Florida’s
COMMUNICATION DEVELOPMENT MONITORING PROCESS
for the Serving Hearing Impaired Newborns Effectively (SHINE)
Component of Early Intervention Services for Infants and Toddlers

MANUAL

Prepared by Children’s Medical Services Early Steps State Office
SHINE Component of Early Steps
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TABLE OF CONTENTS
PURPOSE AND SUMMARY ............................................................................................................................................. 4
Summary of Communication Development Monitoring (CDM) Materials ................................................................. 4
Demographic and Hearing Loss Related Information ..................................................................................................... 4
SHINE Vocabulary Checklists ......................................................................................................................................... 5
Language Development Scale (LDS) ................................................................................................................................ 5
Auditory Skills Checklist ..................................................................................................................................................... 6
Parent Interview Progress Report ..................................................................................................................................... 6
Summary of CDM Information to Report ......................................................................................................................... 7
Reporting Expectations ............................................................................................................................................................ 7
CDM Reporting Schedule .................................................................................................................................................... 8
Description of Different SHINE Vocabulary Checklists ................................................................................................. 9
Examples of Intervals Between Communication Development Monitoring ............................................................. 9
SHINE Vocabulary Checklist: Level I ................................................................................................................................. 10
Vocabulary Checklist ............................................................................................................................................................ 10
Actions and Gestures .............................................................................................................................................................. 10
SHINE Vocabulary Checklist: Level II (Form A and Form B) ............................................................................................ 11
SHINE Vocabulary Checklist: Level III ............................................................................................................................... 11
Other Language Versions ......................................................................................................................................................... 11
RESPONSIBILITY FOR COMMUNICATION DEVELOPMENT MONITORING ............................................................... 12
Three Stages of Communication Development Monitoring .......................................................................................... 12
Completing the Forms and Checklists ............................................................................................................................... 12
Sharing an Interpretation of the Results with Parents ........................................................................................................ 12
Submitting Copies of Completed Forms to Early Steps State Office .............................................................................. 13
COMPLETION OF DEMOGRAPHIC INFORMATION ........................................................................................................ 12
Confidentiality ......................................................................................................................................................................... 12
Completeness of Reporting .................................................................................................................................................... 14
Information to be Completed with Involved Report by Parents ......................................................................................... 14
General Information About the Child .................................................................................................................................. 14
Information About the Child’s Hearing Loss .......................................................................................................................... 14
Language Usage Information .................................................................................................................................................. 16
Etiology – Primary Cause of Hearing Loss .......................................................................................................................... 16
Additional Disabilities .............................................................................................................................................................. 17
Service Provision Information .................................................................................................................................................. 17
Characteristics of Family Involvement ................................................................................................................................. 17
SCORING COMMUNICATION DEVELOPMENT MONITORING CHECKLISTS ........................................................................... 19
Scoring via the Paper Method (not preferred method) ........................................................................................................ 19
Level I Step-By-Step Instructions ........................................................................................................................................ 19
Vocabulary Production and Comprehension .......................................................................................................................... 19
Actions and Gestures .............................................................................................................................................................. 20
Determining Improvement in Months ................................................................................................................................. 20
Estimated growth in vocabulary production since last communication monitoring period ............................................. 21
Level II Step-By-Step Instructions ........................................................................................................................................ 21
Vocabulary Production .......................................................................................................................................................... 21
Level III Step-By-Step Instructions ...................................................................................................................................... 21
Vocabulary Production and Comprehension .......................................................................................................................... 21
Graphing Results ...................................................................................................................................................................... 21
INTERPRETING AND DISCUSSING THE SHINE VOCABULARY CHECKLIST RESULTS WITH PARENTS ..................................................................................................................... 23
Access to Communication in the Natural Environment ................................................................................................... 23
Insufficient Intensity of Communication Experiences .............................................. 23
Lack of Effectiveness of the Communication Features ........................................... 24

INTERPRETING PERCENTILE SCORES .................................................................. 24

REVIEWING THE COMMUNICATION PLAN ............................................................ 25
Areas of concern that the parents and caregivers could consider include: ...... 25

CHILDREN WITH ADDITIONAL DISABILITIES .................................................... 26

CONTACT FOR MORE INFORMATION .................................................................. 27

THE COMMUNICATION DEVELOPMENT MONITORING REPORT FORM AND ALL
TEST INFORMATION CAN BE FOUND AT:

http://www.cms-kids.com/SHINE/shineCommunicationDev.htm
PURPOSE OF COMMUNICATION DEVELOPMENT MONITORING PROCEDURES

Hearing loss prevents full access to communication and delays the normal development of speech and language abilities. Early intervention services assist parents and caregivers in developing an awareness of the communication access barrier that hearing loss poses, facilitates their development of effective parent-child communication strategies, and supports their use of effective communication practices in the natural environments of the child. With adequate and appropriate access to natural communication opportunities, a child with hearing loss can progress in language development at the same rate as a child with normal hearing, that is, one month of language development for every one month of effective communication. The first three years of life (especially the first 6 months) are pivotal to the development of a typical foundation of linguistic skills.

It is important to monitor the communication development of children with hearing loss as a means to gauge the effectiveness of their early intervention program. Communication development monitoring as described in this manual provides a structure of check points during which a child’s language learning will be carefully considered. Not all children learn language at the same rate; however, inadequate access to communication opportunities will delay language development and will interfere with a child’s potential to develop language at a rate that is optimal to their individual potential.

Ultimately, the primary purpose of communication development monitoring is to inform the parents of their child’s language and auditory skill development progress over time and provide them with the opportunity to consider if any changes are needed to the child’s current level of communication access. Secondly, aggregate data on language and auditory skill development of children with hearing loss who have participated in the SHINE component of local early intervention programs will raise the awareness of any changes that may be needed in how or what SHINE services are provided to families on a state level.

SUMMARY OF THE COMMUNICATION DEVELOPMENT MONITORING PROCEDURES

Communication development is multifaceted. No single test captures how well a child is progressing in all skills related to developing communication. Due to this it was felt necessary to specify four checklists to be considered as the child develops communication skills. Each one was selected to be as family-friendly as possible while obtaining information that would show progress in different communication skill areas over time. All Communication Development Monitoring (CDM) materials, including the electronic reporting form can be found at:

http://www.cms-kids.com/SHINE/shineCommunicationDev.htm

Demographic and Hearing Loss Related Information

A report form that includes demographic and hearing loss related questions and CDM results can be found at http://www.cms-kids.com/SHINE/CDM_Procedure.htm. The purpose of the questions that have been included are threefold. First, by answering these questions at each IFSP review the parents are encouraged to develop a base of knowledge that will be very useful to them as they advocate for their child’s needs at school age. Secondly, to identify relevant aspects of communication access that will assist in discussing the CDM results with the parents. And finally, collecting standard demographic and hearing loss related information will allow the analysis of this body of aggregate information.
SHINE Vocabulary Checklists
Most of the information in this manual is related to the SHINE Vocabulary Checklists, which are based on the MacArthur Communication Development Inventories (MCDI). Use of the MCDI should be considered a procedure for screening a child’s development of language. A full evaluation of language ability administered by a speech language pathologist will provide more detailed information regarding areas of communication strengths and non-strengths. The MCDI has been customized, with the author’s permission and cooperation, to meet the needs of communication development monitoring for the SHINE services component in Local Early Steps. For the purposes of this monitoring, the questionnaires have been titled “SHINE Vocabulary Checklists Levels I, II, or III.” The customized features relate to making the MCDI forms appropriate for use by families who use both verbal and/or signed communication with their children with hearing loss. Customized features do not interfere with the established norms published by the authors of the MCDI. These forms, graphs, and norms can be found at http://www.cms-kids.com/SHINE/CDM_Procedure.htm. The MCDI has established norms and is a widely identified means to inventory child development of language skills in early intervention programs. The MCDI is a recognized and accepted means of providing programmatic and planning information to families and early intervention services providers across the United States. Versions of the ASL and Spanish translations are also provided.

Language Development Scale (LDS)
The Language Development Scale (LDS) was developed in 1979 and revised in 2004. The LDS was developed primarily for use in early intervention programs for infants and young children who are deaf or hard of hearing and their families. Expressive and receptive language skills are listed. Items specific to early auditory development are not included on the LDS so that children who use sign language will not be penalized. Rather, the child is given credit for his understanding and use of words and/or signs.

Developmental skills are organized into Units. Each unit is equivalent to 2 months of skill development for units 1-12 (age 0-24 months) and every 4 months for units 11-20 (age 24-60 months).

- If a child is vocalizing but has no gestural, verbal, or sign language then Units 1-3 should be administered.
- If the child is primarily using gestures (with or without beginning words or signs) and with limited vocalizing then Units 5-6 should be administered.
- If the child is beginning to use words then Units 5-8 is appropriate to administer.
- If the child exhibits half or more of the behaviors in a unit then the skills in the next unit should begin to be discussed with the parent and the child should be observed for these skills.
- The most advanced unit in which a child has at least half of the receptive and half of the expressive skills checked would be considered his or her current ability level and is the unit that the SHINE provider should record on the SHINE Vocabulary Checklist Results Summary Page.

Please refer to the Language Development Scale Instruction Manual for more information on the administration and scoring. Copies of the LDS (English and Spanish) are available to hearing specialists in Florida who provide initial SHINE information services and hearing specialists from the Early Steps State Office, Coordinator of Hearing and Vision Services.
Auditory Skills Checklist

The Auditory Skills Checklist can be found at: www.cms-kids.com/SHINE/AUDITORY_SKILLS_CHECKLIST.pdf  The Auditory Skills Checklist contains a hierarchy of auditory skills divided into ten levels. Unlike the Language Development Scale, the levels are not related to a child’s age. Progress in auditory development will depend on a child’s auditory capability, the level of importance the family has on the child developing auditory and verbal language skills, the amount of effort caregivers place on developing auditory skills, and other developmental abilities, such as motor and cognitive skills, that can affect how a child interacts and plays. Some children will progress relatively rapidly through the first four auditory skill levels and others will make little progress. Progress in the different levels is often spotty, with some skills acquired across a few levels. Few children with hearing loss under age 3 will acquire skills in all levels. Hearing specialists who provide initial SHINE information services should assist parents and caregivers in determining if the child has begun to develop an auditory skill (emerging), if they are using the new skill sometimes but not most of the time (inconsistent) or if the skill is being used most of the time (acquired). It is expected that the number of these skills will increase every 6 months or periodic IFSP review unless the child is completely in a sign language environment with no auditory input. The number of emerging, inconsistent, and acquired skills that a child exhibits should be recorded on the SHINE CDM report form at http://www.cms-kids.com/SHINE/CDM_Procedure.htm.

Parent Interview Progress Report

In addition to the SHINE CDM electronic report form and the SHINE Vocabulary Checklists, LDS, and Auditory Skill Checklist the hearing specialist who provides initial SHINE information and subsequent CDM monitoring should also assist the family in completing the Parent Interview Progress Report that has been developed in the Early Steps State Office.

The Parent Interview Progress Report is NOT administered at baseline, which is considered to be within 30 days of the initial IFSP. The Parent Interview Progress Report is to be administered along with the LDS, vocabulary and auditory skills checklist upon periodic review of the IFSP, at least every 6 months. If the child has made at least one month of progress for every one month since the prior CDM then it is not necessary to complete the Parent Interview Progress Report with the caregivers.

The primary purpose of the Parent Interview Progress report is to assist the hearing specialist and the parents or caregivers in identifying possible reasons why the child has not made adequate progress in the months since the prior CDM was administered. Each of the 10 questions on the Parent Interview Progress Report is associated with a factor that may affect a child’s access to communication and incidental exposure to language. The developmental progress of children who are Deaf or hard of hearing is correlated with the degree to which they are able to access communication effectively in all environments and activities. A secondary purpose of the Parent Interview Progress Report is to obtain information on variable that will allow more accurate comprehensive evaluation and analysis of aggregate information of aggregated data. The Parent Interview Progress Report is included at http://www.cms-kids.com/SHINE/Parent_Interview_Progress_Report.pdf
Summary of Communication Development Monitoring Information to Report
http://www.cms-kids.com/SHINE/shineCommunicationDev.htm

1. **Electronic Report Form**: provides basic information on the child’s hearing loss, services and related information. Results of the following tests or checklists will be reported on this form.

2. **SHINE Vocabulary Lists, Level I, II, III**: lists are based on the MacArthur Communication Development Inventories. Provides information on vocabulary production from 8 months to 36 months. Percentile scores for vocabulary production will be compared to normative data for children with normal hearing and the growth of skills in months will be reported. The software built into the electronic report form identifies a child’s percentile rank and the age equivalent associated with the 50th percentile rank for his or her vocabulary production score.

3. **Learning Development Scale (LDS) by SKI*HI**: a nationally accepted development monitoring tool for young children with hearing loss that provides information on expressive and receptive language skills (spoken and signed) ages birth to 5 years. Each unit is equivalent to 2 months of skill development to age 2, 4 months for ages 25 –60 months. The unit in which child exhibits at least half of the receptive and half of the expressive language skills will be reported.

4. **Auditory Skills Checklist**: provides information on the acquisition of levels 1-10 of auditory skills (4 skills per level) that are necessary to track for the majority of children for whom speech is a goal. The number of auditory skills that are emerging, inconsistent, and acquired will be reported.

5. **Parent Interview Progress Report**: provides a format for discussion with parents and caregivers on elements related to communication access that are included in the Communication Plan and the potential need for adjustment in communication strategies, amplification wear, etc. Responses to the ten questions will be reported.

The Language Development Scale and the Auditory Skills Checklists should be used as part of the initial assessment of a child’s functional skills during the multidisciplinary evaluation. If the child is 8 months of age (chronologically or developmentally) or older the appropriate SHINE Vocabulary Checklist should also be administered as part of the assessment process. The results of the assessments should be documented in the IFSP. As always, needs of the individual child will guide assessment decisions, therefore there may be occasions when not all portions of this assessment battery are completed.

**Expectations**

1. A hearing specialist will be included on the multidisciplinary evaluation and assessment team for every child with identified permanent hearing loss. It is the preferred practice that this person be identified by the Local Early Steps as the individual who will provide SHINE initial information and perform subsequent Communication Development Monitoring.

2. The Auditory Skills Checklist, LDS, and SHINE Vocabulary Checklist information that will be obtained at or within 30 days of the multidisciplinary evaluation and assessment and the initial IFSP. This important baseline information necessary for communication development monitoring.

3. The hearing specialist who provides SHINE initial information to the family will complete the electronic report form and submit it to the child’s service coordinator and the Early Steps Coordinator of Hearing and Vision services according to the schedule on page 7 of this manual.
4. The needs of the individual child will guide assessment decisions, therefore there may be occasions when not all portions of this assessment battery are completed.

5. If there is a reason why the child was not assessed with all recommended test instruments will complete the electronic report form as fully as possible.

6. It is recommended that these checklists be referred to frequently as an aid to informal ongoing assessment of the child’s skills (i.e. at least quarterly intervals).

**Communication Development Monitoring Reporting Schedule**

<table>
<thead>
<tr>
<th>Time to obtain information</th>
<th>Information on Report Form</th>
<th>SHINE Vocabulary Checklists</th>
<th>Language Development Scale</th>
<th>Auditory Skills Checklist</th>
<th>Parent Interview Progress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assessment: Hearing Specialist who provides SHINE initial information has to submit all information to state office within 30 days of initial IFSP *</td>
<td>Hearing specialist in conjunction with parent and information available from SHINE service coordinator completes as fully as possible</td>
<td>Complete within 30 days of initial IFSP or IFSP when first services by hearing specialist appear. Child must have a developmental age of at least 8 months. Scores are baseline.</td>
<td>Use to assist with functional outcome planning as appropriate; indicate baseline unit level of development for receptive and expressive language</td>
<td>Use to assist with functional outcome planning as appropriate; indicate baseline auditory skill development for skills that are acquired, inconsistent, and emerging</td>
<td>Do NOT complete as part of baseline assessment</td>
</tr>
<tr>
<td>Review at periodic review of the IFSP, not to exceed 6 month intervals. All five pieces of information to be submitted</td>
<td>Fill in portion of information that was not available at baseline and update any information that changed since baseline.</td>
<td>Child must be at least 8 months developmental age to complete vocabulary checklists. Use only checklist level that is appropriate for age.</td>
<td>Indicate unit level at which child exhibits at least half of receptive language and at least half of the expressive language items</td>
<td>Indicate number of auditory skills that appear to be emerging, inconsistent, and acquired</td>
<td>Do not complete if 1 month of progress was made for every 1 month of intervention. Discuss the 10 questions with parents, complete and submit</td>
</tr>
<tr>
<td>Transition: complete if most recent review was more than 2 months prior to the time of transition out of Early Steps</td>
<td>Update any information that changed since the previous monitoring.</td>
<td>Child must be at least 8 months developmental age to complete vocabulary checklists. Use only checklist level that is appropriate for developmental/chronological age</td>
<td>Indicate unit level at which child exhibits at least half of receptive language and at least half of the expressive language items</td>
<td>Indicate number of auditory skills that are emerging, inconsistent, and acquired</td>
<td>Do NOT complete as part of transition</td>
</tr>
</tbody>
</table>

*The needs of the individual child will guide assessment decisions therefore there may be occasions when a portion of this assessment battery is not completed*
SHINE Communication Development Checklists  
Description of Different Vocabulary Checklists  

There are 4 different customized forms that reflect the communication development of children from age 8 months to age 37 months. The same form will be used twice in Level I, or for children age 8-18 months. Level II has two forms with different vocabulary words to allow more comprehensive evaluation of the typical growth in vocabulary that occurs from age 19 months to 30 months. Finally, Level III contains vocabulary words and more complex language forms that are anticipated for children age 30 to 36 months. **It is intended that a baseline SHINE Vocabulary Checklist be obtained for all children with hearing impairment between the ages of 8 and 35 months as they enter the Early Intervention Program.**

A baseline SHINE Vocabulary Checklist will not be obtained for children under 8 months of age (chronologically or developmentally) due to the very limited receptive and expressive language skills of these infants. Children with cognitive delays who also have hearing impairment should have their communication development monitored via the use of the SHINE Vocabulary Checklists. The IFSP review in which the child’s developmental level is at or above the 8 month level is the point at which the SHINE Vocabulary Checklist Level I should be administered. Subsequent SHINE Vocabulary Checklists appropriate to the child’s developmental level should be administered at IFSP reviews at least every 6 months to determined if the child’s communication development is proceeding at a rate similar to his or her other domains of development. In other words, if a child is above 18 months of age and has little or no expressive communication it would be appropriate for the parent to complete the Level I of the SHINE Communication Development Monitoring Process. Please refer to the table below for examples of intervals between communication development monitoring.

### Examples of intervals between communication development monitoring.

<table>
<thead>
<tr>
<th>Initial IFSP date</th>
<th>Hearing Loss Degree</th>
<th>Age at initial IFSP</th>
<th>Date of Level I 8-13 mo.</th>
<th>Date of Level I 14-18 mo.</th>
<th>Date of Level IIA 19-24 mo.</th>
<th>Date of Level IIB 25-30 mo.</th>
<th>Date of Level III 31-36 mo.</th>
</tr>
</thead>
<tbody>
<tr>
<td>7-6-04</td>
<td>Profound</td>
<td>2 months</td>
<td>1-6-05 8 months</td>
<td>7-6-05 14 months</td>
<td>1-6-06 20 months</td>
<td>7-6-06 28 months</td>
<td>1-6-07 32 months</td>
</tr>
<tr>
<td>7-6-04</td>
<td>Unilateral</td>
<td>14 months</td>
<td>7-6-04 14 months</td>
<td>1-6-05 20 months</td>
<td>7-6-05 26 months</td>
<td>1-6-06 32 months</td>
<td></td>
</tr>
<tr>
<td>7-6-04</td>
<td>Moderate with Down syndrome</td>
<td>2 months</td>
<td>1-7-06 8 months dev. age, 18 months chron. age</td>
<td>7-7-06 12 months dev. age, 24 months chron. age</td>
<td>Repeat I 1-7-07 15 months dev. age, 30 months chron. age</td>
<td>Perform IIA 5-7-07 19 months dev. age, 35 months chron. age</td>
<td></td>
</tr>
</tbody>
</table>

The inventory of words on each level of vocabulary checklist were derived by the authors of the McArthur Communication Development Inventory based on typical words present in the expressive language of children by certain ages. Children learn the words that they are exposed to consistently. It is very possible that a child has learned many new words in the period between communication monitoring events that do not appear
on the SHINE Vocabulary Checklists. Interventionists can keep the vocabulary appearing on the checklists in mind when targeting vocabulary to that used by caregivers in daily routines and activities. Parents should be assured that the checklists screen only for the words appearing in the inventories and that gains in language growth can be measured by assessment in addition to the SHINE Vocabulary Checklists.

**SHINE Vocabulary Checklist: Level I**

Level I of the SHINE Vocabulary Checklists is to be used twice. First when a child is 8-13 months old, and again when the child is 14-18 months. If the child enters Early Steps between 8 to 18 months of age, the parent will complete Level I as a baseline at the time of initial SHINE services, shortly after the interim Individual Family Support Plan (IFSP) is completed and preferably before the child’s multidisciplinary assessment and the rest of the IFSP are completed. If the child enters Early Steps at birth through 7 months of age then no baseline Vocabulary Checklist will be obtained at the time of Early Steps entry. Level I will be completed for the first time by the parents at an IFSP review that occurs no more than 6-months post Early Steps entry. If the child is at a chronological or developmental level less than 8 months of age, the SHINE provider will assist the parents in completing the SKI*HI Language Development Scale and the Auditory Skills Checklist.

Level I has two parts: a vocabulary checklist and actions and gestures items.

**Vocabulary Checklist**

The SHINE Vocabulary Checklist Level I gathers information on both receptive and expressive language. Other Levels reflect only expressive language skills. In Level I the caregivers identify words that the child understands (when signed or said). Caregivers also identify the words that the child expresses by signing or verbalizing. It is assumed that if the child is able to express a word that he or she also understands (when signed or said) the word. **These items are required.**

**Actions and Gestures**

A child’s use of actions and gestures has been found to correlate to cognitive development. These items have been included in the communication development monitoring process as a means to potentially identify or rule out communication delays that are related to global developmental delays, rather than from limitations in communication access due to hearing loss. Children who have hearing loss as their only disability should perform on the actions and gestures section equivalent to their normal hearing peers. Therefore, in this early development stage (8-18 months) the child’s performance on the Actions and Gestures portion should act as a guide for what the child’s language potential is and approximately the developmental level that he or she should be able to attain on the Level I Vocabulary Checklist if the barriers caused by hearing loss are fully addressed.

The actions and gestures items reflect skills learned through the child’s exposure to typical experiences and adult models. Cultural and socioeconomic differences are not reflected adequately in the test item inventory. If the child does not exhibit one or more of the skills included on this portion of the checklist it is important for the SHINE provider to discuss with the parent if the child has been exposed to the action or gesture during daily routines and activities.

**The actions and gestures items are recommended but are not required.**
SHINE Vocabulary Checklist: Level II (Form A and Form B)

This is a vocabulary checklist that requires the caregivers to identify the words on the list that the child says or signs (expressive language only). There are two forms of Level II, Form A is to be completed for children ages 19-24 months and Form B is to be completed for children ages 25-30 months. If the child enters Early Steps between 19 or 30 months of age, Form A or B of Level II will be completed as a baseline at the time of initial SHINE services, typically prior to the development of the first IFSP. If the child entered Early Steps prior to 19 months, Level II Form A and Form B would be completed to monitor communication development at the IFSP reviews occurring when the child is chronologically or developmentally 19-25 months of age.

SHINE Vocabulary Checklist: Level III

This level requires caregivers of children ages 31 months up to the time of the child’s transition age from Early Steps at 36 months to identify words the child signs or says. **This information is required.** In addition, caregivers identify the level of the child’s sentence grammar and language use. This information is recommended but is not required. This form can be completed as a baseline if the child does not enter Early Steps until 31-36 months, or will be completed to monitor communication development at the time of the final IFSP review.

*A final SHINE Vocabulary Checklist appropriate to the child’s chronological or developmental age will be completed prior to a child’s transition out of the Early Intervention Program if transition is more than two months later than the last communication monitoring.* For example, if a child’s communication was monitored at 30 months it would need to be monitored again prior to transition. If a child was monitored at 33 months and the paperwork to transition the child was completed by 35 months then no additional monitoring would be required. If the child was monitored at 32 months and transition was 35-36 months then an additional monitoring would be necessary.

**Other Language Versions**

Spanish and American Sign Language versions of these forms are included on the website. Separate norms or evaluation methods were developed for each of these versions. If a family uses Spanish or American Sign Language as their primary language when communicating with or around their child with hearing loss, then the appropriate alternative versions should be used to evaluate child communication development. It is highly recommended that the hearing specialist who provides SHINE services be able to interview the parent in the native language spoken by the parents. If this is not possible it is necessary for the hearing specialist to be accompanied by an appropriate interpreter or to otherwise identify a qualified source for language translation that is acceptable to the family.

The Spanish version of the SHINE Vocabulary Checklist is only available for use with children ages 16 to 31 months of age. It is intended that a Spanish speaking adult (preferably the hearing specialist) will obtain the information from the parents as necessary to complete the SHINE CDM electronic report form.

The American Sign Language version is available for use with children ages 8 to 36 months of age. All information is gathered through parent interview, therefore, translated versions of forms are not provided. The completed protocols for the ASL version will be requested for submission along with the completed summary of results. With the parent’s permission, the completed protocol will have all identifying information removed and will then be shared with the author of the instrument who continues to gather normative data for young children with hearing loss.
RESPONSIBILITY FOR COMMUNICATION DEVELOPMENT MONITORING PROCEDURES

The hearing specialist who provides SHINE services has the primary responsibility for the communication development monitoring process. This hearing specialist will work with the family to complete the SHINE Vocabulary Checklists, LDS, Auditory Skills Checklist and the Parent Interview Progress Report at least twice per year. Additional IFSP team members can be involved during this assessment as appropriate. It is understood that there may be occasions when a test instrument will not be administered. All results of this assessment must be submitted to the child’s service coordinator and ultimately shared with the IFSP team so a group discussion can occur about the needs of the child and family in relation to the IFSP functional outcomes and services. Ultimately, the Director of each local Early Steps is responsible for ensuring that communication development monitoring procedures are completed in a timely manner. All persons that have the responsibility of communication development monitoring must review the information in this manual and at http://www.cms-kids.com/SHINE/shineCommunicationDev.htm. Contact and individualized training by the Coordinator for Hearing and Vision Services at the Early Steps State Office prior to implementing these procedures is strongly encouraged.

Three Stages of Communication Development Monitoring

Completing the Forms and Checklists
The hearing specialist who provides SHINE services should be a member of the IFSP team and should have the performance of communication development monitoring as a primary activity, either at the time of the evaluation or within 30 days of the initial IFSP. It is suggested that monitoring activities using these instruments occur at least quarterly and that they be included as part of the ongoing assessment procedures used by the hearing specialist that is providing ongoing services to the family. The hearing specialist who provides SHINE services is required to submit communication development monitoring information twice per year at approximately 6 month intervals in conjunction with the child’s IFSP reviews and the annual IFSP.

The hearing specialist who provides SHINE services should discuss the communication development monitoring process with the parents or caregivers. The forms will then be completed during discussion with the parents or caregivers of the children with diagnosed hearing loss meeting the Part C criteria for significant hearing impairment. The SHINE Vocabulary Checklists can only be completed with children that have a chronological or developmental age of at least 8 months that are served by the Local Early Steps.

If a child with hearing loss enters the Early Steps at the age of 8 months or older, the age-appropriate SHINE Vocabulary Checklist will be completed as a baseline, preferably between the time the interim IFSP is established and the full IFSP is completed following the multidisciplinary assessment. The Language Development Scale and the Auditory Skills Checklist should also be completed as a part of the initial multidisciplinary assessment. Annual communication development monitoring is insufficient to meet individual and program planning purposes for children age birth to three years.

Sharing an Interpretation of the Results with Parents
It is necessary for the hearing specialist who provides SHINE services share the results of communication development monitoring with the child’s service coordinator. It is important that the parents or caregivers be presented the information in a meaningful
manner so that they can consider making adjustments to their communication with the child as needed. Refer to page 23 for suggestions for the content of these discussions.

**Submitting the Completed Forms to Early Steps State Office**

The hearing specialist who provides SHINE services will submit the SHINE CDM electronic report form in a timely manner (within 30 days of the initial IFSP or periodic IFSP review or annual IFSP). If it is not possible for the electronic report form to be submitted then copies of the blank form should be printed out, completed and legible copies of the report form, the scoring page of the age appropriate SHINE Vocabulary Checklist, and the completed Parent Interview Progress Report form should be submitted by mail or fax to the Early Steps State Office for aggregate analysis of communication development monitoring information.

The original completed SHINE Vocabulary Checklist forms should be kept in the child’s file kept by the hearing specialist who provides SHINE services. With signed parent consent, copies of this information or a summary of the child’s growth in communication development and changes to the Communication Plan can be shared with the child’s hearing specialist or other ongoing early intervention services providers (audiologist, speech language pathologist, etcetera). Only two sets of SHINE CDM report forms need to be submitted to the Early Steps State Office per year. If SHINE Communication Development Monitoring is performed at more frequent intervals than approximately every 6 months, it is not necessary for the hearing specialist to submit the additional forms. The one exception to this would be when forms completed prior to the child’s transition at age 3 are submitted, even if a 6-month interval has not passed. If there is a question regarding the scoring forms, Hearing specialists who provide initial SHINE information services may be asked to submit the completed protocols for quality assurance and training purposes (identifying information will be deleted if any forms are used for training purposes).

Completed forms can be mailed to:
Karen Anderson  
Coordinator for Hearing and Vision Services  
Bureau of Early Interventions  
4052 Bald Cypress Way, Bin A06  
Tallahassee, FL 32399-1707

Or the forms can be faxed to the attention of Karen Anderson to 850-921-3138 (confidential fax line).
COMPLETION OF DEMOGRAPHIC AND HEARING LOSS RELATED INFORMATION

Confidentiality
Child specific information is protected by the Health Information Protection and Portability Act (HIPPA). Therefore it is necessary to identify the child via a SHINE identification number. This number is assigned to the child at the time he or she is referred from the CMS Newborn Screening Unit and notice is provided to the SHINE service coordinator from the Early Steps State Office Coordinator for Hearing and Vision Services or the SHINE Assistant. If a child with hearing loss was referred directly to the Local Early Steps it is necessary that the SHINE service coordinator or the hearing specialist who provides SHINE services to obtain a SHINE identification number from the Early Steps State Office Coordinator for Hearing and Vision Services or the SHINE Assistant. Additional confidentiality precautions are taken by only requiring the reporting of the child’s birth month and year.

When the hearing specialist submits the completed CDM information to the Early Steps state office they are required to specify the email address of the child’s (SHINE) service coordinator. If the hearing specialist is a parent advisor employed by the Florida School for the Deaf and the Blind Parent Infant Program (FSDB/PIP) it is required that the provided email address for the FSDB/PIP. Additional email addresses can be specified so that the summary of CDM baseline/progress information can be shared. ONLY WITH PARENT CONSENT can any intended recipient other than the Early Steps state office and the child’s service coordinator can be specified to receive this information.

Completeness of Reporting
Much information will be collected about the child with hearing loss for the baseline CDM. If information is not known by baseline do not delay in submitting the CDM information as the missing information can be filled in at the first monitoring event. Subsequent reporting need only complete the child’s SHINE identification number and information that has changed from the prior submission of CDM information. Effort has been made to reduce duplication of reporting information as much as possible.

Information to be Completed with Involved Report by the Parents

General Information About the Child
The first section requests the child’s SHINE identification number, birth month and year, person completing the CDM, Early Steps region and county. In addition critical information is completed about whether the information is a baseline CDM or repeat testing and the age at which the child and family began to receive intervention services specific to hearing loss (SHINE).

Information About the Child’s Hearing Loss
There are two purposes in asking these questions repeatedly throughout the child’s early intervention years. First, is to obtain updated information on changes to hearing. Also, hearing related information is what the parent will need to know and to be able to explain when the child transitions to school services. Parents who are aware of their child’s hearing information and can link this information with evidence of their child’s needs and what works to help the child learn will be better prepared to advocate for their child in all future discussions of the child’s educational needs.

The hearing loss reporting section requires the parent and/or the hearing specialist who provides SHINE services to look at the most child’s most recent audiogram. When communication development monitoring is being completed for the
first time, it is hoped that a complete audiogram will be available. If not, look for the words mild, moderate, severe, etc. in the narrative portion of the audiologist’s comments. Degree of hearing loss is determined based on how well a child hears without amplification instruments. A completed audiogram will typically have circles representing the right ear hearing thresholds and X representing the left ear hearing thresholds. Add the dB thresholds (left side of audiogram) for 500, 1000, 2000 Hz (top of audiogram) and then divide by 3 for the average hearing ability. Check the degree of hearing loss for each ear. If the audiogram has only S marked (no circles or x) this means that there is no ear-specific information. It is important to look carefully at the audiogram and determine if the testing was done when the child was wearing hearing aids or not. If the S represents unaided hearing, please record the average of the S responses for 500, 1000, 2000 Hz. If only two of the three frequencies are included as S responses then average those. The soundfield average hearing results should be recorded in the right ear section, with the ‘soundfield (S) results’ line checked. The button ‘to be determined’ should also be checked for the right and left ear as specific ear thresholds have not yet been obtained for the child. The hearing specialist who provides SHINE services, service coordinator or the parent may need to contact the audiologist to obtain the completed hearing evaluation or to request that ear-specific hearing testing be completed as soon as possible. It is important to specify if the audiologist has indicated that there has been a change in hearing from the previous audiogram(s) and the type of hearing loss, if known (e.g., sensorineural).

Any child’s hearing ability can change over time. Indeed, a proportion of children with hearing loss experience have progressive hearing loss during the first 1-3 years of life. For example, one out of seven children with hearing loss in only one ear will develop hearing loss in the normal hearing ear by the time they turn three years old. This is why it is critical for a child to return to the audiologist for hearing evaluations every 3 months until 2 years of age, and then every 6 months until age 3-5 years. This is the standard of care for young children with hearing loss. If hearing loss progression is indicated, more frequent hearing evaluations may be appropriate. If the child has not received an audiological evaluation in a 6-month period, it is important that the SHINE provider or the service coordinator facilitate setting this appointment.

This section also requests information about the child’s amplification use. Some caregivers will embrace the idea of constant, consistent hearing aid use and others will resist having their child use hearing aids routinely or will not want their child to use amplification at all. It is important to determine the amount of hours of hearing aid or cochlear implant use. If caregivers are using auditory-oral communication features (speech and listening skill development) the rate of the child’s language development will be directly related to the amount of time the child is able to access verbal communication through the hearing aids or cochlear implants. If parents choose to use American Sign Language with the child, amplification of residual hearing is not necessary for a normal rate of language development via sign language to occur. However, if the parents desire their child to speak, use of amplification is a necessary precursor to development of speech skills. If there is a difficulty obtaining hearing aids or hearing aid loaners, the hearing specialist who provides SHINE services and/or service coordinator should facilitate a solution to obtaining hearing aids (i.e. working with the audiologist to obtain loaner hearing aids from the Children’s Hearing Help Fund http://www.cms-kids.com/SHINE/HALB1.pdf ). If the parent is struggling with keeping the hearing aids on the child, the SHINE provider or the Hearing Specialist working with the family should be contacted to assist and support the family and all caregivers to achieve regular hearing aid wear (IFSP functional outcome).

The last part of the amplification questions require that the parent, caregiver, or hearing specialist know the number or type of amplification the child is wearing. If the
child is wearing loaner aids at the time of the completion of communication development monitoring, and it is anticipated that there may be some time (i.e., several weeks) before the child is wearing their own hearing aids, then the loaner aids should be specified (1, 2, bone conduction, FM).

Finally, there is a question that requests information about the size of the child’s listening bubble. In this section the parents are requested to relate their knowledge of how the child performs at different distances in the home or typical listening environment, with and without amplification. To assist in the completion of these sections, the provider should have discussed the Early Listening Function (ELF) instrument with the parents and assisted them in its completion (Included at http://www.cms-kids.com/SHINE/ELF_Questionnaire.pdf). It is suggested that the hearing specialist share the ELF prior to each SHINE communication development monitoring to allow time to repeat the ELF listening activities if needed. Parents who utilize the ELF on a regular basis are likely to be aware of the child’s hearing detection skills. Parents or caregivers who are able to describe their child’s hearing loss in terms of the size of the listening bubble, with and without use of amplification, are likely to be better prepared to advocate for their child with future caregivers and educational personnel.

Language Usage Information
This section requests that the parents identify the language they are using in the home and if any of the usual communicators is Deaf or hard of hearing. Communication access should be accommodated in each environment. If a child’s communication development has not progressed at an expected rate, it is useful to know the natural environments of the child and to inquire about the effectiveness of the communication used in those settings.

It is also important to gather information on the communication features, or primary mode of communication, used throughout the child’s day. The communication mode used with the child can vary, depending on his or her daily environments and this needs to be indicated. For example, if the parents use gestures, speech, hearing aids, and signed English with the child, a 1 should be placed in each of the blanks next to these features. If, when the child goes to childcare every weekday (or grandmother’s for regular babysitting), no signing or hearing aids are used, a 2 should be placed only in the gestures and speech blanks. If the child spends 8 or more hours per week in a setting, the communication features used in the different environments should be indicated by placing a 2, 3, 4 etcetera in the blanks provided.

Etiology – Primary Cause of Hearing Loss
If the child is known to have a risk factor, infection, syndrome or other etiology that is known or suspected to be the cause of hearing loss, please indicate in the space(s) provided or check the selections ‘unknown’ or ‘other’. Indicate whether the family has received an evaluation or consultation by a geneticist or genetic counselor and if the child’s vision has been evaluated by an ophthalmologist. Children with hearing loss are at a higher risk than their normal hearing peers for developing vision
impairments. Therefore it is important for every child to receive an ophthalmologic evaluation and to return for further assessment if visual skills are ever questioned.

**Additional Disabilities**

Progress on communication development may be effected if disabilities in addition to hearing loss are present. The IFSP should assist in identifying domains in which additional disabilities may be present. The hearing specialist who provides SHINE services is urged to use his or her best judgment in estimating the effect of additional disability(ies) on the child’s developmental progress.

**Service Provision Information**

In order to analyze group results it is important to understand the type and level of direct services being provided to a family. This section requires the hearing specialist who provides SHINE services to indicate the type and frequency of services provided to the child and family. Also specify if the child participates in any structured play settings, such as a center-based program for toddlers with hearing impairment, a weekly parent/child group, etc. If the parent has chosen for the child to receive direct clinic based services, please specify what type(s) of therapist is providing these services.

**Characteristics of Family Involvement**

This section should be completed at **every** communication development monitoring interval. In addition to the frequency and type of sessions scheduled it is also important to identify the level of family attendance and involvement in the sessions. The level of family involvement has been found to correlate with the child’s communication development outcomes. Hearing specialists who provide initial SHINE information services can complete this section with the input of the parents or independently, **whichever will result in the most accurate representation of parent involvement.** Select the number that best represents the child or caregiver’s level of proficiency.

- **a) Parent understanding of hearing loss:** It is expected that this rating will improve over time for almost all families. Most children are born into families that have no experience or background to prepare them to understand hearing loss. Parents who can describe their child’s audiogram, type of hearing loss, size of their listening bubble with and without amplification, and who appear willing to actively advocate for the listening or communication needs of their child would be rated high on the scale.

- **b) Motivation to actively assist child development:** Families are busy! It takes real motivation to change interaction patterns and provide active communication access throughout the day. Families also have many priorities. Some families have so many priorities that meeting the needs of their developing child is not as much a priority as working two jobs to pay the rent, or dealing with medical, emotional, or family situations. A family would be scored as a one on the 5-point scale if their life situation is interfering with their motivation to focus on their child’s needs at that point in time. Other families see the child with hearing loss as a challenge to meet and rise to the occasion of becoming their child’s best therapists, teachers, or advocates. These families would be rated four or five on the 5-point scale.

- **c) Quality of daily language models:** Children learn language best when they are surrounded by language that describes what is relevant and of interest to them at the time. If the parents mainly speak in commands with little description a score of one or two would be warranted. If the parents are adept at taking the baby’s lead and talking about their object of interest, gaining attention effectively, and reading the baby’s signals as to when they have had enough, then a score of five would be appropriate.
Remember to consider all of the child’s regular language models. If the parents are excellent language models but the child spends most of the time in a day care where there is minimal accommodations made for his or her communication needs, then the score should reflect a midpoint.

d) **Quality of turn taking with child**: Interaction begins with shared eye contact, smiles, and paying attention to the baby’s attempts to communicate their wants and needs. Parents who actively make opportunities to interact with their child and engage their attention, as well as waiting for the child to respond would be scored a four or five on the 5-point scale. Parents or caregivers who take care of the baby’s physical needs but do little to interact with the child would score a one or two on the 5-point scale.

The hearing specialist who provides SHINE services is also asked to rate the frequency of visits or interactions the family has with individuals who are deaf or hard of hearing. This could include deaf role models, other families with deaf children, or playmates. It is not intended to mean grandparents who have acquired hearing loss.

Child participation in a child care setting and the presence of intervention services provided in that setting should also be identified.
SCORING THE SHINE
COMMUNICATION DEVELOPMENT MONITORING CHECKLISTS

It is recommended that the electronic scoring form be used.
http://www.cms-kids.com/SHINE/shineCommunicationDev.htm

All levels of the SHINE Vocabulary Checklist are easily scored by counting the number of items that the caregivers identified.
Level I asks the parents or caregivers to identify
(1) the words the child understands by sign or verbally, and
(2) the words that the child says or signs
These vocabulary comprehension and vocabulary production scores need to be counted separately. Each word must be counted only one time for comprehension and only one time for production, although there may be times when the child understands a word both when it is signed as well as when it is said. It is assumed that if children produce a word that they will also understand the word, therefore, any word that is checked as being said or signed that is not checked for understanding will be counted toward a child’s vocabulary comprehension score.

On the SHINE CDM electronic report form specify the gender and age in months of the child. If the child has cognitive delays enter their developmental age into this section. The SHINE CDM electronic report form will use this information to provide a percentile rank score once the total vocabulary production score has been entered. It will also automatically provide the 50th percentile rank for the age entered.

Scoring via the Paper Method
Each level has a norm table for boys and a norm table for girls. It is important to use the correct norm table, as it is typical for boys to develop language more slowly than girls at very young ages (i.e. girls average about 1-2 months ahead of boys). The vocabulary comprehension score is identified on the appropriate norm chart for boys or girls and a percentile rank is identified. The same is done for the vocabulary production score. The percentile performance is entered by the SHINE provider into the appropriate blank at the end of the checklist. These percentiles can then be entered onto graphs that have been provided for each level to assist in parent understanding and discussion of child performance implications. Note: the actions and gestures norms only go up to age 16 months, therefore a child who is 17-18 months should be expected to be at or above the 50th % for the 16 month age norms.

An example of completed SHINE Vocabulary Checklists that have been scored appropriately and the resulting graph is available as a scoring tutorial through http://www.cms-kids.com/SHINE/shineCommunicationDev.htm.

Level I Step-By-Step Instructions

Vocabulary Production and Comprehension

Below are the instructions following the Level I vocabulary comprehension and production items.
Step 1: Total all columns and enter totals in blanks above. (sign/says, understands word/sign)
Step 2: To obtain the total score for vocabulary production, add up the number of “understands and says” or “understands and signs” responses. Each word can only be counted once for vocabulary production, whether the child signs the word, says the word, or can do both. This number is the child’s Vocabulary Production score. My child produces __________ words.
Step 3: To obtain the total score for **vocabulary comprehension**, add up all of the “understands signs” or “understands words” responses. Each word can **only** be counted once for vocabulary comprehension, whether the child signs the word, says the word, or can do both. The total number of “understands signs/words” responses is ___________. A child that can produce a word is assumed to understand a word. Add words that are indicated in the says/signs column if the words are **not** already counted in the “understands signs / words” columns. My child comprehends __________ words.

**Actions and Gestures**
Completing this section is recommended, but *optional*.

The actions and gestures sections of Level I are scored as either “Early Gestures” (Sections A: First Communicative Gestures + Section B: Games and Routines), or “Later Gestures” (Sections C: Actions with Objects + Section D: Pretending to Parent + Section E: Imitating Other Actions). The Early Gestures score is then compared to the appropriate norm tables for boys or girls, as is the Later Gestures score. Each of these percentiles is expected to be between the 25th – 75th percentile range, representing early social/cognitive skills commensurate with the broad range of normal development. If a child has a disability in addition to the hearing impairment, the resulting can be expected to be lower than the 50th percentile.

**Determining Improvement in Months**
Percentiles are not the only way in which a child’s performance is considered. Because the expectation for rate of development is one month for every month of early intervention, it is important to consider the relatively number of improvement in months of development the child appeared to progress between the periods in which the SHINE Communication Development Monitoring has been performed. Only the vocabulary production scores are used to determine “improvement in months” as this is the only subtest that is included in each level. The instructions below appear at the end of each of the three SHINE Vocabulary Checklists specifying how the “improvement in months” can be obtained. The **SHINE CDM electronic report form automatically makes these calculations.**

**Estimated growth in vocabulary production since last communication monitoring period** (to be completed by SHINE provider):

Step 1. Look at the Vocabulary Production norms table and find the 50th percentile line.
Step 2. Identify the column of words with the number closest to the total production achieved by the child during the last communication monitoring session
Step 3. Look at the age at the top of the column: _____ months
Step 4. Using the norms tables, find the 50th percentile score closest to the child’s current production score; note the age: _____ months
Step 5. Subtract the two age in months numbers for the child’s estimated growth in vocabulary production during the test interval: _______ months

**Estimating age equivalence of communication for children with developmental delays** (to be completed by SHINE Service Coordinator):

Step 1. Look at the Vocabulary Production norms table for Level 1 and find the 50th percentile line.
Step 2. Using the norms tables, find the 50th percentile score closest to the child’s current production score; note the age: _____ months
Level II Step-By-Step Instructions

**Vocabulary Production**

The scoring procedures for the SHINE Vocabulary Checklists Level II are simpler than Level I in that only the child’s vocabulary production is considered. Again, the parents can indicate whether the child said or signed a word. In scoring, it is important to only count responses to each word ONCE, even if the child can both sign and say the word. After completing the vocabulary checklist the parent completes the following questions about combining words. This question is not scored but will be included in aggregate data analysis:

Has your child begun to combine words yet, such as “nother cookie” or “doggie bite?”
- O Not Yet
- O Sometimes
- O Often

Level III Step-By-Step Instructions

**Vocabulary Production and Comprehension**

The scoring procedures for the Level III Vocabulary Checklist result in a vocabulary production score, grammatical complexity score, and a language use score. Only the vocabulary production score is required, but it is recommended that all items be presented for as complete a picture as possible. If the child is not able to combine words then only the first vocabulary production portion should be completed. It must be noted that the vocabulary of Level III is of greater complexity than of Level II. This is why a 30 month old girl that produces 88 words on the Level II B questionnaire would have a 50th percentile ranking and it only takes 67 known words on the Level III questionnaire for a girl to achieve the same percentile ranking. This is also why growth in language over time cannot be computed in the same manner as it is for Levels I and II.

**Sentences:** The Sentences section is recommended but optional. The Sentences section of Level III has twelve sentence pairs. The parents or caregivers select which sentence in each pair is most similar to something that the child would produce. Only items in which the second sentence is selected will be counted in the score. The number of complex sentences that have been checked is compared to the appropriate gender norms for this section to obtain a percentile score. It is important to recognize that completion of this section is NOT APPROPRIATE for children whose parents use American Sign Language as ASL has a grammatical structure that is different from English. These families should complete the ASL form of the MCDI that is available from the Children’s Medical Services Early Intervention Program Consultant for Hearing Services.

**Language Use:** The Language Use section of Level III has twelve questions for the parents or caregivers to answer, asking about the complexity of the child’s language use. Only ‘Yes’ responses are counted and this total number is compared to the appropriate norm table to obtain a percentile score.

**Graphing Results**

For each SHINE Vocabulary Checklist that is completed at a minimum of 6-month intervals, it is important to graph the vocabulary production score on the boy’s or girl’s vocabulary production chart. A cumulative results graph is available on the [http://www.cms-kids.com/SHINE/shineCommunicationDev.htm](http://www.cms-kids.com/SHINE/shineCommunicationDev.htm) website. This should contain entries for all test periods. The data points will show the child’s trajectory of vocabulary production development over time. This chart will likely be of benefit as the
child enters public school and program considerations are made to meet the child’s developmental needs.
INTERPRETING AND DISCUSSING
THE SHINE VOCABULARY CHECKLIST RESULTS WITH PARENTS

Language Unlocks Learning, has been provided as a resource for use by Hearing specialists who provide initial SHINE information services when the results of the SHINE Communication Development Monitoring Procedures are discussed with parents. Every parent is interested in finding out how his or her child is growing and developing, including how they are progressing in comparison with other children. Language Unlocks Learning can be located on the http://www.cms-kids.com/SHINE/shineCommunicationDev.htm website.

The goal of early intervention for children with hearing loss is to
(1) prevent communication delays from developing, or
(2) promote an optimal rate of language development so that children who have delays can have the best possible outcomes.

For children with hearing loss as their only disability condition who are identified in the first 3 months of life it is possible, through appropriate early intervention and parent involvement, for the child to have a typical rate of language development (at or around the 50\textsuperscript{th} percentile on vocabulary growth). For children who enter into the early intervention system more than 3 – 6 months after their hearing loss has been identified, it is expected that a rate of one month of language development will occur for every one month of early intervention. With a high level of effective parent involvement it is possible for the gap in language development may actually decrease in the first 2-3 years of life.

The Parent Interview Progress Report collects information related to the parent’s perceptions of how well they are addressing the needs below and can be used as a basis for discussions between the SHINE provider and the parents and caregivers.

Access to Communication in the Natural Environment
The disability associated with persons with hearing loss is not their lack of hearing per se, but limitations in their ability to access and be involved in the communication that occurs around them.

Communication access for very young children can be defined as:
(a) recognizing communication is occurring between one or more people,
(b) being aware of or perceiving that there is meaning in communication,
(c) perceiving meaningful voices, gestures, movements, or sound across distance,
(d) perceiving and being able to monitor own speech through hearing ability, if possible,
(e) attempting to initiate communication via vocalizations or movements and having these attempts recognized by caregivers,
(f) engaging in meaningful communication by means of age-appropriate turn-taking to express wants, needs, queries, comments, or emotions.

Insufficient Intensity of Communication Experiences
Children can use hearing and/or vision as their primary means of recognizing and understanding that communication is going on around them. There are at least two ways in which communication access can affect a child’s development. The first of these is insufficient intensity of communication experiences. An example of this would be if only a few people in the child’s environment are able or willing to communicate with the child by whatever means the family has chosen (i.e., mom signs but the dad, siblings, or the daily childcare provider only talk and the child does not have enough hearing to process this kind of communication). This could also mean that the parents talk to the child consistently using effective communication strategies but amplification is not worn.
consistently so the child cannot access enough verbal information to learn language at the expected rate.

**Lack of Effectiveness of the Communication Features**

The second way in which communication access can affect a child’s development is by lack of effectiveness of the communication features chosen by the family to deliver enough of the communication message for it to become meaningful after a typical amount of exposure. This could mean that even though the parents want the child to listen and speak, the child has insufficient hearing to enable him or her to capitalize on the experiences the parents are making available to the child. This is often true for children who have average hearing loss worse than 85 dB. A simple analogy would be having a 100-piece puzzle with 50 pieces missing and trying to identify the picture. Improved amplification or cochlear implantation is often considered in this case. However, not all children are cochlear implant candidates and even with the best hearing aids not all of the speech sounds can be made audible for some individuals. The parents of these children may want to seriously consider adding communication features as a means to provide a more complete communicative message to the child. To use our analogy again, improved hearing ability or adding communication features would be like adding additional pieces to the puzzle so it is easier to identify the picture. Parents can explore this by talking with other parents who have chosen different communication options and have children with a variety of communication outcomes. Alternately, parents who choose signing as a communication mode sometimes do not increase their sign vocabulary as the child's interest and experiences change, therefore, limiting the amount of words and concepts the child can be learning. This is often alleviated by the parents taking sign classes, by the parents using more complex sign language materials as a reference for building their own vocabulary, or by the parents interacting with individuals in the Deaf community so the child is exposed to freely flowing signed communication.

**INTERPRETING PERCENTILE SCORES**

The primary purpose of performing the SHINE Vocabulary Checklists is to provide the parents or caregivers with information about how the child’s language ability is developing in comparison to normal hearing age peers. A second purpose is to estimate how many months the child’s language has developed in the period between the time when the checklists were completed.

**Percentile rank above the 50th %**

The child is performing at age-level for language, likely due directly to the parent’s high level of commitment to effective communication exposure during all of the child’s waking hours.

**Percentile rankings at 32nd % - 50th %**

This is considered to be within one-half of the first standard deviation below the mean performance, or the broad range of normal. There are many reasons why children can perform within the first one-half standard deviation of the mean and not at the 50th percentile. The MCDI manual urges that caution should be used in applying the norms to children from very low education or low socioeconomic households. In the case of children with hearing loss, we would consider an indication of a true delay in language abilities if the percentile rankings begin to fall below the 32nd percentile. However, it is possible that the child may have percentile scores closer to the mean (50%) if parents and caregivers were more attentive to ensuring that the child had access to communication for as many of his or her waking hours as possible.
Percentile rankings between the 16th % - 32nd %

This is considered to be the second half of the first standard deviation below the mean performance. A child with scores in this range would not be considered to have a true delay, however, they are at the lowest end of the broad range of normal. It is very possible that adjustments to communication intensity (including consistent amplification use) or features available to the child could increase the child’s percentile ranking in the next one or two opportunities to monitor communication development.

Percentile rankings below the 16th %

The child with percentile rankings below the 16th percentile will have a language delay in the areas screened. In depth assessment would provide more detail about the specific areas of deficit. Again, an adjustment in communication intensity or communication features should be carefully considered by the parents and caregivers. Children typically do not substantially “catch up” in language development after their first 3 years of life, making the need to address language development very time critical and of highest priority if the parent’s have the goal of normal or near-normal language ability by school entry.

REVIEWING THE COMMUNICATION PLAN

A Communication Plan is developed by the parents with guidance from the hearing specialist who provides SHINE services. This is done at the completion of the four SHINE goals that provide information on the child’s hearing loss, use of audition and amplification, establishing effective interaction strategies, and unbiased presentation of the different communication features and options.

The Communication Plan will be reviewed by the hearing specialist who provides SHINE services, the parents, and the IFSP team following interpretation and discussion of the results of the three recommended checklists and completion of the Parent Interview Progress Report. If the child has not made the expected gain of one month of language development for every month since the last SHINE Vocabulary Checklist completion then the items on the Communication Plan will be discussed with the parents. A new Communication Plan will be completed that will include the changes that the parents choose to improve their child’s rate of language development. Learning Through Language, has been developed to assist the hearing specialist who provides SHINE services to discuss the implications of communication development with the parents, caregivers, and other IFSP team members. The areas of concern below should be discussed in conjunction with completion of the Parent Interview Progress Report.

Areas of concern that the parents and caregivers could consider include:

1. If the child has amplification, are the hearing aids (or cochlear implant) worn all waking hours? Are the hearing aids checked at least once daily to be sure that they are working properly? Are the batteries changed at least every 1-2 weeks? Has the child received a hearing evaluation in the last 3 months (hearing ability can change!)?

2. Are the parents and ALL caregivers aware of the size of the child’s listening bubble, meaning his or her hearing range in different listening environments (quiet, noise, close, far)? Are the parents aware of the impact of noise on the ability of the child to meaningfully perceive speech? Are regular childcare providers aware of how close they need to be to the child in quiet and noise before the child can meaningfully detect that talking is going on?
3. If the child is signing (with or without meaningful auditory input), have the parents and caregivers learned enough words in sign to keep up with the child’s areas of interest? Are signs being used whenever the child is in the room, as much language is picked up incidentally, or when communication is occurring around a child? Do siblings and playmates sign with the child and each other when the child is present?

4. All children learn language best when they are most interested. Are the parents and caregivers following the child’s lead in what they are interested in and providing the spoken and/or signed words and concepts that reflect the child’s interest? Does communication (sign and/or speech/listening) center around ALL of the child’s typical everyday routines and activities (diapering, choosing food or toys, shopping, going somewhere in the car, etcetera)?

5. Does the family interact with other families who have children with hearing loss who use the chosen communication method? Depending on the communication choice, does the child have regular opportunities to interact with older children or adults who wear hearing aids or cochlear implants, or who sign (if applicable)? Does the child interact with age peers who also have hearing impairments (i.e. mommy and me groups, informal play groups)?

   The hearing specialist who provides SHINE services will need to guide families as they consider what true communication access means for them and their child with hearing loss. Review of the Communication Plan will assist in this process as communication features, hearing-impaired role models, services provided, and natural environments that allow communication access are all specified. A Communication Plan has been included on the www.cms-kids.com/SHINE/index.htm website. If the child is not progressing as desired, this dialogue should result in changes that the parents will implement in their everyday routines. These changes should be reflected on a new or updated Communication Plan that should be kept in the child’s Early Steps file. Communication development monitoring should occur in approximately 3 months with further discussions about the child’s progress. If, after the second time the age-appropriate Vocabulary Checklist is completed, a slower than anticipated rate of vocabulary development is still apparent, it can be expected that the parents will seriously consider using additional communication features with their child. Interacting with other families of children with hearing loss who use a variety of communication features and who have a variety of communication outcomes may be very helpful to the parent as they consider what changes to implement. Other amplification options or cochlear implantation may also be of interest to the parents to explore. It is crucial for the child to have hearing evaluations at least every 3-6 months to ensure that there has not been a progression of the hearing loss that would be interfering with the child’s communication development. This evaluation schedule is considered standard of care for children under age three years.

**Using the SHINE Vocabulary Checklists with Children with Additional Disabilities**

For parents of children who have performance at less than the 32nd - 50th% on the Actions and Gestures section of the Level I Checklist for 8-18 month olds, it is critical to explore a full assessment of cognition, vision, and other developmental domains. For children who have identified developmental delays in addition to their hearing disability it is important to ensure that progress in communication development is indeed occurring over time, at a rate equivalent to the child’s development in other areas (i.e., fine motor, self help). Hence, comparing the child to normal hearing and normally developing age
peers may be highly discouraging to parents. It would be more productive to examine the number of months gain the child made in vocabulary production from one review to the next and celebrate steady increases in development over time. **A child’s optimal growth in communication development should be equal to his or her growth in other developmental areas.** This communication development monitoring process should NOT be used for children who have visual impairments that further interfere with communication access or for those who have motor delays that interfere with speech or sign production. However, a Communication Plan should be developed and updated at every IFSP review to define how the child will be receiving or expressing communication in as effective a manner as possible.

**CONTACT FOR MORE INFORMATION**

If you have any questions about how to use the SHINE Vocabulary Checklists for communication development monitoring please contact Children’s Medical Services Coordinator for Hearing and Vision Services in the Early Intervention Program at 850-245-4200.