISH GOALS AND OBJECTIVES TO SCHOOL ENTRY

If a child's language development progress is assessed by the ASL/LSQ Consultant or SLP to be age-appropriate (i.e. actual age) the child should be discharged from active language development services (i.e. steps P7 to P9). The IHP is moving toward monitoring all children using new outcome measurement tools, until school entry. See the IHP Language Development Services Guidelines Questions & Answers for more information about "monitoring" until school entry.

If any team member is concerned that a child's language development progress is not meeting CDP goals and/or a typical age trajectory for language development, the family or service provider should discuss with other members of the child's team and a team meeting with the family should occur to discuss next steps, a revised CDP, and possible modifications. These modifications will vary depending on the needs and capacity of the child and family and may include alterations in frequency/intensity of language development services. A decision may be made to modify the language development plan to implement signed language development services instead of spoken language development services or vice versa. The principles of family-centred intervention should be followed to support the parents in re-visiting previous language development decisions. The IHP Language Development Services Shared Decision Aid and accompanying support material (See Appendix C) may facilitate these discussions with families.

If concerns about a child's language development progress continue after the child's team has made reasonable efforts to meet and implement coordinated strategies to try and address the concerns, SLPs and/or ASL Consultants should notify the IHP Coordinator and/or Director of IHP ASL Services of the family's case so that they are aware and can identify if there are other steps that they can take to facilitate progress. SLPs and ASL Consultants should ensure that the IHP Coordinator and/or Director of IHP ASL Services are kept informed of the child's progress.

---

## TRANSITION TO SCHOOL

The process of transitioning to school for a child who is D/HH can be complex and take time to plan. To support a "warm transfer" a child's team should begin discussing transition to school early (e.g., at least six months to one year prior to a child entering school) so that school staff are prepared to support the needs of the child upon school entry. To support transition planning, the team should meet to identify the child's service needs, goals, and the school-based services that are available. This information should be incorporated in the CDP and coordinated across transition points. If possible, all service providers that have been involved with the child/family should be invited to participate in this planning process (e.g., IHP Audiologist, ASL/LSQ Consultant, FSW, SLP, Communicative Disorder Assistant, child care provider, PDSB Preschool Home Visiting Teacher).

Children who are D/HH may attend a school in their local District School Board or could be eligible for one of the Ministry of Education's Provincial Schools for the Deaf. As part of the transition to school process, parents will be directed to the appropriate school board contact. To enroll in a publicly-funded school in a local District School Board (DSB), parents should contact the school principal of



their local school and may also wish to contact the school's Special Education Department. To apply to one of the Provincial Schools for the Deaf, parents should first register with their local DSB and participate in an Identification Placement and Review Committee (IPRC) process within the DSB. During the IPRC process, parents can request the placement option of a Provincial School for the Deaf. In either case, parents should begin the transition process as soon as possible so that the child's needs can be identified and planned for, in collaboration with all professionals who have been working with the child and their family.

A child transitions from receiving IHP language development services to school-based services when the child enters school. Audiology services (e.g., hearing assessments, hearing aid management) are provided to children, through the IHP, until they are six years of age. In most IHP regions FSW services are available for children and their families, until age six/grade one entry.

## SUMMARY

These Guidelines describe the IHP language development pathway, process, and expectations for all professionals supporting language development services through the IHP. The pathway is described, including roles and responsibilities of multidisciplinary professionals. A Language Development Services Shared Decision Aid and support materials are provided (Appendix C). These tools will assist the child's team to have collaborative conversations about language development goals and decisions about a language pathway that will be supported through the IHP. The Decision Aid also facilitates discussion about modifications/revisions over time.

MCYS continues to support a shared commitment to quality language development service provision. As such, this is a living document and MCYS will continue to communicate and work with IHP service providers to make updates as necessary over time.

## REFERENCES

- Ambrose, S.E., Walker, E., Unflat-Berry, L., Oleson, J., Moeller, M.P. (2015). Quantity and quality of caregivers' linguistic input to 18-month and 3-year old children who are hard of hearing. *Ear and Hearing*, Volume 36, Supplement 1, 48S-59S.
- Allen, T. E. (2015). ASL skills, fingerspelling ability, home communication context and early alphabetic knowledge of preschool-aged deaf children. *Sign Language Studies*, 15(3), 233-265.
- Allen, T. E., Morere, D. A., Clark, M. D., & Murphy, L. (2014). The VL2 Early Education Longitudinal Study: Rationale, Methods, and Participant Characteristics. Retrieved from the NSF-funded Science of Learning Center on Visual Language and Visual Learning (VL2) website: [http://vl2.gallaudet.edu/files/2914/1045/8608/EELS\\_Methods\\_Paper.pdf](http://vl2.gallaudet.edu/files/2914/1045/8608/EELS_Methods_Paper.pdf).
- Allen, T. E., Letteri, A., Choi, S. H., & Dang, D. (2014). Early visual language exposure and emergent literacy in preschool deaf children: Findings from a national longitudinal study. *American Annals of the Deaf*, 159(4), 346-358.
- Bagatto, M., Moodie, S.T., Brown, C., Malandrino, A., Richert, F., Clench, D. & Scollie, S. (2016). Prescribing and verifying hearing aids applying the AAA Pediatric Amplification Guideline: Protocols and outcomes from the Ontario Infant Hearing Program. *Journal of the American Academy of Audiology*, 27(3), 188-203. doi: 10.3766/jaaa.15051
- Bagatto, M.P. & Moodie, S.T. (2016). The ICF-CY in EHDI programs. *Seminars in Hearing*, 37(3), 257-271. doi: <http://dx.doi.org/10.1055/s-0036-1584406>
- Bagatto, M.P., Moodie, S.T., Malandrino, A., Richert, F., Clench, D., & Scollie, S.D. (2011). The University of Western Ontario Pediatric Audiological Monitoring Protocol (UWO PedAMP). *Trends in Amplification*, 15(1), 57-76. doi: 10.1177/1084713811420304
- Bahan, B., Kegl, J., Lee, R.G., Maclaughlin, D., & Neidle, C. (1999). *The Syntax of American Sign Language*. Cambridge, MA: MIT Press.
- Baker, M. (2011). The foundations of lifelong health are built in early childhood. *Canadian Journal of Economics/Revue canadienne d'économique*, 44, 1069-1105.
- Beckley, E. T. (2016). Refocusing on choices. *ASHA Leader*, 21, 44-49. doi: 10.1044/leader.FTR1.21052016.44
- Benedict, B. (2013). *How early intervention can make a difference: Research and trends* [Video file]. Retrieved from <http://videocatalog.gallaudet.edu/?video=17618>.
- Bodrova, E., & Leong, D. (2008). Developing self-regulation in young children: Can we keep all the crickets in the basket? *Young Children*, 63(2), 56-58.

Cairney, J., Clark, H.J., & Nair, K. (2016). Parental concerns, developmental temperature taking, and the necessary conditions for developmental surveillance and screening. *Current Developmental Disorders Reports*, 3:174–179 DOI 10.1007/s40474-016-0095-5

CanChild. (n.d.). CanChild's definition of family-centred service. Retrieved from: <https://www.canchild.ca/en/research-in-practice/family-centred-service>

Chen Pichler, D., Lee, J., Lillo-Martin, D. (2014). Language development in ASL-English bimodal bilinguals. In D. Quinto-Pozos (Ed.) *Multilingual Aspects of Signed Language Communication and Disorder*, Multilingual Matters: North York, ON, 235-260.

Convertino, C., Borgna, G., Marschark, M., & Durkin, A. (2014). Word and world knowledge among deaf learners with and without cochlear implants. *Journal of Deaf Studies and Deaf Education*, 19(4), 471-483. doi:10.1093/deafed/enu024

Coutu, M. F., Légaré, F., Durand, M. J., Corbière, M., Stacey, D., Bainbridge, L., & Labrecque, M. E. (2015). Operationalizing a shared decision making model for work rehabilitation programs: A consensus process. *Journal of Occupational Rehabilitation*, 25, 141-152. doi: 10.1007/s10926-014-9532-7

Davidson, K., Lillo-Martin, D., & Chen Pichler, D. (2014). Spoken English language development among native signing children with cochlear implants. *Journal of Deaf Studies & Deaf Education*, 19(2), 238-250. doi: 10.1093/deafed/ent045

Enderby, P., & John, A. (2015). *Therapy Outcome Measure for Rehabilitation Professionals*, 3<sup>rd</sup> edition. UK: J&R Press.

Fitzpatrick, E. M., Hamel, C., Stevens, A., Pratt, M., Moher, D., Doucet, S. P., Neuss, D., Bernstein, A., & Na, E. (2016). *Pediatrics*, 137(1), e20151974.

Gray, C., Hosie, J., Russell, P., Scott, C., & Hunter, N. (2007). Attribution of emotions to story characters by severely and profoundly deaf children. *Journal of Developmental and Physical Disabilities*, 19(2), 145–159. <http://doi.org/10.1007/s10882-006-9029-1>

Halfon, N., Larson, K., Lu, M., Tullis, E., & Russ, S. (2014). Lifecourse Health Development: Past, Present and Future. *Matern Child Health J.* 18:344-365.

Hall, M. L., Eigsti, I. M., Bortfeld, H., Lillo-Martin, D. (2017). Auditory deprivation does not impair executive function, but language deprivation might: Evidence from a parent-report measure in Deaf native signing children. *Journal of Deaf Studies and Deaf Education*, 22(1), 9-21.

Hardin, B. J., Boone Blanchard, S., Kemmery, M. A., Appenzeller, M., & Parker, S. D. (2014). Family-centered practices and American Sign Language (ASL): Challenges and Recommendations. *Exceptional Children*, 81(1), 107-123. doi: 10.1177/0014402914532229

Hassanzadeh, S. (2012). Outcomes of cochlear implantation in deaf children of deaf parents: comparative study. *The Journal of Laryngology & Otology*, 126(10), 989-994. doi:10.1017/S0022215112001909

Head Zauche, L., Thul, T. A., Darcy Mahoney, A. E., & Stapel-Wax, J. L. (2016). Influence of language nutrition on children's language and cognitive development: An integrated review, *Early Childhood Research Quarterly*, 36(3<sup>rd</sup> Quarter), 318-333, <http://dx.doi.org/10.1016/j.ecresq.2016.01.015>

Hertzman, C. (2010). Social geography of developmental health in the early years. *Healthcare Quarterly*. 14 Spec 1:32-40.

Hirsh-Pasek, K. & Golinkoff, R. (2015, September). Living in Pasteur's quadrant: Navigating the uncharted waters between basic and applied research. Paper presented at the PEN 2015-2016 Distinguished Lecture Series, Washington, DC. Retrieved from <http://webcast.gallaudet.edu/?id=251>

Hrastinski, I., & Wilbur, R. B. (2016). Academic achievement of deaf and hard-of-hearing students in an ASL/English bilingual program. *Journal of deaf studies and deaf education*, 21(2), 156-170.

Humphries, T., Kushalnagar, P., Mathur, G., Napoli, D. J., Padden, C., Rathmann, C., & Smith, S. (2016). Avoiding linguistic neglect of deaf children. *Social Service Review*, 90(4), 589-619. doi: 0037-7961/2016/9004-0001\$10.00

International Patient Decision Aids Standards Collaboration (n.d.). <http://www.ipdas.ohri.ca/>

Joint Committee on Infant Hearing of the American Academy of Pediatrics (2007). Year 2007 position statement: principles and guidelines for early hearing detection and intervention programs. *Pediatrics*, 120(4), 898-921.

Kuhl, P., & Rivera-Gaxiola, M. (2008). Neural substrates of language acquisition. *Annu. Rev. Neurosci.*, 31, 511-534. doi:10.1146/annurev.neuro.30.051606.094321

Leigh, I. (2009). *A lens on deaf identities*. Perspectives on Deafness. Oxford, UK: Oxford University Press.

Lillo-Martin, D., de Quadros, R. M., Chen Pichler, D., & Fieldsteel, Z. (2014). Language choice in bimodal bilingual development. *Frontiers in Psychology*, 5, 1163. doi: 10.3389/fpsyg.2014.01163.

Lippman, L. H., Moore, K. A., McIntosh, H. (2011). Positive indicators of child well-being: a conceptual framework, measures, and methodological issues. *Applied Research in Quality of Life*, 6(4), 425-449.

Mayberry, R. I., Chen, J. K., Witcher, P., & Klein, D. (2011). Age of acquisition effects on the functional organization of language in the adult brain. *Brain and language*, 119(1), 16-29. doi:10.1016/j.bandl.2011.05.007

McCreery, R.W., Walker, E.A., Spratford, M., Bentler, R., Holte, L., Roush, P., Oleson, J., Van Buren, J., Moeller, M.P. (2015). Longitudinal Predictors of Aided Speech Audibility. *Ear and Hearing*, Volume 36, Supplement 1, 24S-37S.

Ministry of Children & Youth Services & Children's Hospital of Eastern Ontario. (2017, Jan 9). Presentation to IHP coordinators: Speech-language pathology training [Presentation].

Ministry of Children & Youth Services. (2017, March). Ontario Infant Hearing Program: A Guidance Document, Version 2017.01.

Ministry of Children & Youth Services. (2016, June 1). Protocol for auditory brainstem response-based audiological assessment (ABRA), Version 2016.02.

Ministry of Children & Youth Services, Ministry of Community & Social Services, Ministry of Education, & Ministry of Health and Long-Term Care. (2017, June). Coordinated Service Planning: Policy and Program Guidelines – Ontario's Special Needs Strategy for Children and Youth. Retrieved from: [http://www.children.gov.on.ca/htdocs/English/professionals/specialneeds/Coordinated\\_Service\\_Planning\\_Policy\\_and\\_Program\\_Guidelines\\_en.pdf](http://www.children.gov.on.ca/htdocs/English/professionals/specialneeds/Coordinated_Service_Planning_Policy_and_Program_Guidelines_en.pdf).

Ministry of Education. (2004). The Individual Education Plan: A Resource Guide. Retrieved from: [www.edu.gov.on.ca/eng/general/elemsec/speced/guide/resource/iepresguid.pdf](http://www.edu.gov.on.ca/eng/general/elemsec/speced/guide/resource/iepresguid.pdf).

Ministry of Education. (2007). New ASL/LSQ Regulation: An Amendment to Regulation 298 of the Education Act.

Ministry of Education. (2017). American Sign Language Glossary, Grades 1 to 8 and 9 to 12. (Unpublished work of the Ontario Provincial Schools American Sign Language Curriculum Team)

Ministry of Education & Training. (1993). Ontario First in North America to Recognize Sign Language as Language of Instruction. Press release. July 23.

Mitchell, R. E., and M. A. Karchmer (2004). Chasing the mythical ten percent: Parental hearing status of Deaf and Hard of Hearing students in the United States. *Sign Language Studies*, 4(2), 138-163.

Moeller, M. P., Carr, G., Seaver, L., Stredler-Brown, A., & Holzinger, D. (2013). Best practices in family-centred early intervention for children who are deaf or hard of hearing: An international consensus statement. *Journal of Deaf Studies and Deaf Education*, 18(4), 429-445.

Moodie, S.T., The Network of Pediatric Audiologists of Canada, Scollie, S., Bagatto, M. & Keene, K. (2017). Fit to targets for the DSL v5.0 hearing aid prescription method for children. *American Journal of Audiology*, 26(3), 251-258. doi: 10.1044/2017\_AJA-16-0054

Muse, C., Harrison, J., Yoshinaga-Itano, C. et al. (2013). Joint Committee on Infant Hearing of the American Academy of Pediatrics. 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(4), e1324-e1349.

- O'Connor, A. M., Jacobsen, M. J., & Stacey, D. (2002). An evidence-based approach to managing women's decisional conflict. *Journal of Obstetric, Gynecologic, & Neonatal Nursing*, 31(5), 570-581. doi: 10.1177/088421702237742
- O'Connor, A.M., Stacey, D., & Jacobsen, M. J. (2012). *The Ottawa personal decision guide for people facing tough health or social decisions*. Ottawa, Ontario, Canada: Ottawa Hospital Research Institute and University of Ottawa.
- Parisot, A.M. & Rinfret, J. (2012). Recognition of Langue des signes québécoise in Eastern Canada. *Sign Language Studies*, 12(4), 583-601.
- Pénicaud, S., Klein, D., Zatorre, R. J., Chen, J. K., Witcher, P., Hyde, K., & Mayberry, R. I. (2013). Structural brain changes linked to delayed first language acquisition in congenitally deaf individuals. *Neuroimage*, 66, 42-49. <http://dx.doi.org/10.1016/j.neuroimage.2012.09.076>
- Simms, L., Baker, S., & Clark, M. D. (2013). The Standardized Visual Communication and Sign Language Checklist for Signing Children. *Sign Language Studies*, 14(1), 101-124.
- Singleton, J. L., & Newport, E. L. (2004). When learners surpass their models: The acquisition of American Sign Language from inconsistent input. *Cognitive psychology*, 49(4), 370-407. doi: 10.1016/j.cogpsych.2004.05.00
- Snoddon, K. (2015). Using the Common European Framework of Reference for Languages to teach sign language to parents of deaf children. *Canadian Modern Language Review*, 71(3), 270-287. doi: 10.3138/cmlr.2602
- Snoddon, K. (2016). Whose ASL counts? Linguistic prescriptivism and challenges in the context of parent sign language curriculum development. *International Journal of Bilingual Education and Bilingualism*, 1-12. doi: 10.1080/13670050.2016.1228599
- Snoddon, K., & Underwood, K. (2014). Toward a social relational model of Deaf childhood. *Disability & Society*, 29(4), 530-542. <http://dx.doi.org/10.1080/09687599.2013.823081>
- Stacey, D., Légaré, F., Col, N. F., Bennett, C. L., Barry, M. J., Eden, K. B., Holmes-Rovner, M., Llewellyn-Thomas, H., Lyddiatt, A., Thomson, R., Trevena, L., & Wu, J. H. C. (2014). Decision aids for people facing health treatment or screening decisions. *Cochrane Database of Systematic Reviews*. 2014 Jan 28;1:CD 001431. DOI: 10.1002/14651858.CD001431.pub4
- Tharpe, A. M., & Dickinson, W. W. (2011). Audiologic management of unilateral and minimal to mild bilateral hearing loss in children. In R. Seewald & A.M. Tharpe (Eds.) *Comprehensive Handbook of Pediatric Audiology* (pp. 683-691). San Diego, CA: Plural Publishing.
- Tomblin, J. B., Harrison, M., Ambrose, S. E., Walker, E. A., Oleson, J. J., & Moeller, M. P. (2015). Language outcomes in young children with mild to severe hearing loss. *Ear & Hearing*, Nov-Dec;36 Suppl 1:76S-91S. doi: 10.1097/AUD.0000000000000219

- Traxler, M. J. (2012). *Introduction to psycholinguistics*. Chichester, UK: Wiley-Blackwell.
- Valli, C. & Lucas, C. (2000). *Linguistics of ASL: An Introduction*. 3<sup>rd</sup> ed. Washington, D.C.: Gallaudet University Press.
- Valli, C., Lucas, C., & Mulrooney, K. J. (2005). *Linguistics of ASL: An Introduction*. 4<sup>th</sup> ed. Washington, D.C.: Gallaudet University Press.
- Visual Language and Visual Learning Science of Learning Center. (2013, June). Family Involvement in ASL Acquisition. (Research Brief No. 9). Washington, DC: Charlotte Enns & Lianna Price.
- Walker, E., McCreery, R., Spratford, M., Oleson, J., Van Buren, J., Bentler, R., Roush, P., Moeller, M.P. (2015). Trends and predictors of longitudinal hearing aid use for children who are hard of hearing. *Ear and Hearing*, Volume 36, Supplement 1, 38S-47S.
- Wolsey, J. L. A., Clark, M. D., van der Mark, L., & Suggs, C. (2017). Life Scripts and Life Stories of Oral Deaf Individuals. *Journal of Developmental and Physical Disabilities*, 29(1), 77-103. doi 10.1007/s10882-016-9487-z
- World Health Organization. (2013). *International Classification of Functioning, Disability and Health: Child & Youth Version (ICF-CY)*. Switzerland, EU.

#### ***American Sign Language***

American Sign Language (ASL) is a language used by the ASL community in Canada using a distinct grammatical and syntactic structure not derived from any other language, either spoken or written. Children of parents who use ASL also acquire and use ASL as their first language. The complexity of American Sign Language can express the full breadth of human experiences that are conveyed in theories, science, education, history, politics, culture and literature. ASL cultural identity is inextricably interwoven with ASL language.

“Recent research on the syntax of sign languages has revealed that, apart from some modality-specific differences, sign languages are organized according to the same underlying principles as spoken languages.”

ASL as an academic language — whose vocabulary, classifier structures, grammatical structures and non-manual grammatical markers, registers and forms are appropriately applied in formal ASL expositions, oratory pieces, debates, literature, presentations, etc. ASL as an academic language is used at abstract level of language in an academic setting. It involves necessary language and literacy competencies that include analysis, synthesis, and evaluation, metacognition and metalinguistic awareness.

ASL as a conversational language — a vernacular language that is used on a daily basis in a variety of social and cultural contexts

(Bahan et al., 1999; Ministry of Education & Training, 1993; Ministry of Education, 2007; Ministry of Education, 2017; Valli & Lucas, 2000)

#### ***Auditory verbal therapy (avt) approach***

A method for teaching children with permanent hearing loss to listen and speak to support the development of spoken language. Within the IHP, this is a strategy used by SLPs to support spoken language development. (Ministry of Children & Youth Services & Children’s Hospital of Eastern Ontario, 2017)

#### ***Cochlear implant***

A surgically implanted electronic device that provides individuals with the sensation of hearing. It is recommended for individuals who obtain limited or no benefit from air conduction hearing aids. (Ministry of Children & Youth Services, 2017)



## ***Communication***

Communication is a two-way process of reaching mutual understanding, in which participants not only exchange information, news, ideas, and feelings but also create and shared meaning (<http://businessdictionary.com/definition/communication.html>). Communication includes auditory, visual, gestural, written, receptive and expressive language. (Moeller et al, 2013)

## ***Individual Education Plan (IEP)***

The Individual Education Plan (IEP) is “a written plan describing the special education program and/or services required by a particular student, based on a thorough assessment of the student’s strengths and needs – that is, the strengths and needs that affect the student’s ability to learn and to demonstrate learning.” It is a working document that identifies learning expectations that are modified from the expectations for the age-appropriate grade level in a particular subject or course, helps teachers monitor the student’s progress, and provides a framework for communicating information about the student’s progress to parents and to the student. (Ministry of Education, 2004). Children who are accessing preschool services from their local District School Board may have an IEP prior to school entry.

## ***Language***

Language is a rule-governed communication system used to exchange information and is made up of phonology, morphology, syntax, semantics, and pragmatics (Traxler, 2012). Language includes all the words we know, how we put these words together into sentences and how we understand and express ideas and feelings. (Visual Language and Visual Learning Science of Learning Center, 2013)

## ***Langue des signes québécoise***

Langue des signes québécoise (LSQ) is a natural visuospatial language that is mainly used in Quebec and in Francophone parts of Ontario and other provinces by thousands of members of the Deaf LSQ community. It is an inherent part of Deaf cultural identity and the driving force of Deaf LSQ communities in Canada. For these communities, in addition to being the everyday language of reference to convey the full breadth of human experiences in various spheres of life, it is also the first language of Deaf and hearing children of Deaf parents.

LSQ has its own distinct phonological, syntactic and grammatical structures. It is a rich and complex language that is comprised of its own lexicon, classifiers, non-manual markers, and registers that are expressed with spatial references. Linguistic parameters such as facial expressions, hand shapes, movements, directions, and locations also play a crucial part in conveying information visually in LSQ.

Like all other languages around the world, LSQ is a living language that evolves over time, and is used by signers to express complex and abstract ideas in a diverse range of topics. Since 1993, LSQ, as well as American Sign Language (ASL), have been officially recognized as official languages in Ontario for teaching Deaf and Hard of Hearing students (Parisot & Rinfret, 2012; Ministry of Education & Training, 1993).

### ***Permanent Hearing Loss (PHL)***

Within the IHP, a hearing loss of 30 dB HL or more at 500, 1000, 2000 or 4000 Hz in any ear caused by disorders of the cochlea, brainstem auditory pathways or structural abnormalities affecting sound conduction through the external or middle ear structures. Within the IHP, the hearing loss is considered permanent if it will not resolve spontaneously and will present a loss of hearing sensitivity in the absence of intervention for six months or more. (Ministry of Children & Youth Services, 2016)

### ***Signed language***

Signed language is achieved by combining hand shapes, face movements, body movements, and other grammatical features to form signs and sentences (Valli, Lucas & Mulrooney, 2005). Therefore, sign languages use the visual system for receptive language and manual articulators (e.g., hands, face, and body for expressive language. ASL/LSQ are the signed languages supported by the IHP.

### ***Spoken language***

Spoken language is achieved by articulating words and sentences using the vocal tract for expression and by using hearing to receive the spoken language of others. Therefore, spoken languages use the aural senses for receptive language and oral articulators for expressive language (Traxler, 2012). English/French (or other languages, if available) are the spoken languages supported by the IHP.

---

### IMPLICATIONS OF PERMANENT HEARING LOSS ON LANGUAGE DEVELOPMENT

Knowledge regarding language development for infants born with various degrees of hearing and support for language development is necessary and provided for parents through the IHP.

Within the Ontario IHP, approximately 85% of infants who are identified with permanent hearing loss (PHL) fall within the mild to moderately-severe hearing loss range (25 – 70 dB HL; Bagatto et al, 2016). With current technology and evidence-based protocols for hearing aid fitting, infants with mild to moderately-severe permanent hearing loss will have sufficient access to speech through the consistent use of well-fitted hearing aids (Bagatto et al, 2016; Moodie et al, 2017); keeping in mind that additional goals should support the child's social, emotional, and academic wellbeing (Bodrova & Leong, 2008; Gray et al., 2007) and development of world knowledge (Convertino, Borgna, Marschark, & Durkin, 2015). For infants and young children who have hearing loss within the severe to profound range (71 dB HL and greater), access to speech through hearing aids may be limited, depending on the amount of residual hearing and limitations within the technology, among other factors. These children may benefit from signed language either as a primary language and/or in addition to spoken language development. Children with severe to profound hearing loss may be candidates for cochlear implants following a trial period with hearing aids during infancy and may benefit from signed language either as a primary language and/or in addition to spoken language.

---

### SPOKEN AND SIGNED LANGUAGE ACQUISITION

Languages can be produced through hearing and speech or through vision and the manual modality. Given that 92% of infants born with PHL have hearing parents (Mitchell & Karchmer, 2004) it is frequently unexpected when parents learn that their infant has a hearing loss (Benedict, 2013) as they may have never met a person who has hearing loss, before their baby. Therefore, families are to be supported in their understanding of how children who are D/HH acquire language. Families should be informed of the facilitators and barriers to signed and spoken language development, to help them decide which they will choose as the primary pathway to be supported by the IHP. Families should also be informed about how their child's progress will be assessed during intervention to support them in decision-making over time and as their child grows. To achieve success in either language, parents should be supported to understand how to provide a supportive, language-rich environment for their developing child.

A recent longitudinal outcomes study of language development of children with mild to severe permanent hearing loss (which the data from the IHP indicates is approximately 85% of the children in the program) showed language development skills aligned with their typically-developing hearing peers as long as they were well-fitted with hearing aids and received appropriate hearing aid and spoken language development support (Ambrose et al., 2015; McCreery et al., 2015; Tomblin et al., 2015; Walker et al., 2015).

Children who are D/HH with age-appropriate exposure to signed language (such as ASL/LSQ) from signing ASL/LSQ parents demonstrate language, literacy, cognitive and psychosocial development similar to their typically developing hearing peers (Hall, Eigsti, Bortfeld, & Lillo-Martin, 2016). Hall and colleagues (2016) emphasize that 'natural sign language' refers to "a language that arises spontaneously within a community of Deaf users and is acquired and transmitted across generations, evolving its own phonology, morphology, and syntax naturally along the way" and is "crucially different from other types of signing systems (such as Signed English and Total Communication)." Moreover, the Early Educational Longitudinal Study (EELS; Allen, 2015; Allen, Morere, Clark, & Murphy, 2014) found that children in families who are learning signed languages also showed higher pre-literacy skills than their 3-, 4-, and 5-year old peers in families that were not signing. Therefore it appears that visually accessible language allows the development of linguistic foundations for later academic success in children using both signed and spoken language (Hrastinski & Wilbur, 2016).

## APPENDIX C: LANGUAGE DEVELOPMENT SERVICES SHARED DECISION AID AND SUPPORT MATERIAL FOR PROFESSIONALS

The Infant Hearing Program helps eligible children who are D/deaf or hard of hearing (D/HH) to develop language, to the best of their ability, by the time they start school. The Program funds services to develop either spoken language (English/French, or other languages if available) or signed language (American Sign Language (ASL) or Langue des signes québécoise (LSQ)). If you wish for your child to develop both spoken and signed language, you will be directed to community or web-based/online resources outside of the Program for development of the second language. To help you decide which language you would like your child to develop through the Program, you and your child's team of professionals will discuss the information below. You and your child's team of professionals can come back to this information in the future, if needed.

	<b>SPOKEN LANGUAGE (English/French, or other languages if available)</b>	<b>OR</b>	<b>SIGNED LANGUAGE (ASL/LSQ)</b>
What will help my child to learn language?	<p>Your child needs to wear hearing aids and/or cochlear implants all of the time that they are awake so that they can be exposed to as much spoken language as possible early in life.</p> <p>Spoken language is used as the main way to communicate. It is used most of the time at home and in other places (e.g., during family outings, child care centres).</p> <p>Your child can receive services from the Infant Hearing Program to learn spoken language so they can practice using it every day.</p>		<p>Your child needs exposure to signed language (ASL/LSQ) early in life, and use it as the main way to communicate.</p> <p>Signed language is used regularly in the home and in other places (e.g., during family outings, child care centres). As a parent, communicating with your child also includes eye gaze, joint attention, and attending to a child's signs.</p> <p>Your child can receive services from the Infant Hearing Program to learn signed language so they can practice using it every day.</p>
What are the potential challenges?	<p>Some children with complex special needs may have difficulty learning spoken language, or develop it at a different pace than other children.</p> <p>Active and motivated participation of parents and other family members is key to developing spoken language. Being in places where you and others are frequently using spoken language is important to your child's development.</p>		<p>Some children with complex special needs may have difficulty learning signed language, or develop it at a different pace than other children.</p> <p>Active and motivated participation of parents and other family members is key to developing signed language. Being in places where you and others are frequently using signed language is important to your child's development.</p> <p>Most parents will need to learn signed language, which is not offered by the Infant Hearing Program. Your child's team can help guide you to community programs or web based resources, outside of the Program, that provide services for people who are D/HH.</p>
What are the costs?	<p>The Infant Hearing Program offers spoken language development services free of charge for children, if required, until they enter school.</p>		<p>The Infant Hearing Program offers signed language development services free of charge for children until they enter school. Community or web resources outside of the Program may support you to develop your signed language skills.</p>

	SPOKEN LANGUAGE	OR	SIGNED LANGUAGE
What do language development services in the Infant Hearing Program look like?	A Speech- Language Pathologist (SLP) will work with your child, in a community setting, to help develop spoken language. They will also teach you ways to help your child develop spoken language. The SLP will regularly measure your child's progress and work with other professionals on your child's team to help you make the best decisions about services for your child.		An ASL/LSQ Consultant will work with your child, in your home or in a community setting, to help develop signed language. They will also teach you ways to help your child develop signed language. The ASL/LSQ Consultant will regularly measure your child's progress and work with other professionals on your child's team to help you make the best decisions about services for your child.
What if my child is not making progress in developing language?	After regular measuring, if your child is not progressing in spoken language as expected, your SLP will work with you to recommend other ways to help your child communicate. This may include working with other professionals on your child's team. In some cases other services could include learning ASL/LSQ, depending on your child's needs.		After regular measuring, if your child is not developing ASL/LSQ as expected, your ASL/LSQ Consultant will work with you to recommend other ways to help your child communicate. This may include working with other professionals on your child's team.
What happens when my child goes to school?	Your child may have access to supports for using spoken language in the classroom through a local school board or Provincial School for the Deaf. Successful transitions to school need to start early (six months to one year before school starts) and discussions should be in writing. If your child will attend a local school, you should contact the school's Principal and Special Education Department to let them know about your child's needs. If you wish for your child to attend a Provincial School for the Deaf, you should register with your local school board and ask for a placement at a Provincial School for the Deaf.		Your child may have access to supports for using signed language in the classroom through a local school board or Provincial School for the Deaf. Successful transitions to school need to start early (six months to one year before school starts) and discussions should be in writing. If your child will attend a local school, you should contact the school's Principal and Special Education Department to let them know about your child's needs. If you wish for your child to attend a Provincial School for the Deaf, you should register with your local school board and ask for a placement at a Provincial School for the Deaf.

**My/our goal is for the Infant Hearing Program to support my/our child's development of:**

**Spoken language – YES NO UNSURE**

**Signed Language – YES NO UNSURE**

**Receiving both spoken and signed language services through the Program for a trial period**

In some complex cases, you and your child's team of professionals may decide that it is unclear if your child should receive spoken language or signed language development services through the Infant Hearing Program. In these exceptional cases, an initial decision may be made to focus early language development on using spoken language and signed language for a limited time. With language development check-ups, you and your child's team of professionals will need to decide which language pathway (spoken or signed language) to focus on through the Program.

## DECISION AID: FREQUENTLY ASKED QUESTIONS

The Frequently Asked Questions (FAQs) that follow should accompany the use of the IHP Language Development Services Shared Decision Aid. The FAQs are a tool for service providers to support discussions with families about considerations that will inform decision-making about a language pathway that will be supported by the IHP.

---

### WHAT WILL HELP MY CHILD TO LEARN LANGUAGE?

The IHP provides language intervention services for children identified with PHL, with the goal that children will develop a language (signed or spoken) to the best of their ability by the time they enter school.

Children who are D/HH and who wear hearing aids and/or cochlear implants that provide good aided audibility for speech across the broadest frequency range possible have the potential to achieve spoken language and literacy outcomes similar to their peers with hearing considered to be in the 'normal hearing' range (Tomblin, Harrison, Ambrose, Oleson & Moeller, 2015). To achieve this outcome they should:

- have hearing aids fitted early in life;
- wear appropriately-fitted hearing aids all waking hours;
- have home, child care and other environments where they frequently hear high quality, rich, consistent spoken language;
- have family-directed, spoken language support from an SLP; and
- have families who are committed to providing language stimulation beyond service provider visits.

Children who are D/HH who may or may not wear hearing aids and/or cochlear implants have the potential to achieve signed language and literacy outcomes similar to their peers with hearing considered to be in the 'normal hearing' range (Chen Pichler, Lee, & Lillo-Martin, 2014; Hall et al., 2016; Snodden, 2015). To achieve this outcome they should:

- learn signed language early in life;
- have home, child care and other environments where they have a high quality, rich, consistent signed language environment;
- have signed language support provided to the child from trained signed language providers;
- have families that access signed language learning opportunities;
- have families that are committed to providing language stimulation beyond signed language service provider visits; and
- participate in and develop an identity/connection with the Deaf culture/community.

Research has shown that when parents who are highly fluent in ASL have children who have a well-developed language foundation in ASL, it enables the child to reach higher levels of English literacy regardless of parental hearing status (Snodden, 2008).

In addition to language development, consideration should also be given to factors that will support the child's social-emotional wellbeing and development of a positive identity as a person who is D/HH.

---

## WHAT ARE THE POTENTIAL CHALLENGES?

Approximately 30% to 40% of children with PHL will have an additional medical condition that impacts development, including language development (Bagatto et al., 2011; 2016). Depending on the condition, the development of spoken and/or signed language may be challenging.

The requirements for a child to develop spoken or signed language requires concentrated and active participation from parents, other family members, and early childhood educators (Beckley, 2016; Head Zauche, Thul, Darcy Mahoney, & Stapel-Wax, 2016). Parents who wish for their child to develop spoken language need to have sufficient communication skills so that they include rich and varied spoken language experiences in their everyday activities (Head Zauche et al., 2016). Parents who wish for their child to develop signed language need to develop age appropriate signed language skills so that they can participate fluently and frequently at every opportunity within their family environment, and alongside their children in the D/HH community (Snodden 2016; 2015). Parents who wish to learn signed language need access to programs that understand the unique needs of these parents for learning signed language for use within a family-centred, early language development context (Chen Pichler, Lee, & Lillo-Martin, 2014; Snodden, 2015).

---

## WHAT ARE THE COSTS?

The IHP funds language development services for children who are D/HH in either signed or spoken language, or in some complex cases both during a trial period. Once a family makes a decision about a primary language pathway to be supported through the IHP, if they wish for their child to also develop the second language (that has not been chosen as the primary language in the IHP), the family's service providers will refer them to other community programs or online resources.

Children are eligible to receive language development services through the IHP until they enter school (as early as junior kindergarten entry or up to grade one entry). Children who are not enrolled in a publicly-funded school may continue to receive services through the IHP up until entry into grade one. Prior to school entry, if assessment indicates that a child is achieving age-appropriate (i.e. actual age) language development milestones, the child should be discharged from active language development services (e.g., ongoing language development services from a Speech-Language Pathologist or ASL/LSQ Consultant, regular team meetings) and monitored until school entry. At school entry, the child may be eligible for and will transition to school-based services for students who are D/HH as seamlessly as possible. Audiology services (e.g., hearing assessments, hearing aid management) are provided to children, through the IHP, until they are six years of age. In most IHP



regions, Family Support Worker services are available for children and their families, until age six/grade one entry.

Parents choosing signed language development for their child, who need to develop signed language skills themselves will be guided to services outside of the IHP (community or web-based/online resources). Parents are to be made aware that ASL/LSQ are languages, not simply signed vocabulary lists. Learning signed language entails learning about communication needs such as eye gaze, joint attention, and paying attention to signs received from the child.

---

## WHAT DO LANGUAGE DEVELOPMENT SERVICES IN THE IHP LOOK LIKE?

Intervention for facilitating a child's early spoken language development will be provided by an SLP. SLPs are regulated health care professionals with specialized knowledge, skills and the clinical training to support spoken language development. A clear plan for language development will be documented within a Communication Development Plan (CDP), in collaboration with the parents and appropriate professionals. Regular measurement of the child's language development progress is implemented throughout the intervention stage. The need for, frequency of, and type of strategies used will be modified accordingly based on the child's language development progress and other considerations. These will be documented in a revised CDP over time.

Intervention for facilitating a child's early signed language development will be provided by ASL/LSQ Consultants. ASL/LSQ Consultants are specially trained professionals that have specialized knowledge and skills to support ASL/LSQ language development. A clear plan for language development will be documented within a CDP, in collaboration with the parents and appropriate professionals. Regular measurement of the child's language development progress is implemented throughout the intervention stage. The need for, frequency of, and type of strategies used will be modified accordingly based on the child's language development progress and other considerations. These will be documented in revised CDP over time.

---

## WHAT IF MY CHILD IS NOT MAKING PROGRESS IN DEVELOPING LANGUAGE?

The family-centred early intervention team consists of the child's parents, Audiologist, Family Support Worker, SLP or ASL/LSQ Consultant and other professional team members as necessary. Regardless of the method of language development (signed or spoken language), regular measurement of the child's language development progress is implemented throughout the intervention stage, every six months. If a child is not developing language skills as expected, additional strategies and/or resources will be discussed with the family.

IHP service providers are required to meet with the family and other team members to share information, provide updates, and (re)-establish goals for the child every six months. Progress regarding language development (spoken or signed) is discussed with the family and other team members at these routine meetings. If a family member, IHP service provider, or other team member has any concerns that language development is not following appropriate developmental milestones, these concerns will be discussed immediately rather than at the next six month meeting date.

---

## WHAT HAPPENS WHEN MY CHILD GOES TO SCHOOL?

The process of transitioning to school for a child who is D/HH can be complex and take time to plan, therefore discussions should start early (e.g., at least six months to one year prior to a child entering school). The team should meet to identify the child's service needs, goals, and the school-based services that are available and this information should be incorporated in the CDP. If possible, all service providers that have been involved with the child/family should be invited to participate in this planning process (e.g., IHP Audiologist, ASL/LSQ Consultant, FSW, SLP, child care provider, PDSB Preschool Home Visiting Teacher).

Children who are D/HH may attend a school in their local District School Board or could be eligible for one of the Ministry of Education's Provincial Schools for the Deaf. To enroll in a publicly-funded school in a local District School Board (DSB), parents should contact the school principal of their local school and may also wish to contact the school's Special Education Department. To apply to one of the Provincial Schools for the Deaf, parents should first register with their local DSB and participate in an Identification Placement and Review Committee (IPRC) process within the DSB. During the IPRC process, parents can request the placement option of a Provincial School for the Deaf. In either case, parents should begin the transition process as soon as possible so that the child's needs can be identified and planned for, in collaboration the child's team, so that school staff are prepared to support the needs of the child upon entering the classroom.

A child transitions, as seamlessly as possible, from IHP language development services to school-based services for students who are D/HH when the child enters school. Audiology services (e.g., hearing assessments, hearing aid management) are provided to children, through the IHP, until they are six years of age. In most IHP regions, Family Support Worker services are available for children and their families, until age six/grade one entry.



