

CLINICAL PRACTICE GUIDELINE
Quick Reference Guide
for Parents and Professionals

**COMMUNICATION
DISORDERS**

ASSESSMENT AND INTERVENTION
FOR
YOUNG CHILDREN (AGE 0-3 YEARS)

SPONSORED BY
NEW YORK STATE DEPARTMENT OF HEALTH
EARLY INTERVENTION PROGRAM

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COMMUNICATION DISORDERS

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PREFACE

WHY THE EARLY INTERVENTION PROGRAM IS DEVELOPING CLINICAL PRACTICE GUIDELINES

In 1996, a multiyear effort was initiated by the New York State Department of Health (NYSDOH) to develop clinical practice guidelines to support the efforts of the statewide Early Intervention Program. As lead agency for the Early Intervention Program in New York State, the NYSDOH is committed to ensuring that the Early Intervention Program provides consistent, high-quality, cost-effective, and appropriate early intervention services that result in measurable outcomes for eligible children and their families.

The guidelines are not standards nor are they policies. The guidelines are a tool to help ensure that infants and young children with disabilities receive early intervention services consistent with their individual needs and resources, priorities, and concerns of their families.

The guidelines are intended to help families, service providers, and public officials make informed choices about early intervention services by offering recommendations based on scientific evidence and expert clinical opinion on effective practices.

The impact of clinical practice guidelines for the Early Intervention Program will depend on their credibility with families, service providers, and public officials. To ensure a credible product, the NYSDOH elected to use an evidence-based, multidisciplinary consensus panel approach. The methodology used for this guideline was established by the Agency for Health Care Policy and Research (AHCPR). This methodology was selected because it is an effective, scientific, and well-tested approach to guideline development.

The NYSDOH has worked closely with the NYS Early Intervention Coordinating Council throughout the guideline development process. A state-level steering committee comprised of early intervention officials, representatives of service providers, and parents was also established to advise the NYSDOH regarding this initiative. A national advisory group of experts in early intervention has been available to the NYSDOH to review and to provide feedback on the methodology and the guideline. Their efforts have been crucial to the successful development of this guideline.



When this symbol appears, it indicates that there is information in Appendix C-1 about relevant Early Intervention Program (EIP) policy.

It is intended that the NYSDOH clinical practice guidelines for developmental disabilities in children from birth to age 3 be dynamic documents that are updated periodically as new scientific information becomes available. This guideline reflects the state of knowledge at the time of publication, but given the inevitable evolution of scientific information and technology, it is the intention of the NYSDOH that periodic review, updating, and revision will be incorporated into an ongoing guideline development process.

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CLINICAL PRACTICE GUIDELINE

QUICK REFERENCE GUIDE ***FOR PARENTS AND PROFESSIONALS***

COMMUNICATION DISORDERS

**ASSESSMENT AND INTERVENTION
FOR
YOUNG CHILDREN (AGE 0-3 YEARS)**

This *Quick Reference Guide* provides only summary information. For the full text of the recommendations and a summary of the evidence supporting the recommendations, see *Clinical Practice Guideline: Report of the Recommendations*.

INTRODUCTION

The guideline recommendations suggest “best practices,” not policy or regulation

The Clinical Practice Guideline on which this *Quick Reference Guide* is based was developed by a multidisciplinary panel of clinicians and parents. The development of guidelines for the Early Intervention Program (EIP) was sponsored by the New York State Department of Health as a part of its mission to make a positive contribution to the quality of care for children with disabilities.

The guideline is intended to provide parents, professionals, and others with recommendations based on the best scientific evidence available about “best practices” for assessment and intervention for young children with communication disorders.

- ◆ The guideline is not a required standard of practice for the Early Intervention Program administered by the State of New York.
- ◆ This guideline document is a tool to help providers and families make informed decisions.
- ◆ Providers and families are encouraged to use this guideline, recognizing that the care provided should always be tailored to the individual child and family. The decision to follow any particular recommendations should be made by the provider and the family based on the circumstances presented by individual children and their families.

SCOPE OF THE GUIDELINE

This clinical practice guideline provides recommendations about best practices for assessment and intervention for communication disorders in young children.

PRIMARY FOCUS OF THE GUIDELINE

The *primary focus* of the recommendations in this guideline is:

◆ ***Communication disorders in children under 3 years of age***

The primary focus of the guideline is children from birth to 3 years old. However, age 3 is not an absolute cutoff, since many of the recommendations in this guideline may be applicable to somewhat older children.

◆ ***Communication disorders that are primarily speech and language problems***

While there are many aspects to communication, the primary focus of this guideline is communication problems related to speech and language.

◆ ***Communication disorders that are not the result of hearing loss or other specific developmental disorders***

Communication disorders are sometimes the result of hearing loss or other developmental disorders. The identification of children with these problems is covered in a limited fashion in the guideline. The in-depth assessment and intervention for these problems is not a primary focus of the guideline.

DEFINITION OF COMMUNICATION DISORDER

As defined by the American Speech-Language-Hearing Association (ASHA), a communication disorder is:

“An impairment in the ability to receive, send, process, and comprehend concepts or verbal, nonverbal, and graphic symbol systems. A communication disorder may be evident in the processes of hearing, language, and/or speech. A communication disorder may range in severity from mild to profound. It may be developmental or acquired. Individuals may demonstrate one or any combination of the three aspects of communication disorders. A communication disorder may result in a primary disability or it may be secondary to other disabilities” (ASHA, 1993).

Operational Definition

The ASHA definition above includes children with a delay or disorder in speech, language, and/or hearing.

In this guideline, the term “communication disorders” is used to refer primarily to speech and language problems.

Although hearing disorders may result in a communication disorder in young children, assessment and intervention for hearing problems are not the primary focus of this guideline.

COMMUNICATION DISORDERS

Communication Disorder versus Communication Delay

In the literature on communication disorders in young children, varying definitions are sometimes used for the terms “*disorder*,” “*delay*,” and “*disability*” as they refer to communication problems. A variety of different diagnostic terms and labels are also used to describe specific communication problems in young children.

At the current time, there is not a standard definition of these various terms used by all professionals dealing with young children.

The terms “communication disorder” and “communication delay” are defined for use in this guideline as follows:

Communication Disorder

The term “communication disorder” (or “communication problem”) is defined broadly to include all types of speech/ language delays, disorders, and disabilities.

Communication Delay

When used in this guideline, the term “communication delay” refers more specifically to a level of communication that is significantly below the expected or typical levels based on a child’s age and refers primarily to speech/ language delay.



EIP 1

DEFINITIONS OF OTHER TERMS

Definitions are given below for some major terms as they are used in this guideline.

<i>Assessment</i>	The entire process of evaluating the child, including the activities and tools used to measure level of functioning, establish eligibility for services, determine a diagnosis, plan intervention, and measure treatment outcomes.
<i>Developmental Disability</i>	A condition that significantly interferes with a child's functioning.
<i>Family</i>	The child's primary caregivers, who might include one or both parents, siblings, grandparents, foster care parents, or others usually in the child's home environment(s).
<i>Parents</i>	The primary caregiver(s) or other person(s) who has (have) significant responsibility for the welfare of the child.
<i>Professional</i>	Any provider of professional services who is qualified to provide the intended service. Qualifications generally include training, experience, licensure, and/or other state requirements. The term is not intended to imply any specific professional degree or qualifications other than appropriate training and credentials. (It is beyond the scope of this guideline to address professional practice issues.)
<i>Screening</i>	The early stages of the assessment process. Screening may include parent interviews or questionnaires, observation of the child, or use of specific screening tests. Screening is used to identify children who need more in-depth evaluation.
<i>Target Population</i>	A study group selected according to specific characteristics. For this guideline, the <i>target population</i> is children with possible autism from birth to age 3 years. Throughout this document, the term <i>young children</i> is used to describe this target age group.
<i>Young Children</i>	Term used in this guideline to describe the target age group (children from birth to age 3 years.) Although children from birth to age 3 is the intended focus of the guideline, the term young children may also include somewhat older children.



WHY THE GUIDELINE WAS DEVELOPED

THE IMPORTANCE OF USING SCIENTIFIC EVIDENCE TO HELP SHAPE CLINICAL PRACTICE

Every professional discipline today is being called upon to document its effectiveness. Current questions often asked of professionals are:

- ◆ “How do we know if current professional practices are effective in bringing about the desired results?”
- ◆ “Are there other approaches, or modifications of existing approaches, that might produce better results or similar outcomes at less cost?”

The difficulty in answering these questions is that many times the methods used in current professional practice have not been studied extensively or rigorously.

Evidence-based clinical practice guidelines are intended to help professionals, parents, and others learn what scientific evidence exists about the effectiveness of specific clinical methods. This information can be used as the basis for informed decisions.

This guideline represents the panel’s attempt to interpret the available scientific evidence in a systematic and unbiased fashion and to use this interpretation as the basis for developing guideline recommendations. It is hoped that by this process, the guideline offers a set of recommendations that reflects current best practices and will lead to the best results for children with developmental problems.

HOW THE GUIDELINE WAS DEVELOPED

This guideline was developed using standard research methods for evidence-based guidelines. The process involved establishing specific criteria for acceptable evidence and reviewing the scientific literature to find such evidence. Relatively rigorous criteria were used to select studies that would provide adequate evidence about the effectiveness of assessment and intervention methods of interest.

Studies meeting these criteria for evidence were then used as the primary basis for developing the recommendations. In addition, there were numerous articles in the scientific literature that did not meet the evidence criteria yet still contained information that may be useful in clinical practice. In many cases, information from these other articles and studies was also used by the panel but was not given as much weight in making the guideline recommendations.

When no studies were found that focused on children in the target age group (from birth to age 3),

generalizations were made from evidence found in the studies of somewhat older children.

In the full-text versions of this guideline, each recommendation is followed by a “strength of evidence” rating indicating the amount, general quality, and clinical applicability (to the guideline topic) of the evidence that was used as the basis for the recommendation.

For more information about the process used to develop the guideline recommendations as well as a summary of the evidence that supports them, see Clinical Practice Guideline: Report of the Recommendations.

A full description of the methodology, the recommendations, and the supporting evidence can be found in Clinical Practice Guideline: The Technical Report.

GUIDELINE VERSIONS

There are three versions of this clinical practice guideline published by the Department of Health. The versions differ in their length and level of detail in describing the methods and the evidence that supports the recommendations.

Technical Report

- ◆ full text of all the recommendations
- ◆ background information
- ◆ full report of the research process and the evidence reviewed

Report of the Recommendations

- ◆ full text of all the recommendations
- ◆ background information
- ◆ summary of the supporting evidence

Quick Reference Guide

- ◆ summary of major recommendations
- ◆ summary of background information

WHERE CAN I GET MORE INFORMATION?

There are many ways to learn more about communication disorders. Several resources are listed in the back of this booklet. In providing this list of resources, we caution families and professionals that the information provided by these resources has not been specifically reviewed by the guideline panel.

Caution is advised when considering assessment or treatment options that have not been studied using a good scientific research methodology.

It is important to consider whether or not there is good scientific evidence that the approach being considered is effective for young children with communication disorders.

BACKGROUND: UNDERSTANDING COMMUNICATION DISORDERS

What Is Communication?

Communication is the process used to exchange information with others and includes the ability to produce and understand messages. Communication includes the transmission of all types of messages, including information related to needs, feelings, desires, perception, ideas, and knowledge.

There are many forms of communication, including:

- ◆ **Nonlinguistic** (gestures, body posture, facial expression, eye contact, head and body movement, and physical distance)
- ◆ **Verbal** (communication using words, such as speaking, writing, or sign language)
- ◆ **Paralinguistic** (use of tone of voice, emphasis of words, change of inflection, etc., as part of verbal expression)

Although language and speech are sometimes thought of as the same thing, they are, in fact, different.

- ◆ **Language** is a system of communication using symbols within a specific set of rules involving a set of small units (such as syllables or words) that can be combined to produce larger language forms (phrases and sentences).

- ◆ **Speech** is the method of verbal language communication that involves the oral production and articulation of words.

An important aspect of communication includes the give-and-take interaction of the young child with others. The way in which the child communicates varies with the child's age and developmental status.

COMMUNICATION DISORDERS

What Is Typical Communication Development?

Communicative behaviors begin at birth and evolve over time.

Children enter the world with a limited but meaningful set of behaviors that serve as communication signals to parents and caregivers.

Young children usually demonstrate many kinds of nonverbal gestures and social routines before the onset of first words. The production and use of words emerge later in the child's development.

As children move into the "intentional language" stage, language comprehension (what the child understands) and language production processes become evident. Typically in young children, the ability to understand language develops before the ability to speak or produce language.

There is a systematic progression of vocal and language development that characterizes the first 2 years of life. During the second year of life, a child's comprehension and production abilities expand rapidly. By 3 years of age, most children have acquired the basics of language.

Communication is important for all aspects of a child's development, and the quality of the child's communication development has a long-term impact on learning and on the child's ability to interact with others.
--

What Is a Communication Disorder?

Young children with a communication disorder may have problems with communication development in one or more of the following areas:

- ◆ ***Articulation***: the movements of the mouth, tongue, and jaw involved in the production of speech sounds
- ◆ ***Fluency***: the overall flow or rhythm of speech production
- ◆ ***Language Comprehension***: the ability to understand speech (also called *reception* or *processing*)
- ◆ ***Language Production***: the spoken or gestural (such as sign language) expression of language
- ◆ ***Morphology***: the formation of words using the smallest meaningful units in language (words that can stand alone and syllables or sounds that add meaning to words)
- ◆ ***Phonology***: the sounds of language (consonants and vowels) and rules for combining sounds to form words
- ◆ ***Pragmatics***: the practical use of language (such as the use of language in conversation) including implicit and explicit communicative intent, nonverbal communication, and social aspects of communication
- ◆ ***Semantics***: the meaning of words and the meaningful use of words in phrases or sentence contexts
- ◆ ***Syntax***: the rules governing the order of and relationships among words or phrases in sentences
- ◆ ***Voice***: the vocal quality, pitch, and intensity of speech

COMMUNICATION DISORDERS

What Are the Major Types of Communication Disorders?

The American Speech-Language-Hearing Association (ASHA, 1993) groups communication disorders into the following three categories:

1. Language Disorders

Language disorder refers to a problem with comprehension and/or use of spoken, written, and/or other symbol systems.

Young children with cognitive delays, autism, and other general developmental disabilities almost always experience general delays in their language development.

Some children may not have identifiable developmental delays other than a language disorder. These children may have what some refer to as a *specific language impairment* (SLI). SLI is a significant limitation in language ability without other associated problems such as hearing impairment, cognitive delays, or neurologic problems.

In some young children with SLI, only expressive language seems to be affected, whereas others show impairments in both receptive and expressive development.

2. Speech Disorders

A speech disorder is an impairment of the articulation of speech sounds, fluency, and/or voice. Of the preschool-age children served by speech language pathologists in the United States, it is estimated that approximately 60% have a primary language delay or disorder and 40% have some type of speech disorder.

3. Hearing Disorders

A hearing disorder is the result of impaired sensitivity of the physiological auditory system. The focus of this guideline is primary communication disorders that are not the result of hearing loss (or other specific developmental problems).

What Causes a Communication Disorder?

Communication disorders can occur in isolation (not associated with any other identifiable cause), or they may coexist with other conditions such as hearing loss or developmental disorders such as mental retardation and autism. The specific cause of a communication disorder is often unknown.

Do Children “Outgrow” Communication Disorders?

Young children who have communication disorders as a result of hearing loss, developmental disorders, or other specific medical conditions do not typically “outgrow” their communication disorder.

Appropriate treatment for these children may help them to improve their language skills, but it will probably not completely eliminate the disorder.

Some young children are described as “late talkers.” These are children who have no problems in other areas of skill development (for example, they participated in joint attention games with caregivers or started walking at the appropriate age) but who demonstrate delays in expressive language for unknown reasons. Some of these children appear to “catch up” to other children in their age group by the preschool and early school years.

How Common Are Communication Disorders?

The American Speech-Language-Hearing Association (ASHA) estimates that 42 million Americans have some type of communication disorder. Communication disorders represent the most common developmental problem in young children. As broadly defined by ASHA, it is estimated that between 15% and 25% of young children have some form of communication disorder.

ASSESSMENT OF COMMUNICATION DISORDERS

Communication is important to all aspects of a child's development and can have a long-term impact on socialization and learning. It is important to monitor communication development, including hearing, in all children from birth.

It is important for parents and professionals to be able to identify potential communication disorders as early as possible. However, early identification and accurate diagnosis of communication disorders can be challenging in children under 3 years of age who are in the early stages of language development. As the child gets older, the accuracy of the diagnosis usually increases.

It may be particularly difficult to diagnose a communication problem in children who otherwise seem to have no apparent developmental problems.

In order to identify young children with possible communication disorders as early as possible, all persons involved with young children (including parents and professionals) need to understand:

- ◆ typical communication development
- ◆ how to recognize signs of difficulty with communication
- ◆ steps to take when concerns are identified

Once an increased concern about a communication disorder has been identified, it is important for professionals to perform or arrange for appropriate screening and assessment of the child's communication.

It is important that all professionals involved in the assessment process be knowledgeable and have experience working with infants and young children.



EIP 4, 5, 6

Cultural Considerations and Language Variations

For many families, English may not be the primary or the only language spoken in the home. It is important to consider and respect these variations and differences when working with children and their families.

A regional, social, or cultural/ethnic variation of a language system is not considered a disorder of speech or language.

Bilingualism (two languages) or *multilingualism* (more than two languages) within a child's home or other care environment may affect the way in which the child learns each language. As a result, the child's early expression of language may vary somewhat from that seen in children raised in an environment in which only one language is spoken. This is a *difference* in learning language, *not a language disorder*.

Children cannot have a communication disorder in one language alone. The effects of a communication disorder will be present across all of the child's languages.

It is important to evaluate the child's language skills in a setting familiar to the child (a natural language sample). It is also important to include a parent or other family member who can interact with the child during the evaluation.

It is recommended that whenever possible, the evaluator use tools that have been tested for accuracy in the child's language and cultural group. It is strongly recommended that the evaluator be fluent in the child's primary language and familiar with the child's cultural background. If no evaluators are fluent in a child's primary language, it is important to have a trained interpreter participate in the evaluation process. It may also be helpful to include a cultural informant to assist the evaluator.



EIP 7

EARLY IDENTIFICATION OF COMMUNICATION DISORDERS

Early identification of children with communication disorders can occur in a variety of ways. In some cases, certain behaviors or lack of progress in the child's development may cause parents or other caregivers to become concerned that the child may have a communication problem. In other instances, a professional seeing the child for routine health care may become concerned about a possible communication disorder based on information from the parents or direct observation of the child.

There are a number of *risk factors* and *clinical clues* that increase the concern that a child may have a communication disorder. Risk factors and clinical clues may be noticed by the parents, by others familiar with the child, or by a professional who is evaluating or caring for the child.

Risk Factors

Risk factors are current or historical observable behaviors or findings that suggest that a child is at increased risk for either having or developing a communication disorder. For example, a history of chronic ear infections is a risk factor for communication disorders.

Clinical Clues

Clinical clues are specific behaviors or physical findings that are a cause for concern that a child may currently have a communication disorder. For example, a child having no spoken words at 18 months would be a clinical clue of a possible communication disorder, including hearing loss.

Risk factors and clinical clues for speech/language problems are listed in TABLES 1 and 2

TABLE 1: RISK FACTORS FOR SPEECH/LANGUAGE PROBLEMS IN YOUNG CHILDREN

A. Genetic/Congenital Problems

- ◆ Prenatal complications
- ◆ Genetic disorders
- ◆ Prematurity*
- ◆ Fetal alcohol syndrome
- ◆ Microcephaly
- ◆ Known exposure to a teratogen
- ◆ Dysmorphic child
- ◆ Positive toxicology screen at birth

B. Medical Conditions

- ◆ Ear and hearing problems (see Appendix A: Table A-1)
- ◆ Oral-motor or feeding problems (see Appendix A: Table A-2)
- ◆ Cleft lip or cleft palate
- ◆ Tracheotomy
- ◆ Autism (see Appendix A: Table A-3)
- ◆ Neurological disorders
- ◆ Persistent health/medical problems, chronic illness, or prolonged hospitalization
- ◆ History of intubation
- ◆ Lead poisoning
- ◆ Failure to thrive

C. Family/Environmental Risk Factors

- ◆ Family history of hearing or speech/language problems
- ◆ Parents with hearing impairment or cognitive limitation
- ◆ Children in foster care
- ◆ Family history of child maltreatment (physical abuse or child neglect)

* The more premature the birth and the more complicated the perinatal course, the greater the risk for communication disorders and/or other developmental problems.

COMMUNICATION DISORDERS

Normal Language Milestones and Clinical Clues of a Possible Problem

Most young children vary somewhat in the timing of their communication development. Typical speech and language development, known as “*normal language milestones*,” can be used as a reference to monitor a child’s speech and language development. The “normal language milestones” presented in TABLE 2 are specific communication behaviors grouped according to the age range when they usually first appear in most children.

Although there is some normal variation in the rate at which children develop, these milestones are usually first seen sometime during the age range specified. The age at which a behavior or absence of a behavior starts to become a *cause for concern* (a clinical clue) corresponds to the upper limit of the age range when this behavior usually first appears in most children.

For example, babbling usually develops between 6 and 9 months of age. A child not babbling or babbling with few or no consonants at the age of 9 months is a clinical clue of a possible communication problem.

Some risk factors and clinical clues of a possible communication disorder can be identified at a very early age; others may not be recognized until parents, caregivers, or professionals notice that the child’s use of language seems to be delayed compared to other children within the same age range.

Not all children who have risk factors or clinical clues have a communication disorder.

The presence of risk factors or clinical clues merely provides an indication that further assessment may be needed.

If parents have concerns because the child has risk factors or clinical clues indicating a possible communication disorder, it is recommended that they discuss these concerns with a health care provider or other professional experienced in evaluating young children with developmental problems.

If a child care professional suspects that a child has a developmental problem, including a possible communication disorder or hearing loss, it is important that these concerns be discussed with the parents. When a concern is identified, it is important to provide information to the family about how to obtain an appropriate evaluation by a health care provider or other professional.

Listening To Parent Concerns

Parental concerns about the child's communication skills are an important indicator that warrants further assessment for the possibility of a communication disorder or hearing loss. Further assessment might begin with a formal or informal checklist or a direct referral for formal assessment depending on the level of parental concern and presence of other risk factors or clinical clues.

TABLE 2: NORMAL LANGUAGE MILESTONES AND CLINICAL CLUES OF A POSSIBLE COMMUNICATION DISORDER

During the First 3 Months

Normal Language Milestones	Clinical Clues/Cause for Concern in First 3 Months
<ul style="list-style-type: none"> ◆ looks at caregivers/others ◆ becomes quiet in response to sound (especially to speech) ◆ cries differently when tired, hungry, or in pain ◆ smiles or coos in response to another person's smile or voice 	<ul style="list-style-type: none"> ◆ lack of responsiveness ◆ lack of awareness of sound ◆ lack of awareness of environment ◆ cry is no different if tired, hungry, or in pain ◆ problems sucking/swallowing

From 3–6 Months

Normal Language Milestones	Clinical Clues/Cause for Concern at 6 Months
<ul style="list-style-type: none"> ◆ fixes gaze on face ◆ responds to name by looking for voice ◆ regularly localizes sound source/speaker ◆ cooing, gurgling, chuckling, laughing 	<ul style="list-style-type: none"> ◆ cannot focus, easily over-stimulated ◆ lack of awareness of sound, no localizing toward the source of a sound/speaker ◆ lack of awareness of people and objects in the environment

Continued...

TABLE 2 – *Continued...*

From 6-9 Months

Normal Language Milestones

- ◆ imitates vocalizing to another
- ◆ enjoys reciprocal social games structured by adult (such as peek-a-boo, pat-a-cake)
- ◆ has different vocalizations for different states
- ◆ recognizes familiar people
- ◆ imitates familiar sounds and actions
- ◆ reduplicative babbling (“bababa,” “mama-mama”), vocal play with intonational patterns, lots of sounds that take on the sound of words
- ◆ cries when parent leaves room (9 mos.)
- ◆ responds consistently to soft speech and environmental sounds
- ◆ reaches to request object

Clinical Clues/Cause for Concern at 9 Months

- ◆ does not appear to understand or enjoy the social rewards of interaction
- ◆ lack of connection with adult (such as lack of eye contact, reciprocal eye gaze, vocal turn-taking, reciprocal social games)
- ◆ no babbling or babbling with few or no consonants

Continued...

COMMUNICATION DISORDERS

TABLE 2 - *Continued . . .*

From 9–12 Months

Normal Language Milestones

- ◆ attracts attention (such as vocalizing, coughing)
- ◆ shakes head “no,” pushes undesired objects away
- ◆ waves “bye”
- ◆ indicates requests clearly; directs others’ behavior (shows objects); gives objects to adults; pats, pulls, tugs on adult; points to object of desire
- ◆ coordinates actions between objects and adults (looks back and forth between adult and object of desire)
- ◆ imitates new sounds/actions
- ◆ shows consistent patterns of reduplicative babbling, produces vocalizations that sound like first words (“mama,” “dada”)

Clinical Clues/Cause for Concern at 12 Months

- ◆ is easily upset by sounds that would not be upsetting to others
- ◆ does not clearly indicate request for object while focusing on object
- ◆ does not coordinate action between objects and adults
- ◆ lacks consistent patterns of reduplicative babbling
- ◆ lacks responses indicating comprehension of words or communicative gestures
- ◆ relies exclusively on context for language understanding

Continued...

TABLE 2 – Continued...

From 12–18 Months

Normal Language Milestones

- ◆ begins single-word productions
- ◆ requests objects: points, vocalizes, may use word approximations
- ◆ gets attention: vocally, physically, maybe by using words (such as “mommy”)
- ◆ understands that an adult can do things for him/her (such as activate a wind-up toy)
- ◆ uses ritual words (such as “bye,” “hi,” “thank you,” “please”)
- ◆ protests: says “no,” shakes head, moves away, pushes objects away
- ◆ comments: points to object, vocalizes, or uses word approximation
- ◆ acknowledges: eye contact, vocal response, repetition of words

Clinical Clues/Cause for Concern at 18 Months

- ◆ lack of communicative gestures
- ◆ does not attempt to imitate or spontaneously produce single words to convey meaning
- ◆ does not persist in communication (such as may hand object to adult for help, but then gives up if adult does not respond immediately)
- ◆ limited comprehension vocabulary (understands fewer than 50 words or phrases without gesture or context clues)
- ◆ limited production vocabulary (speaks fewer than 10 words)
- ◆ lack of growth in production vocabulary over 6-month period from 12 to 18 months

Continued...

COMMUNICATION DISORDERS

TABLE 2 - *Continued . . .*

From 18–24 Months

Normal Language Milestones

- ◆ uses mostly words to communicate
- ◆ begins to use two-word combinations; first combinations are usually memorized forms and used in one or two contexts
- ◆ by 24 months, uses combinations with relational meanings (such as “more cookie,” “daddy shoe”); more flexible in use
- ◆ by 24 months, has at least 50 words, which can be approximations of adult form

Clinical Clues/Cause for Concern at 24 Months

- ◆ reliance on gestures without verbalization
- ◆ limited production vocabulary (speaks fewer than 50 words)
- ◆ does not use any two-word combinations
- ◆ limited consonant production
- ◆ largely unintelligible speech
- ◆ compulsively labels objects in place of commenting or requesting
- ◆ regression in language development, stops talking, or begins echoing phrases he/she hears, often inappropriately

Continued...

TABLE 2 - Continued . . .

From 24–36 Months

Normal Language Milestones

- ◆ engages in short dialogues and expresses emotion
- ◆ begins using language in imaginative ways
- ◆ begins providing descriptive details to facilitate listener's comprehension
- ◆ uses attention-getting devices (such as “hey”)
- ◆ able to link unrelated ideas and story elements
- ◆ begins to include articles (such as “a,” “the”) and word endings (such as “-ing” added to verbs); regular plural “-s” (cats); “is” + adjective (ball is red); and regular past tense (“-ed”)

Clinical Clues/Cause for Concern at 36 Months

- ◆ words limited to single syllables with no final consonants
- ◆ few or no multiword utterances
- ◆ does not demand a response from listeners
- ◆ asks no questions
- ◆ poor speech intelligibility
- ◆ frequent tantrums when not understood
- ◆ echoing or “parroting” of speech without communicative intent

TABLE 2 REFERENCES:

- Miller J. *Assessing Language Production in Children: Experimental Procedures*. Austin, TX: Pro-Ed, 1981.
- Miller J, Chapman R, Branston M, and Reichle J. Language comprehension in sensorimotor stages V and VI. *Journal of Speech and Hearing Research*, 1980; 23:284-311.
- Olswang L, Stoel-Gammon C, Coggins T, and Carpenter R. Assessing prelinguistic and early linguistic behaviors in developmentally young children. In *Assessing Linguistic Behavior (ALB)*. Seattle, WA: University of Washington Press, 1987.

ROUTINE DEVELOPMENTAL SURVEILLANCE

Developmental surveillance is a flexible, ongoing process in which child care professionals monitor a child's developmental status during routine health care visits or while providing early childhood services.

Periodic developmental surveillance can be part of routine well-child exams or done at other times when child care professionals evaluate a child.

Developmental surveillance for communication includes looking for risk factors, identifying clinical clues of possible communication disorders, listening to parents' concerns about their child's development, and using age-appropriate formal screening tests for communication development.

It is important to monitor a child's communication development at 6, 9, 12, 18, 24, and 36 months.

Monitoring the child's patterns and timing of speech and language development and then comparing them to "normal language milestones" (see TABLE 2) are an important part of routine developmental surveillance.

A child's failure to achieve a particular milestone by a certain age is a clinical clue of a possible communication disorder. When a child's communication development appears to be delayed, it is appropriate to begin more specific surveillance for a communication disorder (referred to as *enhanced developmental surveillance*.)



EIP 8

Surveillance for Hearing Problems

It is recommended that routine developmental surveillance for all young children include surveillance for hearing problems. It is strongly recommended that all children within the first 3 months of life receive an objective screening of hearing, preferably in the neonatal period before discharge from the hospital.

Screening for possible hearing problems is particularly important for infants and young children when:

- ◆ there are known risk factors for hearing loss
- ◆ clinical clues for communication disorders are identified
- ◆ parents express concerns about the possibility of a communication disorder or hearing loss
- ◆ there are abnormal findings on a speech/language screening test.

It is extremely important to do an objective assessment of a child's hearing status if there is an increased level of concern for hearing problems.



AN ENHANCED SURVEILLANCE APPROACH

For children in whom there is an increased level of concern for a communication disorder, it is recommended that routine developmental surveillance be replaced with more frequent and more specific developmental surveillance to monitor communication development.

Enhanced developmental surveillance is recommended for young children who have no apparent developmental problems other than a concern about a possible communication disorder. Professionals and parents can make informed decisions about appropriate actions based on the information that is gathered in the surveillance process.



Once a program of enhanced surveillance has begun, it is recommended that the child return for reevaluation within 3 months.

It may be appropriate to have some children return for a follow-up visit (or initiate screening) sooner than 3 months depending on the degree/severity of the apparent disorder and the age of the child.

As part of the surveillance process, it is important to provide parents with information about expected language milestones (see TABLE 2), reasons for concern, and ways to provide the child with opportunities that encourage language development.

As part of enhanced surveillance, it is recommended that parents begin systematic monitoring of the child's language. This can be done through the use of a developmental checklist or questionnaire designed for use by parents, such as the CDI Words and Gestures checklist or the Ages and Stages Questionnaire. These tests are discussed later in this chapter.

ON THE INITIAL VISIT

When a professional initially suspects a child may have a communication disorder, it is important to:

- ◆ determine if a hearing assessment or other developmental assessment is needed
- ◆ educate parents about normal language development and language disorders
- ◆ teach parents to use appropriate checklists to monitor communication development
- ◆ teach parents methods to encourage the child's language development
- ◆ establish an appointment for a follow-up visit



EIP 11

At the time of any follow-up visits, it is recommended that decisions about further actions be based on the child's progress during the surveillance period.

AFTER 3 MONTHS OF ENHANCED SURVEILLANCE

a) If the child has caught up to age-appropriate normal language milestones...

It is recommended that the child receive no further specific assessment but continue enhanced developmental surveillance and return for reevaluation no later than 3 months.

In young children, language skills change dramatically during the child's first 3 years. It is important to recognize that it is often difficult to determine the reason for or extent of a communication disorder in young children, particularly in children less than 24 months of age with no other apparent developmental concerns. Some children, in the absence of any other developmental problems, may eventually catch up to their peers and thus may seem to "outgrow" their communication delay.

COMMUNICATION DISORDERS

b) If communication has improved but not caught up to language milestones...

In a child who has no other apparent developmental disorder, it may be appropriate to begin more specific screening or assessment for a communication disorder (including hearing loss) if the child has not caught up to expected language milestones over a 3- to 6-month period of active surveillance.

Or, it may be appropriate to continue surveillance and have the child return for reevaluation within 3 months if:

- ◆ the child's communication has improved (by some objective measure as well as in the clinical judgment of the professional), *and*
- ◆ the communication delay does not appear to be affecting other areas of the child's development, *and*
- ◆ there are no other developmental concerns, *and*
- ◆ the parents and the professional are comfortable extending the surveillance period.

If there continues to be a concern about communication development but no indication of other developmental problems, it is important to:

- ◆ encourage parents to continue monitoring the child's language development
- ◆ intensify parent education
- ◆ inform the parents that the child may be at risk for language problems *or* may eventually catch up to normal language milestones—it is too soon to know for sure
- ◆ encourage parents to increase activities in which the child has an opportunity to interact with other children (exposure to children with normal language development might be provided through a variety of activities, such as library story groups, day care, or playgroups)
- ◆ establish a hearing history and rule out hearing loss

c) If the child's level of communication remains the same as at the initial visit...

A hearing assessment (comprehensive audiologic evaluation) is very important if it has not yet been done.

An in-depth evaluation for a possible speech/language problem is recommended for children with no other apparent developmental disorder whose language has not progressed after 3 months of language surveillance and stimulation.

It is important for the professional to look carefully for risk factors or findings that suggest other developmental problems (besides the possible speech/language problem). Referral to an audiologist, developmental pediatrician, or other specialists may be appropriate.

d) If the child's level of communication has regressed since the initial visit...

If a child under age 3 regresses in communication abilities or other developmental skills, it is recommended that the child receive an in-depth medical assessment. This may include evaluation by a developmental pediatrician or pediatric neurologist.

It is recommended that an in-depth assessment of communication be done by a speech language pathologist.

A hearing assessment (comprehensive audiologic evaluation) is very important (if it has not yet been done).



EIP 12

SCREENING TESTS FOR COMMUNICATION DISORDERS

Screening tests for communication disorders are intended to lead to a “yes” or “no” decision that a child either may have *or* is unlikely to have problems with communication. The intent of screening tests is not to arrive at a formal diagnosis. Instead, the goal of screening is to identify children for whom there is an increased likelihood of a communication disorder and who, therefore, need further in-depth assessment to establish the diagnosis.

There are various approaches to screening for communication disorders in young children. Screening tests for communication disorders can be used to screen all children in a certain age group or can be used more selectively to screen children when there is an increased concern for a communication disorder that has already been identified.

General Principles of Screening for Communication Disorders

Many screening instruments are readily available to detect possible communication disorders. However, even screening instruments that are easy to administer usually require the experience of a qualified professional (knowledgeable about communication disorders in young children) to interpret results and counsel parents.

It is recommended that screening for communication disorders include use of:

- ◆ open-ended questions
- ◆ informal or formal checklists
- ◆ formal screening instruments
- ◆ observation of parent-child interactions in a setting that is familiar to the child

If initial screening is done with a formal checklist or parent questionnaire, one of the following is recommended:

- ◆ Language Development Survey (LDS)
- ◆ MacArthur Communicative Development Inventories (CDIs)
- ◆ Ages and Stages Questionnaire (ASQ) (*not reviewed in the guideline*)

If there is an increased concern about a possible communication disorder in a young child, use of formal screening instruments for communication disorders is recommended. Formal screening instruments may include:

- ◆ Clinical Linguistic Auditory Milestone Scale (CLAMS)
- ◆ Early Language Milestone (ELM) Scale

If a screening instrument suggests the possibility of a communication disorder, further assessment is needed to determine whether a communication disorder exists and to establish a diagnosis.

If a screening instrument suggests a communication disorder is *not* likely, it is still important to assess the child for other developmental or medical problems that may have caused the initial concern.

COMMUNICATION DISORDERS

LANGUAGE DEVELOPMENT SURVEY (LDS)

The Language Development Survey (LDS) was originally designed to be completed by parents in a clinical setting, but it can also be mailed to parents. It is a test of expressive language designed to identify language delay in 2-year-old children.

The LDS consists of a one-page vocabulary checklist of approximately 300 words, plus a question asking about combining two or more words into phrases.

The LDS may be useful in identifying children 24 months of age who have a possible communication disorder. If a child at 24 months has less than a 50-word vocabulary or has no word combinations, further assessment is needed.

MACARTHUR COMMUNICATIVE DEVELOPMENTAL INVENTORIES (CDIs)

The MacArthur Communicative Developmental Inventories (CDIs) are norm-referenced tests of language development in children and are based on parent reports on a standardized questionnaire.

The CDIs are intended to describe typical language development in children from 8 to 30 months of age. There are two formats: one for children age 8 to 16 months old and another for children age 16 to 30 months. Parents complete a standardized questionnaire asking about various aspects of nonverbal and verbal communication.

The CDIs are useful to aid in the recognition of children who would benefit from further assessment. If the child is from a family in which Spanish is the primary language, the Spanish version of the CDIs may be particularly useful.

**CLINICAL LINGUISTIC
AUDITORY
MILESTONE SCALE
(CLAMS)**

The *Clinical Linguistic Auditory Milestone Scale* (CLAMS) was developed to screen for language delays in young children between birth and 3 years of age. The test uses standardized methods for obtaining information from a parent report and from direct interaction between the examiner and the child. The CLAMS is designed to be administered by a physician in an office setting.

The test determines if a child has specific language skills or abilities that have been found to be present in most typically developing children in specific age ranges.

The CLAMS is most useful for confirming normal language development in children from 14 to 36 months of age. It may also be useful as a screening test to identify expressive language delays in children age 25 to 36 months.

**EARLY
LANGUAGE
MILESTONE SCALE
(ELM)**

The *Early Language Milestone* (ELM) *Scale* was developed for use in the pediatrician's office for a brief screening of a child's language abilities. Responses are obtained from a combination of parent report, examiner observation, and direct testing.

The ELM Scale may be useful for identifying 24-month-old children who have normal expressive language development. The ELM Scale may be less useful for identifying children with expressive language delays at 24 months. A revised version, the ELM-2 Scale, is now available.

COMMUNICATION DISORDERS

Considering the Results of a Screening Test

When considering the results of a screening test, it is important to remember:

- ◆ Not all children with communication disorders can be identified early. For children less than 24 months of age, screening tests are limited in their ability to differentiate children with receptive language problems from children who have normally developing language skills.
- ◆ Because the time of onset and severity of symptoms vary, it is recommended that screenings be repeated at various age levels when concerns for communication disorders persist or become apparent.
- ◆ If a child scores above the standard cutoff on a standardized test and there are other indications of a possible communication disorder, then it is recommended that the child's progress continue to be monitored and periodic follow-up be scheduled.



EIP 13

IN-DEPTH ASSESSMENT

Several standardized tests and assessment methods have been developed to provide a more in-depth assessment of children who have a possible communication disorder. These tests are intended to further evaluate children when a communication disorder is considered possible due to risk factors and clinical clues, parental or professional concerns, and/or positive screening test results.

When screening suggests the child has a possible communication problem, an in-depth assessment by a speech language pathologist is recommended in order to determine if a communication disorder is present. It is recommended that an in-depth assessment focus on identifying the child's strengths as well as intervention needs. It is important to share the assessment results with the parents.

It is important to ask parents about their concerns and questions. This will assist the professional in the choice of assessment materials and procedures.

It is recommended that an in-depth speech/language evaluation include:

- ◆ hearing ability and hearing history
- ◆ history of speech/language development
- ◆ oral-motor and feeding history
- ◆ expressive and receptive language performance (syntax, semantics, pragmatics, phonology)
- ◆ social development
- ◆ quality/resonance of voice (breath support, nasality of voice)
- ◆ fluency (rate and flow of speech)
- ◆ information about culture, ethnicity, and linguistic variations

COMMUNICATION DISORDERS

In assessing a child who has a possible communication disorder, it is very important that professionals use clinical judgment, in addition to all information gathered about the child, and not rely solely on test scores.



EIP 14

In reporting results of the assessment, it is important to consider the impact on the family.



EIP 15

When assessment results confirm that there is a communication disorder, it is important to try to determine possible causes of or factors contributing to the disorder.

It is appropriate for parents to explore the possibility of a second or independent evaluation when they continue to have concerns about speech/language development.



EIP 16

Specific Techniques for an In-Depth Assessment

It is recommended that the in-depth assessment of young children with possible speech/language disorders include both standardized tests and alternative assessment approaches.

Standardized tests of expressive and receptive language are important because of the objectivity and structure they offer to the assessment process. It is important that these tests be age-appropriate and include measures that are *norm-referenced* (comparing the child's performance to that of an appropriate peer group) and *criterion-referenced* (comparing the child's performance against a predetermined standard).

It is important to remember that standardized test scores alone are not sufficient to make a diagnosis.



EIP 17

Some aspects of communication (including pragmatics, discourse, voice, and fluency) are not easily measured using standardized tests. Therefore, it is important to include alternative assessment approaches in addition to standardized tests.

Alternative approaches may include observation of the child and an analysis of *natural language samples* (the child's speech and language as they are used in settings that are familiar to the child and with familiar persons such as parents and caregivers).

Samples of spontaneous speech collected in natural contexts are important for determining the child's level of language development and obtaining a description of the child's language form, language content, and language use. Observations of interactions between the caregiver and child can serve as a measure of the effectiveness of the child's communication.

OTHER SPECIAL EVALUATIONS

Many young children who are initially identified and referred because of a speech/language problem will eventually be diagnosed with other developmental problems in addition to the communication disorder. For example, children with a developmental delay are often first seen for evaluation because of concern about a speech/language problem.

Although it is important for children to have a general assessment of all the different areas of development, the three conditions that are most likely to include a speech/language problem are:

- ◆ general cognitive problems (developmental delay/mental retardation).
- ◆ hearing impairment
- ◆ autism or pervasive developmental disorders (*not discussed in this guideline—see Appendix A for Risk Factors for Autism*)

Assessing Young Children with Communication Disorders and Other Developmental Problems

When evaluating young children for general developmental delay, it is recommended that communicative skills be a special and separate focus of the assessment.

Communication disorders are more common in young children who have other developmental problems or disorders. Children with both a communication disorder and some other developmental disorder present greater challenges for planning assessment and intervention strategies.

When evaluating young children with possible communication disorders, it is important to assess their general cognitive function, social functioning, and emotional interactions.



EIP 18, 19

It is particularly important to consider a child's level of cognitive abilities (the ability to understand, process, and respond to information) when assessing whether the child has a communication disorder.

It is important to assess cognition separately from communication in young children with suspected communication disorders.

When assessing cognition in young children, it is important to use some type of performance-based test that does not require the use of language.



EIP 20, 21

Assessing Hearing Problems in Young Children

It is recommended that a comprehensive assessment of hearing for infants and young children (from birth to 3 years old) include:

- ◆ a hearing history
- ◆ behavioral audiometry testing (using an age/developmentally appropriate response procedure)
- ◆ electrophysiologic procedures

Physiologic tests such as the *auditory brainstem response* (ABR) are recommended for children whose hearing assessment results are unreliable or inconsistent. ABR is an appropriate test for children suspected of hearing loss who are too young for behavioral tests. ABR may require using medications to sedate the child.

Behavioral observation audiometry (such as clapping hands or ringing a bell) is *not* recommended as a hearing test for infants and children because it is unreliable.

COMMUNICATION DISORDERS

Other Special Evaluations

Children with oral-motor and feeding problems

Although developing recommendations for children with oral-motor and feeding problems is not the focus of this guideline, some general recommendations are included because children who have these problems often have (or are at risk for developing) a speech or language problem also.

It is useful to have a team of pediatric professionals involved in ongoing assessment of children for whom there are concerns about oral-motor function or feeding.

It is recommended that the professionals involved in the assessment of children with oral-motor and feeding concerns have knowledge of normal oral-motor and feeding development as well as experience and expertise in assessing children with such problems.

Augmentative communication

Augmentative communication involves using various methods and/or equipment to assist with communication. Augmentative devices may include sign language, picture boards, electronic voice output devices, and computers. Augmentative communication systems may include other communication techniques such as gestures, facial expressions, and nonspeech vocalization.

It is important to assess the need for an augmentative communication system in children with communication disorders, especially when speech is not an effective mode of communication for the child. For some children, augmentative communication systems (including sign language) may be transitional or temporary.

It is recommended that parents be informed that the use of an augmentative communication system may help promote the development of speech.



EIP 22

USING RESULTS OF THE ASSESSMENT IN DECIDING WHETHER TO INITIATE SPEECH/LANGUAGE THERAPY

The decision to initiate speech/language therapy for young children or not to depends on the nature of the speech/language problem and the developmental level of the child. Professionals use information from the in-depth speech/language assessment and the developmental assessment, including any special assessments for cognition, hearing, or other special evaluations such as oral-motor problems.

Separate recommendations are given for children who have only a speech/language problem with no other apparent developmental problems and for children in whom the speech/language problem is accompanied by other developmental problems such as general developmental delay, hearing problems, or oral-motor problems.

Considerations for Initiating Speech/language Therapy

In deciding whether or not to initiate speech/language therapy in young children with possible communication disorders, it is important that parents and professionals have available to them current information from all of the following:

- ◆ in-depth speech/language assessment
- ◆ a developmental assessment that includes appropriate assessment of the child's cognitive status
- ◆ assessment of hearing
- ◆ assessment of oral-motor problems, if present

After findings of the above assessments are available, it is important to make preliminary decisions regarding the need for speech/language therapy.

COMMUNICATION DISORDERS

Factors to consider in making the decision about beginning speech/language therapy include:

- ◆ the severity of the child's speech/language delay
- ◆ the type of the child's speech/language problem
- ◆ the child's cognitive status
- ◆ the presence of hearing, oral-motor, or any other significant problems that may affect the child's communication

It is important to recognize that the indications for speech/language therapy in children with general developmental delays may change over time as the child develops.

Children with Speech/Language Problems and Developmental Delays

It may not be necessary to initiate formal speech language therapy for children with general developmental (cognitive) delays if the following three conditions are met:

- ◆ the child's comprehension and expressive language are consistent with the child's developmental level, *and*
- ◆ the child has no other specific speech/language impairments, *and*
- ◆ the cognitive delay is not associated with a specific condition in which communication problems are usually a major component (such as Down syndrome or autism)

For children with specific developmental disorders associated with conditions in which speech and language problems are usually a major component (such as Down syndrome or autism), it may be beneficial to initiate formal speech/language therapy.

When the child's language level and developmental level are the same and there are no other specific speech/language disorders, it is recommended that parents and professionals initiate activities to stimulate language development, including appropriate social interactions. It is also important to continue active developmental surveillance.

In deciding whether to initiate speech language therapy for children with developmental delays, it is important to consider the degree of confidence in the test results. Cognitive tests that rely on language ability may sometimes underestimate the child's cognitive abilities.

Considering Speech/Language Therapy for Children with No Other Developmental Problems

When in-depth speech/language assessment finds that a child has a speech/language problem, but the developmental assessment indicates no general developmental delay or other developmental problems, it may be useful to consider whether the child has the following:

- ◆ a delay in expressive language but normal language comprehension, and no other specific language impairments (sometimes referred to as “specific expressive language delay” or SELD)
- ◆ a specific language impairment (SLI)

COMMUNICATION DISORDERS

Children with Mild Expressive Delays Only

When deciding whether or not to initiate speech/language therapy for children age 18 to 36 months who have a delay in expressive language only and no other apparent developmental problems (normal language comprehension, no hearing loss, and typically developing in all other ways), it is important to:

- ◆ assess if the child has a higher or lower likelihood of continuing to have language problems
- ◆ recognize that predicting whether a child has a higher or lower likelihood of continuing to have language problems requires experienced clinical judgment



EIP 23, 24

For children who are considered to have a *higher* likelihood of developing future speech/language problems (for example, children with multiple factors predicting continued delay), it is recommended that:

- ◆ formal speech/language therapy be initiated
- ◆ activities to promote language development be continued, along with the ongoing monitoring of the child's progress
- ◆ children receive periodic assessment of their communication level and progress (whether or not speech/language therapy is initiated)

For children who have a *lower* likelihood of future speech/language problems, it is recommended that:

- ◆ formal speech/language therapy not be initiated at this time
- ◆ activities to promote language development be continued, along with the ongoing monitoring of the child's progress
- ◆ the child be reevaluated by the professional within 3 months
- ◆ the child's need for speech/language therapy be reconsidered at the time of reevaluation depending on the child's progress

Children with Severe Speech/Language Delays

For children at ages 18 to 36 months who have had an in-depth assessment that indicates a severe delay and who have no other apparent developmental problems, it is recommended that formal speech/language therapy, as well as a comprehensive health evaluation, be initiated.

A severe delay may be indicated by:

- ◆ at 18 months, no single words
- ◆ at 24 months, a vocabulary of fewer than 30 words
- ◆ at 36 months, no two-word combinations

One area of current discussion among experts in the field is the extent to which formal speech/language therapy is necessary for young children ages 18 to 36 months who have a language delay but no other developmental problems.

There is a certain degree of variation in the timing of language development in typically developing children in this age range. Many of these children with milder language delays may catch up with typically developing peers by 48 months of age, especially if efforts are made to facilitate language development. However, initiating speech/language therapy is important for those children who have more severe delays.

INTERVENTION FOR COMMUNICATION DISORDERS

No one type of speech/language intervention is the best for all young children. It is recommended that the type of intervention for each child be based on an assessment of that child's specific strengths and needs. It is particularly important to assess the child's pretreatment developmental and language levels.



It is important to remember that early intervention may help speed the child's overall language development and lead to better long-term functional outcomes.

For a child to make progress in a particular component of language (such as pronunciation or grammar), it is important to focus treatment directly on that problem, since improvement in one area may not necessarily generalize to improvement in other areas.

It is important that treatment goals for each individual child be clearly identified and defined with measurable results and clear markers for mastery.



For most young children with communication disorders, it is recommended that intervention focus first on increasing the amount, variety, and success of verbal and nonverbal communication and then, if necessary, on intelligibility.

It is important not to slow a child's progress by focusing on speech skills that are not expected at the child's particular age or developmental level.

It is important to include ongoing evaluation of the progress of the intervention and to modify intervention strategies as needed.

It is recommended that no form of therapy be continued without documentation that the intervention is effective for the child.

It may be appropriate to modify the intervention approach when any of the following occur:

- ◆ treatment goals have been achieved
- ◆ progress is not evident
- ◆ regression is noted
- ◆ there is an unexpected change in a child's behavior or health status
- ◆ there is a change in the intervention setting or the child's environment



EIP 27, 28

Comprehensive evaluations, including appropriate standardized tests, are also important to compare the child's individual progress to age-expected development. It is important to perform a comprehensive evaluation at least yearly.

The Parents' Involvement in Intervention

It is important that parents, to the extent they are able and willing, be involved in the assessment and intervention for their child in order to understand the child's language disorder, treatment options, and prognosis, as well as treatment goals, objectives, and methods.

It is recommended that decisions about the extent of parental involvement in interventions be made on a case-by-case basis and take into account:

- ◆ the parents' availability and interest in participating
- ◆ characteristics of the child's home environment
- ◆ the availability of training and professional support

While it is important to include parents in the intervention process, it is also important that they be involved in deciding their ability, availability, and willingness to participate in the intervention.

COMMUNICATION DISORDERS

Some parents can help provide intervention for their child provided that:

- ◆ adequate amounts of professional and parent time are allocated for parent training
- ◆ parents receive adequate direction from the professional
- ◆ there is ongoing monitoring of the child's progress by the professional

The Professional's Involvement in the Intervention Process

It is recommended that the professionals involved in providing intervention have expertise and experience with infants, toddlers, and their families and be qualified and appropriately credentialed under the professional practice acts of New York State.

It is important that all professionals collaborate in coordinating and integrating techniques and approaches when working with the child and family.

Considerations of the Language and Culture of the Child and Family

It is always essential to consider and respect the culture and primary language of the family when providing interventions for children with communication disorders.

Although it is important to consider the parents' preference in determining the language used in the intervention, it is strongly recommended that any intervention be conducted in the primary language used in the home. This is important so that natural interaction and communication can occur between the child and the family at home. It is important that parent education and counseling, including written materials, be in the primary language of the family.

It is recommended that a professional who is fluent in the language of the child and the family conduct any direct speech/language therapy.

Because parent involvement is such an integral part of the development of speech and language, it is important for professionals involved in parent education and training to be competent in the language of the family and familiar with its culture.

If a professional fluent in the child's primary language is not available, it is recommended that a specially trained translator interpret for the professional who is providing the intervention.

If the professional providing the intervention is not familiar with the culture of the family, it is important to have a cultural informant to advise the professional on issues that may cause misunderstanding during the course of therapy.

A person familiar with the culture and language of the family can review intervention techniques and materials to determine if they are culturally appropriate.

It is important that any interpreters assisting in the intervention process be trained by the professional providing the intervention to ensure that interpretations of the child's behaviors are culturally and linguistically accurate. It is recommended that interpreters participate in the specific intervention program.

MAJOR INTERVENTION APPROACHES

Speech and language interventions for young children with communication disorders include a variety of methods and approaches. Some interventions are focused directly on the child (often called *direct interventions*). Other interventions focus on teaching intervention skills to the parent or another individual who then works with the child (often referred to as *indirect interventions*).

Individual and/or Group Therapy

Of the interventions that focus directly on the child, some involve working with the child in *individual* therapy sessions in which the therapist works one-on-one with the child, either alone or in a setting that includes other typically developing children. This type of intervention can occur in the home (a home-based program) or at some other location (such as a professional's office, school, day care, or community setting).

The choice of setting for individual speech/language therapy will depend on a variety of factors relating to the individual child's needs and family situation. These might include age and developmental level, the type and severity of the communication disorder, other developmental deficits or medical problems, the family's interest in and ability to participate in the intervention, the culture of the child and family, and the language used by the child and family.

Other interventions involve working with children in a *group* setting in which there are several children receiving similar interventions. Group interventions range from groups as small as two children to large classroom settings.



EIP 29

In this guideline, *group* speech/language interventions are defined as interventions that involve a professional working with two or more children who both have a communication disorder. The size, number of participants, and structure of the group may vary depending on the needs and abilities of the child, intervention techniques, and the setting.

Group interventions may occur in a clinical, classroom, or community setting (such as the professional's office, day care, or preschool). More informal settings might include opportunities for children to interact at library or recreation programs.

In somewhat older children, group interventions may take place in a preschool setting. Group interventions in preschool settings may either be specialized classes for children with developmental disorders or include peers with normal language development.

Individual Speech/Language Therapy Approaches

Individual speech/language therapy (either as the only kind of intervention or in combination with group interventions) may be useful in treating young children with communication disorders.

Individual therapy may be especially important at the beginning stages of treatment as specific treatment objectives are established and as the child becomes familiar with the professional and the use of particular techniques. However, individual therapy as the only intervention method may produce less generalization of language skills to other situations than would group interventions that involve multiple conversational partners.

It is important for professionals conducting individual speech/language interventions to work with the parents to decide the goals of the intervention and monitor the child's progress.

COMMUNICATION DISORDERS

When choosing the treatment strategy for individual therapy sessions, it is important to consider:

- ◆ the child's chronological age and developmental level
- ◆ the type and severity of the child's communication disorder
- ◆ other developmental deficits or medical problems
- ◆ strengths and interests of the child
- ◆ other therapies the child is receiving
- ◆ the family's interest in and ability to participate in the intervention
- ◆ language used by the child and the family
- ◆ community resources

Group Speech/Language Therapy Approaches

Depending on the age and language development level of the child, group speech/language intervention in a developmentally appropriate group may be useful for young children with communication disorders (either as the only intervention or combined with individual therapy).

The specific techniques used by the professional providing the intervention are often similar for both individual and group intervention settings.

Group speech/language interventions are useful to encourage generalization of language skills to other settings. In contrast, interventions provided directly by a professional in individual therapy sessions may be more useful in establishing the structural aspects of language.

QUICK REFERENCE GUIDE

It is important to provide opportunities for including parents in speech/language group interventions for young children. Including parents in these group interventions may help provide parents with support, information, and education to enhance communicative development. It may also facilitate generalization of the child's language skills to other settings.

The type of group speech/language intervention which is most appropriate and useful depends upon the age (or developmental level) of the child. For children 18 months old and younger, it is recommended that parents be active participants in the group intervention process.



EIP 30, 31

For children age 18 to 24 months, it is useful to include parents in group interventions, but for some children in this age range group interventions may be useful even if their parents are not present. For children age 24 to 36 months, small group interventions under the direction of a professional may be useful.

It may be useful to include typically developing peers in group interventions for young children with communication disorders because they provide an important source of language stimulation. Having a young child with a communication disorder interact in play settings with other children in the same age range who have age-appropriate language skills can be useful in stimulating the child's language development.

Formal Parent Training Programs

The recommendations for parent training apply to a formal program in which a professional instructs parents in strategies and methods for improving their child's speech and/or language development. Formal parent training programs provide an opportunity for parents to take a more primary role in implementing speech/language interventions for their child.

Parents can be successful primary intervention agents provided that:

- ◆ parents are supervised by a professional qualified to provide the intervention
- ◆ parents and professionals dedicate adequate time to the parent training process
- ◆ there is ongoing review of the child's progress by the professional providing the intervention

Formal parent training programs are strongly recommended for parents who serve as primary intervention agents for their child with a communication disorder. Formal parent training programs may also be useful for parents whose children are involved in either individual or group speech/language therapy.

It is strongly recommended that parent training programs include:

- ◆ instruction regarding general techniques and approaches as well as ways to adapt intervention methods to their own child's needs
- ◆ direct instruction in the treatment approach and the specific goals of the intervention
- ◆ demonstrations of the specific intervention techniques
- ◆ feedback on use of intervention techniques with their child



EIP 32

SPECIFIC INTERVENTION TECHNIQUES

Speech and language interventions for young children with communication disorders include a variety of specific techniques. There are several ways to classify these techniques. An intervention plan for an individual child usually incorporates a number of specific techniques.

Directive versus Naturalistic Intervention

One of the major distinctions between techniques is the extent to which they are based on either *directive* or *naturalistic* approaches. Intervention approaches are usually not limited to only one approach, but rather include a mix of both, usually starting with a more directive approach and moving to a more naturalistic approach. Many speech/language interventions combine elements of both.

Directive Interventions

Directive interventions usually include the following three characteristics: providing massed blocks of trials, providing situations in which the professional controls the incentives and the related consequences (reinforcers), and using consequences such as verbal praise or tokens that are not related to the child's current activities.

Directive approaches use specific techniques such as modeling and prompting to elicit targeted language structures from the child. An example of modeling is having the professional name an object shown to the child and then prompting the child to name the object. Prompting involves the professional presenting a verbal command or question, or some nonverbal cue, to the child to produce a desired verbal response.

COMMUNICATION DISORDERS

Naturalistic Approaches

Naturalistic approaches commonly include the following three characteristics: providing learning opportunities in the day-to-day environment of the child rather than structured learning sessions, following the child's focus of attention or interest, and using an incentive and a reinforcer that are naturally associated with a particular communication response.

Naturalistic interventions use specific techniques that create opportunities for the child to learn. This approach utilizes aspects of adult-child interaction that promote language learning in the child's natural environment. In a naturalistic intervention, the professional arranges materials in the environment to elicit specific responses from the child. Deciding which techniques to use for an individual child requires the professional to draw upon knowledge about normal language learning and to be aware of the needs of the particular child.

Selecting a Technique or an Approach

No one specific speech/language therapy technique or approach is best for all young children. When selecting an intervention technique or approach, it is important for the professional providing the intervention to consider the individual characteristics of the child, including the child's stage of language development. It is often useful to consider the child's conversational skills and verbal style in deciding whether to use a more directive or a more naturalistic intervention.

For some children, more directive interventions may be appropriate, particularly at the beginning stages of treatment. Directive interventions can be very effective in developing initial structures of speech or gesture. Naturalistic interventions may be more useful in increasing spontaneous language and generalization to nontreatment settings.

A progression of intervention strategies from more directive approaches to more naturalistic approaches is important.

While directive approaches are perhaps more important initially for some children, some functional aspects of language (such as how to participate in a conversation) need to be learned using more naturalistic approaches.

A naturalistic approach may help to facilitate long-term goals for speech/language interventions such as expressing basic needs, establishing functional use of language, interacting socially, and acquiring knowledge.

Evaluating Specific Intervention Techniques

Many different, specific intervention techniques have been shown to be effective for improving speech/language skills in children with communication disorders. Specific techniques that will prove to be most effective for an individual child will depend upon many factors, including the type of communication disorder, the child's personality, and whether or not the child has other developmental problems.

It is recommended that the treatment objectives for each child be clearly identified and defined with clear criteria for success. It is important to evaluate the effectiveness of the speech/language interventions on a regular basis. When a child is receiving speech/language therapy, it is important to assess behaviors and communication skills at the beginning of treatment and to document progress at the end of each intervention session.

COMMUNICATION DISORDERS

When a child is receiving a speech/language intervention that is integrated within the child's daily activities (rather than in separate sessions), it is still important to periodically monitor and document the child's progress.

It is important to assess the extent to which the speech/language skills acquired with specific intervention techniques are generalized to nontreatment settings.

It is recommended that the professional providing the intervention use information gathered regularly about the child's progress to assist in choosing and modifying intervention strategies as well as the intensity, frequency, and duration of the intervention.



SPEECH/LANGUAGE INTERVENTIONS FOR CHILDREN WITH DEVELOPMENT DISORDERS

Children whose communication disorder is only one part of a more general developmental disorder may require multiple services to address multiple needs. There are additional considerations when planning an intervention for a child with multiple needs compared to a child with only a language delay or disorder and no other apparent developmental problems.

Often, similar speech and language intervention strategies are effective for a child with communication disorders regardless of whether the child has other developmental issues. However, some studies comparing specific treatment approaches found that the most effective intervention method differed according to the child's pretreatment developmental level.

The expected rate of progress in communication may be different for a child who has additional types of impairment.

Additional considerations for children who have a communication disorder associated with other developmental problems include:

- ◆ For children with a developmental disorder diagnosed at birth, it is recommended that intervention for possible communication disorders begin at birth.
- ◆ For newborns with genetic syndromes or conditions with a high probability of developmental delay (including hearing loss and certain neurological conditions), it is recommended that intervention for potential communication disorders begin immediately.
- ◆ For children with disabilities in other areas of development, it is recommended that interventions address all affected areas rather than just focusing on communication.



EIP 34

COMMUNICATION DISORDERS

Strategies for Children with a Communication Disorder and Other Developmental Problems

Particular communication treatment strategies may have to be modified when the child's communication disorder is combined with other disabilities. Some strategies that might be helpful in setting up the communication environment include:

- ◆ adapt materials, equipment, and lessons to the developmental level of the child
- ◆ adapt the home and/or therapy environment so the child has to solve problems or reinforce skills to do what he or she wants to do
- ◆ set the level of stimulation in the environment to the individual learning style of the child
- ◆ use preparatory physical or sensory stimulation or alerting activities prior to or during language stimulation
- ◆ present learning material in small increments (through the use of task analysis) and provide sensory, emotional, or physical supports
- ◆ set up predictable schedules to help a child transition from one activity to another
- ◆ present language-related concepts concretely, repetitiously, and/or with multisensory input through the use of sensory cues, which may need to be dramatic or exaggerated
- ◆ include parent and peer interactions as part of the communication environment in order to help foster generalization of communication skills

Children whose development is affected in multiple areas require multiple services. It is important to coordinate these services so interventions are not fragmented and parents are not put in the role of coordinating services for the child.

Interventions for Children Who Have a Speech/language Problem Associated with a Hearing Loss

Many of the general recommendations for treating children with only a communication disorder also apply to children who have communication disorders associated with hearing loss.

It is recommended that communication intervention for young children with hearing loss follow a developmental approach, with a goal of maximizing age-appropriate communication skills.

Communication goals specifically directed at infants and children with hearing loss who are learning language through or partly through the auditory channel may need to emphasize specific aspects of language (such as phonologic or syntactic) that often are less obvious to the hearing-impaired (because they are less audible, less visible).



EIP 35, 36

Use of personal amplification devices (such as hearing aids) is considered a prerequisite for optimal communication intervention for children with hearing loss. It is recommended that amplification devices be individually selected and fitted for each child's specific type, degree, and configuration of hearing loss. It is important to monitor the child's hearing loss, amplification device fitting, and the effectiveness of the amplification device throughout the intervention process.

Interventions for Children with Oral-Motor Deficits or Feeding Problems

Because of the implications for future oral functions such as speech, it is important to initiate treatment when there are oral-motor deficits or feeding problems. Oral-motor function is important for the development of coordinated movements of the mouth and for the respiratory and phonatory systems that are necessary for communication.

COMMUNICATION DISORDERS

Many of the recommendations about speech/language interventions for children with communication disorders alone also apply to children who have communication disorders associated with oral-motor or feeding problems. When speech intelligibility is significantly reduced because of oral-motor deficits, it is recommended that interventions address these concerns.

Before initiating a feeding program, it is extremely important to rule out possible medical complications that may be affecting feeding. When aspiration or gastrointestinal reflux is suspected, it is recommended that more extensive medical testing be considered.



EIP 37

It is uncommon that an infant or young child's feeding problem will be resolved using only one technique or approach. It is important to revise the selection of techniques and strategies as appropriate to meet the child's changing needs.

Because of the high risk for aspiration and other medical complications in infants and young children who have feeding or swallowing disorders, it is strongly recommended that professionals working with these children have adequate knowledge, training, and experience specific to these conditions. It is recommended that feeding and oral-motor therapy plans involve the parents and other caregivers as much as possible for optimal results and maintenance.

Interventions for Children Needing Augmentative Communication

It is recommended that strategies for supporting the development of natural speech always be included in augmentative communication intervention strategies for infants and young children.

It is important to focus on the child's communication skills rather than on the child's skill in using the system.

QUICK REFERENCE GUIDE

When choosing an augmentative communication system for intervention, it is important to consider the child's vision, hearing, and cognitive abilities; the intended audience; and access, portability, adaptability, possibilities for expansion, and maintenance.

It is recommended that augmentative communication interventions focus on training with a system that is easy to use, enables the child to be understood by a wide variety of communication partners, and provides motivation to use the system in response to natural cues in everyday contexts.



EIP 38

APPENDICES

APPENDIX A

OTHER RISK FACTORS AND CLINICAL CLUES

TABLE A-1

RISK FACTORS FOR HEARING PROBLEMS IN YOUNG CHILDREN

Genetic or Congenital Factors

- ◆ Family history of hereditary childhood sensory-neural hearing loss
- ◆ Congenital infections known to be associated with hearing loss
- ◆ Craniofacial anomalies
- ◆ Birth weight less than 1,500 grams
- ◆ A genetic syndrome known to include hearing loss

Exposures or problems occurring after birth

- ◆ Low Apgar Scores (0–4 at one minute or 0–6 at five minutes)
- ◆ Hyperbilirubinemia requiring exchange transfusion
- ◆ Ototoxic medications
- ◆ Bacterial meningitis
- ◆ Mechanical ventilation for five days or longer
- ◆ Recurrent or chronic otitis media with effusion

From: Joint Committee on Infant Hearing, 1994

TABLE A-2

RISK FACTORS AND CLINICAL CLUES FOR ORAL-MOTOR / FEEDING PROBLEMS IN YOUNG CHILDREN

Risk factors

- ◆ Craniofacial disorders or syndromes (of the head and neck)
- ◆ Cleft lip or cleft palate
- ◆ Tracheotomy
- ◆ Cerebral Palsy

Clinical clues

- | | |
|--------------------------|------------------------------------|
| ◆ Poor weight gain | ◆ Undifferentiated cry sounds |
| ◆ Prolonged feeding time | ◆ Poor volume or quality of crying |
| ◆ Poor suck | ◆ Lack of reciprocal babbling |
| ◆ Gagging | ◆ Reduced vocal play |
| ◆ Excessive drooling | ◆ Failure to thrive |
| ◆ Hyper/hypo sensitivity | |

TABLE A-3
CLINICAL CLUES OF POSSIBLE AUTISM IN YOUNG CHILDREN

The clinical clues listed below represent delayed or atypical behaviors that when observed in children with a possible communication disorder may be a clinical clue for autism (although some of these findings may also be seen in children who have a developmental delay or disorder other than autism).

If any of these clinical clues are present, further assessment may be needed to evaluate the possibility of autism or other developmental disorder.

- ◆ Delay or absence of spoken language
- ◆ Looks through people; not aware of others
- ◆ Not responsive to other people's facial expressions/feelings
- ◆ Lack of pretend play; little or no imagination
- ◆ Does not show typical interest in or play near peers purposefully
- ◆ Lack of turn-taking
- ◆ Unable to share pleasure
- ◆ Qualitative impairment in nonverbal communication
- ◆ Does not point at an object to direct another person to look at it
- ◆ Lack of gaze monitoring
- ◆ Lack of initiation of activity or social play
- ◆ Unusual or repetitive hand and finger mannerisms
- ◆ Unusual reactions or lack of reaction to sensory stimuli

From: *Clinical Practice Guideline for Autism/Pervasive Developmental Disorder*, New York State Department of Health, 1999.

APPENDIX B

LIST OF ARTICLES MEETING CRITERIA FOR EVIDENCE

ARTICLES CITED AS EVIDENCE - ASSESSMENT METHODS

Group Studies

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APPENDIX C

NEW YORK STATE EARLY INTERVENTION PROGRAM

- C-1 EARLY INTERVENTION PROGRAM:
RELEVANT POLICY INFORMATION**
- C-2 EARLY INTERVENTION PROGRAM
DESCRIPTION**
- C-3 EARLY INTERVENTION PROGRAM
DEFINITIONS**
- C-4 TELEPHONE NUMBERS OF MUNICIPAL
EARLY INTERVENTION PROGRAMS**

C-1 EARLY INTERVENTION PROGRAM: RELEVANT POLICY INFORMATION

- EIP ❖ 1 Children experiencing communication delays consistent with the State definition of developmental delay are eligible for the Early Intervention Program. Children with diagnosed communication disorders, including specific language impairment, hearing loss, developmental language disorder, receptive expressive language disorder, and dyspraxia syndrome are eligible for the Early Intervention Program by having a “diagnosed condition with a high probability of developmental delay.” (page 4)
- EIP ❖ 2 The terms *assessment*, *parents*, and *screening* are also defined in regulations that apply to the NYS Early Intervention Program. These definitions are included in Appendix C-3. (page 5)
- EIP ❖ 3 In New York State, the term used for professionals who are qualified to deliver early intervention services is “qualified personnel.” *Qualified personnel* are those individuals who are (1) approved to deliver services to eligible children to the extent authorized by their licensure, certification or registration, to eligible children and (2) have appropriate licensure, certification, or registration in the area in which they are providing services. See Appendix C-3 for the list of qualified personnel included in program regulations. (page 5)
- EIP ❖ 4 Under the NYS Early Intervention Program, physicians and other professionals are considered “primary referral sources.” When primary referral sources suspect a possible communication disorder or a developmental delay communication, development, they must refer the child to the Early Intervention Official in the child’s county of residence unless the parent objects to the referral. See Appendix C-4 for a list of Early Intervention Officials. (page 14)
- EIP ❖ 5 Parents can refer their children directly to the NYS Early Intervention Official in their county of residence if they suspect a possible communication disorder. (page 14)
- EIP ❖ 6 Primary referral sources, including physicians and other professionals, are required to inform parents about the Early Intervention Program and the benefits of early intervention services for children and their families. (page 14)

COMMUNICATION DISORDERS

- EIP ❖ 7 The child's multidisciplinary evaluation for the Early Intervention Program must be conducted in the child's dominant language, whenever feasible. *(page 15)*
- EIP ❖ 8 Professionals who suspect a child may have a communication delay or disorder due to parent concerns or in the course of developmental surveillance must refer the child to the New York State Early Intervention Program, unless the parent objects to a referral. *(page 26)*
- EIP ❖ 9 Children with hearing impairments are eligible for the Early Intervention Program. Professionals who suspect a child may have a hearing problem, due to parent concerns or results of developmental surveillance, must refer the child to the New York State Early Intervention Program, unless the parent objects to a referral. *(page 27)*
- EIP ❖ 10 Under the New York State Early Intervention Program, primary referral sources include a wide range of professionals who provide services to young children and their families (see the definition in Appendix C-3). Primary referral sources must refer children at risk or suspected of having a communication delay or disorder, or other developmental problem, to the Early Intervention Official in the child's county of residence. When there are heightened concerns about communication development, and these concerns are not yet to the level of a suspected communication delay or disorder, a child may be considered at risk for communication development. In these cases, professional judgment and parent concerns must be weighed in determining if a child should be referred to the Early Intervention Official as an at-risk child. If it is determined that the child is at risk for a communication delay or disorder, the child should be referred unless the parent objects.

The Early Intervention Official is responsible for ensuring that children at risk for developmental problems are screened and tracked, and referred for a multidisciplinary evaluation if a developmental delay or disorder is suspected. If it is determined that a child is not yet at risk for a communication delay, it is still important to monitor the child's progress through developmental surveillance. *(page 28)*

QUICK REFERENCE GUIDE

- EIP ❖ 11 Professionals who suspect (because of parent concerns or results of developmental surveillance) that a child may have a communication disorder or delay must refer the child to the New York State Early Intervention Program, unless the parent objects to a referral. *(page 29)*
- EIP ❖ 12 If a child has not made progress or shows signs of regression after three months of developmental surveillance, the child should be referred to the Early Intervention Program as suspected of having a delay in communication development or a communication disorder. *(page 31)*
- EIP ❖ 13 Under the Early Intervention Program, the multidisciplinary evaluation team may decide, with the consent of the child's parent, to first perform a screening to determine whether to proceed with an evaluation or what type of evaluation is needed.
If a screening test is used before a child is referred to the program (such as during developmental surveillance included as part of a routine health care visit) and the results suggest a possible communication disorder, the child should be referred to the Early Intervention Program for a multidisciplinary evaluation, unless the parent objects. With parent consent, the results of the screening should also be provided to the multidisciplinary evaluation team selected by the parent to conduct the child's evaluation. *(page 36)*
- EIP ❖ 14 The multidisciplinary evaluation team can use a combination of standardized instruments and procedures, and informed clinical opinion to determine a child's eligibility for services. *(page 38)*
- EIP ❖ 15 Under the NYS Early Intervention Program, the multidisciplinary evaluation team is responsible for informing the parent(s) about the results of the child's evaluation. *(page 38)*
- EIP ❖ 16 Under the New York State Early Intervention Program, parents may exercise their rights to a mediation or impartial hearing if the multidisciplinary evaluation findings show that the child is not eligible for early intervention services. *(page 38)*
- EIP ❖ 17 Under the NYS Early Intervention Program, the multidisciplinary evaluation team may use a combination of standardized instruments and procedures, and informed clinical opinion to determine a child's eligibility for early intervention services. *(page 38)*

COMMUNICATION DISORDERS

- EIP ❖ 18 Under the Early Intervention Program, a multidisciplinary evaluation must assess all five areas of development (cognitive, communication, physical, social-emotional, and adaptive development). The multidisciplinary evaluation is provided at no cost to parents. *(page 40)*
- EIP ❖ 19 An assessment of physical development, including a health assessment, is a required component of the multidisciplinary evaluation under the NYS Early Intervention Program. Whenever possible, the health assessment should be completed by the child's primary health care provider. *(page 40)*
- EIP ❖ 20 Audiological services are covered under the NYS Early Intervention Program. *(page 41)*
- EIP ❖ 21 Children with hearing impairments are eligible for the New York State Early Intervention Program by having a diagnosed condition with a high probability of developmental delay. *(page 41)*
- EIP ❖ 22 Under the Early Intervention Program, augmentative communication systems are considered "assistive technology devices." The potential need for an augmentative communication system could be identified through the child's initial multidisciplinary evaluation, or later through a supplement evaluation, or as part of ongoing assessment. The need for assistive technology devices must be agreed upon by the parent and the Early Intervention Official, and included in the Individualized Family Service Plan. *(page 42)*
- EIP ❖ 23 In New York State, children with speech language delays are eligible for the Early Intervention Program if their delays are consistent with the State's definition of developmental delay (see Appendix C-3). Most children with *only* mild expressive language delays will not meet the eligibility criteria established in the State's definition of developmental delay. These children may be considered at risk for communication delay. In determining whether to make a referral to the Early Intervention Program, professionals and parents should carefully judge the extent of their concerns and the need for formal screening and tracking. See pages 28–31 on enhanced developmental surveillance. *(page 46)*

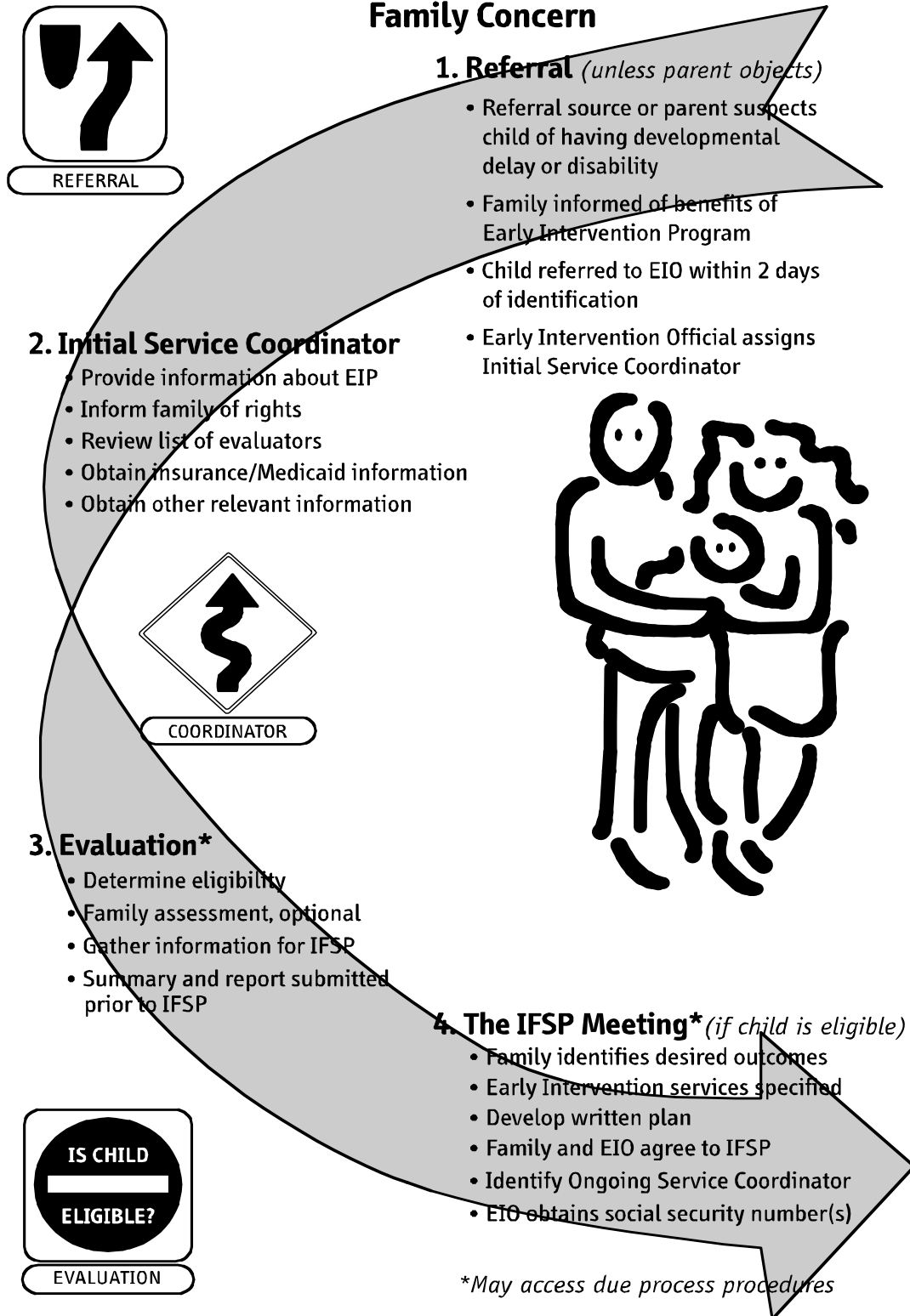
- EIP ❖ 24 Under the New York State Early Intervention Program, the multidisciplinary evaluation team may use a combination of standardized instruments and informed clinical opinion in determining whether a child meets the eligibility criteria for the program. If the multidisciplinary evaluation team views the combination of a child's expressive language delays and preponderance of prognostic factors (see Table III-7 in *Report of the Recommendations*) as showing that a child meets the eligibility requirements, then these findings should be thoroughly documented in the evaluation. (page 46)
- EIP ❖ 25 Under the NYS Early Intervention Program, early intervention services must be included in a child and family's Individualized Family Service Plan (IFSP) and provided at no cost to parents, under the public supervision of Early Intervention Officials and the State Department of Health by qualified personnel, as defined in State regulation. (See Appendix C-4 for a list of Early Intervention Officials and Appendix C-3 for the definition of *qualified personnel*.) (page 48)
- EIP ❖ 26 Under the NYS Early Intervention Program, an IFSP must be in place for the child within 45 days of referral to the Early Intervention Official. The IFSP must include a statement of the major outcomes expected for the child and family, and the services needed by the child and family. The IFSP must be reviewed every 6 months and evaluated annually. Information from ongoing assessments should be used in IFSP reviews and annual evaluations. (page 48)
- EIP ❖ 27 An IFSP may be amended any time the parent(s) and the Early Intervention Official agree that a change is needed to better meet the needs of the child and family. (page 49)
- EIP ❖ 28 Under the New York State Early Intervention Program, a child and family's IFSP must be evaluated on an annual basis. This may include an evaluation of the child's developmental status if needed. After the child's initial multidisciplinary evaluation, supplemental evaluations may also be conducted when recommended by the IFSP team, agreed upon by the parent and early intervention official, and included in the child's IFSP. (page 49)

COMMUNICATION DISORDERS

- EIP ❖ 29 Under the NYS Early Intervention Program, early intervention services can be delivered in a wide variety of home- and community-based settings. Early intervention services can be provided to an individual child, to a child and parent or other family member or caregiver, to parents and children in groups, and to groups of eligible children. (These groups can also include typically developing peers.) Family support groups are also available. (page 52)
- EIP ❖ 30 Under the NYS Early Intervention Program, early intervention services can be delivered in a wide variety of settings. Early Intervention services can be provided to an individual child, to a child and parent or other family member or caregiver, to parents and children in groups, and to groups of eligible children. (These groups can also include typically developing peers.) Family support groups are also available. See Appendix C-3 for the official service models as defined in NYS regulations on the Early Intervention Program. (page 55)
- EIP ❖ 31 Under the Individuals with Disabilities Education Act and New York State Public Health Law, early intervention services must be provided in natural environments to the maximum extent appropriate to the needs of the child. *Natural environments* means settings that are natural or normal for the child's age peers who have no disabilities. (page 55)
- EIP ❖ 32 Under the NYS Early Intervention Program, providers of early intervention services are responsible for consulting with parents and other service providers to ensure the effective provision of services and providing support, education, and guidance to parents and other caretakers regarding the provision of early intervention services. (page 56)
- EIP ❖ 33 The type, intensity, frequency, and duration of early intervention services provided to a child and family under the NYS Early Intervention Program are determined through the IFSP process. All services in the IFSP must be agreed to by the parent and the Early Intervention Official. If disagreements arise about what should be included in the IFSP, parents can seek due process through mediation and/or an impartial hearing. (page 60)

QUICK REFERENCE GUIDE

- EIP ❖ 34 Children with diagnosed conditions with a high probability of developmental delay are eligible to receive early intervention services under the New York State Early Intervention Program. *(page 61)*
- EIP ❖ 35 Personal amplification devices are considered assistive technology devices under the NYS Early Intervention Program. *(page 63)*
- EIP ❖ 36 Audiology services, including monitoring of the child's hearing loss, amplification fitting, and assessing the effectiveness of amplification devices, are included as early intervention services under the NYS Early Intervention Program. *(page 63)*
- EIP ❖ 37 Medical and health services of this nature are not considered early intervention services under the NYS Early Intervention Program. However, the child's service coordinator is responsible for coordinating the provision of early intervention services and other services needed by the child and family. This includes providing appropriate referrals and facilitating access to other services needed by the child and family that are not provided under the Early Intervention Program. *(page 64)*
- EIP ❖ 38 Augmentative communication systems are considered assistive technology devices under the NYS Early Intervention Program. *(page 65)*



6. Transition

- Plan for transition included in IFSP
- Transition to:
 - services under Section 4410 of Education Law (3-5 system)
- OR
- other early childhood services, as needed

Areas of Development

- cognitive
- physical (including vision and hearing)
- communication
- social/emotional
- adaptive development



5. IFSP – Review Six Months /Evaluate Annually

- Decision is made to continue, add, modify or delete outcomes, strategies, and/or services
- If parent requests, may review sooner:
 - If parent requests an increase in services, EIO may ask for independent evaluation

Early Intervention Services*

- assistive technology devices and services
- audiology
- family training, counseling, home visits and parent support groups
- medical services only for diagnostic or evaluation purposes
- nursing services
- nutrition services
- occupational therapy
- physical therapy
- psychological services
- service coordination
- social work services
- special instruction
- speech-language pathology
- vision services
- health services
- transportation and related costs

Parent/guardian consent is required for evaluation, IFSP, provision of services in IFSP, and transition.



Revised 12/04

C-2 EARLY INTERVENTION PROGRAM DESCRIPTION

The Early Intervention Program is a statewide program that provides many different types of early intervention services to infants and toddlers with disabilities and their families. In New York State, the Department of Health is the lead state agency responsible for the Early Intervention Program.

Early Intervention services can help families:

- ◆ Learn the best ways to care for their child.
- ◆ Support and promote their child's development.
- ◆ Include their child in family and community life.

Early Intervention services can be provided anywhere in the community, including:

- ◆ A child's home.
- ◆ A child care center or family day care home.
- ◆ Recreational centers, play groups, playgrounds, libraries, or any place parents and children go for fun and support.
- ◆ Early childhood programs and centers.

Parents help decide:

- ◆ What are appropriate early intervention services for their child and family.
- ◆ The outcomes of early intervention that are important for their child and family.
- ◆ When and where their child and family will get early intervention services.
- ◆ Who will provide services to their child and family.

Early Intervention Officials (EIO)

In New York State, all counties and the City of New York are required by public health law to appoint a public official as their Early Intervention Official.

The EIO is the person in the county responsible for:

- ◆ Finding eligible children.
- ◆ Making sure eligible children have a multidisciplinary evaluation.
- ◆ Appointing an initial service coordinator to help families with their child's multidisciplinary evaluation and Individualized Family Service Plan (IFSP).
- ◆ Making sure children and families get the early intervention services in their IFSPs.
- ◆ Safeguarding child and family rights under the Program.

The EIO is the “single point of entry” for children into the Program. This means that all children under three years of age who may need early intervention services must be referred to the EIO. In practice, Early Intervention Officials have staff who are assigned to take child referrals.

Parents are usually the first to notice a problem. Parents can refer their own children to the Early Intervention Official. (See Step 1 of Early Intervention Steps.) Sometimes, someone else will be the first to raise a concern about a child's development. New York State public health law requires certain professionals, primary referral sources, to refer infants and toddlers to the Early Intervention Official if a problem with development is suspected. However, no professional can refer a child to the EIO if the child's parent says no to the referral.

COMMUNICATION DISORDERS

Service Coordinators

There are two types of service coordinators in New York State: an initial service coordinator and an ongoing service coordinator. The initial service coordinator is appointed by the Early Intervention Official. The initial service coordinator helps with all the steps necessary to get services, from the child's multidisciplinary evaluation to the first Individualized Family Service Plan (IFSP).

Parents are asked to choose an ongoing service coordinator as part of the first IFSP. The main job of the ongoing service coordinator is to make sure the child and family get the services in the IFSP. The ongoing service coordinator will also help change the IFSP when necessary and make sure the IFSP is reviewed on a regular basis. Parents may choose to keep the initial service coordinator, or they can choose a new person to be the ongoing service coordinator.

Eligibility

Children are eligible for the Early Intervention Program if they are under three years old AND have a disability OR developmental delay. A disability means that a child has a diagnosed physical or mental condition that often leads to problems in development (such as Down syndrome, autism, cerebral palsy, vision impairment, hearing impairment).

A developmental delay means that a child is behind in at least one area of development, including:

- ◆ Physical development (growth, gross and fine motor abilities).
- ◆ Cognitive development (learning and thinking).
- ◆ Communication (understanding and using words).
- ◆ Social-emotional development (relating to others).
- ◆ Adaptive development (self-help skills, such as feeding).

A child does not need to be a U.S. citizen to be eligible for services. And, there is no income “test” for the Program. The child and family do have to be residents of New York State to participate in the Early Intervention Program.

How is eligibility decided?

All children referred to the Early Intervention Official have the right to a free multidisciplinary evaluation to determine if they are eligible for services. The multidisciplinary evaluation also helps parents to better understand their child’s strengths and needs and how early intervention can help. A child who is referred because of a diagnosed condition that often leads to developmental delay, such as Down syndrome, will always be eligible for early intervention services. If a child has a diagnosed condition, he or she will still need a multidisciplinary evaluation to help plan for services. If a child has a delay in development and no diagnosed condition the multidisciplinary evaluation is needed to find out if the child is eligible for the Program. A child’s development will be measured according to the “definition of developmental delay” set by New York State.

COMMUNICATION DISORDERS

Services

The Early Intervention Program offers many types of services. Early intervention services are:

- ◆ Aimed at meeting children's developmental needs and helping parents take care of their children.
- ◆ Included in an Individualized Family Service Plan (IFSP) agreed to by the parent and the Early Intervention Official.

Early intervention services include:

- ◆ Assistive technology services and devices.
- ◆ Audiology.
- ◆ Family training, counseling, home visits, and parent support groups.
- ◆ Medical services only for diagnostic or evaluation purposes.
- ◆ Nursing services.
- ◆ Nutrition services.
- ◆ Occupational therapy.
- ◆ Physical therapy.
- ◆ Psychological services.
- ◆ Service coordination services.
- ◆ Social work services.
- ◆ Special instruction.
- ◆ Speech-language pathology.
- ◆ Vision services.
- ◆ Health services needed for children to benefit from other early intervention services.
- ◆ Transportation to and from early intervention services.

Provision of services

Only qualified professionals, i.e., individuals who are licensed, certified, or registered in their discipline and approved by New York State, can deliver early intervention services. All services can be provided using any of the following service models:

- ◆ Home- and community-based visits. In this model, services are given to a child and/or parent or other family member or caregiver at home or in the community (such as a relative's home, child care center, family day care home, play group, library story hour, or other places parents go with their children).
- ◆ Facility- or center-based visits. In this model, services are given to a child and/or parent or other family member or caregiver where the service provider works (such as an office, a hospital, a clinic, or early intervention center).
- ◆ Parent-child groups. In this model, parents and children get services together in a group led by a service provider. A parent-child group can happen anywhere in the community.
- ◆ Family support groups. In this model, parents, grandparents, siblings, or other relatives of the child get together in a group led by a service provider for help and support and to share concerns and information.
- ◆ Group developmental intervention. In this model, children receive services in a group setting led by a service provider or providers without parents or caregivers. A group means two or more children who are eligible for early intervention services. The group can include children without disabilities and can happen anywhere in the community.

COMMUNICATION DISORDERS

Reimbursement

All services are at no cost to families. Funding sources to cover the cost of services include Medicaid and private health insurance, supplemented by county and state funds. For more information about the New York State laws and regulations that apply to Early Intervention services, contact the Bureau of Early Intervention.

New York State Department of Health

Bureau of Early Intervention

Corning Tower, Room 287

Empire State Plaza

Albany, NY 12237-0660

(518) 473-7016

http://www.nyhealth.gov/community/infants_children/early_intervention/

bei@health.state.ny.us

C-3 EARLY INTERVENTION PROGRAM DEFINITIONS

These definitions are from 10 New York Code of Rules and Regulations, §69-4.1 and §69-4.10. For a complete set of the regulations governing the Early Intervention Program, contact the New York State Department of Health, Bureau of Early Intervention at (518) 473-7016 or visit the Bureau's Web page: www.nyhealth.gov/community/infants_children/early_intervention/index.htm.

Sec. 69-4.10 Service Model Options

- (a) The Department of Health, state early intervention service agencies, and early intervention officials shall make reasonable efforts to ensure the full range of early intervention service options are available to eligible children and their families.
 - (1) The following models of early intervention service delivery shall be available:
 - (i) home- and community-based individual/ collateral visits: the provision by appropriate qualified personnel of early intervention services to the child and/or parent or other designated caregiver at the child's home or any other natural environment in which children under three years of age are typically found (including day care centers and family day care homes);
 - (ii) facility-based individual/collateral visits: the provision by appropriate qualified personnel of early intervention services to the child and/or parent or other designated caregiver at an approved early intervention provider's site;
 - (iii) parent-child groups: a group comprised of parents or caregivers, children, and a minimum of one appropriate qualified provider of early intervention services at an early intervention provider's site or a community-based site (e.g., day care center, family day care, or other community settings);

COMMUNICATION DISORDERS

- (iv) group developmental intervention: the provision of early intervention services by appropriate qualified personnel to a group of eligible children at an approved early intervention provider's site or in a community-based setting where children under three years of age are typically found (this group may also include children without disabilities); and
- (v) family/caregiver support group: the provision of early intervention services to a group of parents, caregivers (foster parents, day care staff, etc.) and/or siblings of eligible children for the purposes of:
 - (a) enhancing their capacity to care for and/ or enhance the development of the eligible child; and
 - (b) providing support, education, and guidance to such individuals relative to the child's unique developmental needs.
- (b) *Assessment* means ongoing procedures used to identify:
 - (1) the child's unique needs and strengths and the services appropriate to meet those needs; and
 - (2) the resources, priorities and concerns of the family and the supports and services necessary to enhance the family's capacity to meet the developmental needs of their infant or toddler with a disability.
- (g) *Developmental delay* means that a child has not attained developmental milestones expected for the child's chronological age adjusted for prematurity in one or more of the following areas of development: cognitive, physical (including vision and hearing), communication, social/ emotional, or adaptive development.

QUICK REFERENCE GUIDE

- (1) A developmental delay for purposes of the Early Intervention Program is a developmental delay that has been measured by qualified personnel using informed clinical opinion, appropriate diagnostic procedures and/or instruments and documented as:
 - (i) a twelve month delay in one functional area; or
 - (ii) a 33% delay in one functional area or a 25% delay in each of two areas; or
 - (iii) if appropriate standardized instruments are individually administered in the evaluation process, a score of at least 2.0 standard deviations below the mean in one functional area or score of at least 1.5 standard deviation below the mean in each of two functional areas.
- (ag) *Parent* means a parent by birth or adoption, or person in parental relation to the child. With respect to a child who is a ward of the state, or a child who is not a ward of the state but whose parents by birth or adoption are unknown or unavailable and the child has no person in parental relation, the term “parent” means a person who has been appointed as a surrogate parent for the child in accordance with Section 69-4.16 of this subpart. This term does not include the state if the child is a ward of the state.
- (aj) *Qualified personnel* are those individuals who are approved as required by this subpart to deliver services to the extent authorized by their licensure, certification or registration, to eligible children and have appropriate licensure, certification, or registration in the area in which they are providing services, including:
 - (1) audiologists;
 - (2) certifies occupational therapy assistants;
 - (3) licensed practical nurses, registered nurses and nurse practitioners;
 - (4) certified low vision specialists;
 - (5) occupational therapists;
 - (6) orientation and mobility specialists;
 - (7) physical therapists;

COMMUNICATION DISORDERS

- (8) physical therapy assistants;
 - (9) pediatricians and other physicians;
 - (10) physician assistants;
 - (11) psychologists;
 - (12) registered dieticians;
 - (13) school psychologists;
 - (14) social workers;
 - (15) special education teachers;
 - (16) speech and language pathologists and audiologists;
 - (17) teachers of the blind and partially sighted;
 - (18) teachers of the deaf and hearing handicapped;
 - (19) teachers of the speech and hearing handicapped;
 - (20) other categories of personnel as designated by the Commissioner.
- (al) *Screening* means a process involving those instruments, procedures, family information and observations, and clinical observations used by an approved evaluator to assess a child's developmental status to indicate what type of evaluation, if any, is warranted.

C-4 TELEPHONE NUMBERS OF MUNICIPAL EARLY INTERVENTION PROGRAMS

Albany	518-447-4820
Allegany	585-268-9767
Broome	607-778-2851
Cattaraugus	716-373-8050
Cayuga	315-253-1560
Chautauqua	716-753-4491
Chemung	607-737-5568
Chenango	607-337-1729
Clinton	518-565-4798
Columbia	518-828-4278 Ext. 1303
Cortland	607-756-3439
Delaware	607-746-3166
Dutchess	845-486-3507
Erie	716-858-6161
Essex	518-873-3522
Franklin	518-481-1709
Fulton	518-736-5720
Genesee	585-344-2580 Ext. 5572
Greene	518-719-3600
Hamilton	518-648-6497
Herkimer	315-867-1176
Jefferson	315-785-3283
Lewis	315-376-5849
Livingston	585-243-7290
Madison	315-366-2361
Monroe	585-753-5274
Montgomery	518-853-3531
Nassau	516-227-8661
New York City	212-219-5213

COMMUNICATION DISORDERS

Niagara	716-278-1991
Oneida	315-798-6400
Onondaga	315-435-3230
Ontario	585-396-4439
Orange	845-291-2333
Orleans	585-589-2777
Oswego	315-349-3510
Otsego	607-547-6474
Putnam	845-228-2847 Ext. 1036
Rensselaer	518-270-2626
Rockland	845-364-2620
Saratoga	518-584-7460 Ext. 390
Schenectady	518-386-2815
Schoharie	518-295-8705
Schuyler	607-535-8140
Seneca	315-539-1920
St. Lawrence	315-386-2325
Steuben	607-664-2146
Suffolk	631-853-3100
Sullivan	845-292-0100 Ext. 1
Tioga	607-687-8600
Tompkins	607-274-6644
Ulster	845-334-5251
Warren	518-761-6580
Washington	518-746-2400
Wayne	315-946-5749
Westchester	914-813-5094
Wyoming	585-786-8850
Yates	315-536-5160

APPENDIX D

ADDITIONAL RESOURCES

ADDITIONAL RESOURCES

American Speech-Language-Hearing Association (ASHA)

2200 Research Boulevard
Rockville, MD 20850

Website: <http://www.asha.org/>

Answerline: 1-888-321-ASHA

Action Center:

1-800-498-2071 – members

1-800-638-8255 – non-members

Fax: 1-301-296-8580

**National Dissemination Center
for Children with
Disabilities (NICHCY)**

PO Box 1492

Washington, DC 20013-1492

Website: <http://www.nichcy.org>

1-800-695-0285

Fax: 1-202-884-8441

The Parent Network of WNY

1000 Main Street

Buffalo, NY 14202

Website: <http://www.parentnetworkwny.org/>

1-866-277-4762

1-716-332-4170

Fax: 1-716-332-4171

**Parent to Parent Network
of New York State**

500 Balltown Road

Schenectady, NY 12304

Website: <http://www.parenttoparentnys.org>

1-800-305-8817

1-518-381-4350

Fax: 1-518-393-9607

NOTE: Inclusion of these organizations is not intended to imply an endorsement by the guideline panel or the NYSDOH. The guideline panel has not specifically reviewed either the books or the information provided by these organizations.

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