

## *Assistive Technology*

### **Introduction**

Assistive Technology is a service required to be made available by the NC Infant Toddler Program. To be eligible to access any assistive technology device or service through the Infant-Toddler Program, a child must:

- be enrolled in the Infant-Toddler Program or have an Interim Individualized Family Service Plan (IFSP); and
- have identified on their IFSP the need to use assistive technology services and devices as described in this policy.

### **Definitions**

**Assistive Technology Device :** According to federal definition ( 303.13(b) (1)), the term **Assistive Technology Device** means any item, piece of equipment or product system, whether acquired commercially off the shelf, modified, or customized, that is used to increase, maintain, or improve functional capabilities of an infant or toddler with a disability. The term does not include a medical device that is surgically implanted, including a cochlear implant, or the optimization (e.g. mapping) or the maintenance or replacement of that device.

**Assistive Technology Service:** The term means any service that directly assists an infant or toddler with a disability in the selection, acquisition, or use of an assistive technology device. This term includes—

- a. the evaluation of the needs of an infant or toddler with a disability, including a functional evaluation of the child in the child's customary environment;
- b. purchasing, leasing, or otherwise providing for the acquisition of assistive technology devices for infants or toddlers with disabilities;
- c. selecting, designing, fitting, customizing, adapting, applying, maintaining, repairing, or replacing assistive technology devices;
- d. coordinating and using other therapies, interventions, or services with assistive technology devices, such as those associated with existing education and rehabilitation plans and programs;
- e. training or technical assistance for an infant or toddler with a disability, or, where appropriate, the family of the child; and
- f. training or technical assistance for professionals (including individuals providing education and rehabilitation services), employers, or other individuals who provide services to, employ, or are otherwise substantially involved in the major life functions of an infant or toddler with disabilities.

## Approved Assistive Technology Categories for Early Intervention

Assistive Technology can support a child's ability to participate actively in the home, childcare program, community or other natural environment. It is a broad term that can include adaptations to items already in the child's environment such as a towel roll in a high chair to support sitting, to more advanced equipment for communication or mobility assistance. A device is considered a required early intervention assistive technology device, and must be made available, only if it relates to the developmental needs of the child and is necessary to achieve a functional IFSP outcome as determined through the IFSP process.

As the term assistive technology covers many different types of items, it is often useful to divide the devices into categories. The assistive technology available to young children is changing and expanding at a rapid pace. It should be noted that the lists below provide examples, but are not considered to be comprehensive.

- 1. Aids for Self Help** – Devices to assist with self-help skills and functional abilities related to bathing, eating, dressing and other daily routines. Please section on “Ineligible AT Categories” for items that are not considered eligible assistive technology. Items may include but are not limited to:
  - adaptive feeding utensils
  - non-slip matting
  - bath chairs
  - weighted vest and blankets
- 2. Adapted Toys and Switches** – Switches and adapted interfaces that can be used to adapt a toy to allow a child to activate the toy in order to support engagement in developmental learning through play. Items may include but are not limited to:
  - switch adapted toys
  - single-use switches
  - visual aids for increasing contrast, enlarging images, and making use of tactile and auditory materials
- 3. Assistive Listening** – Devices to help with auditory processing. Items are limited to and will only be paid for when no other funding is available (see *Exceptions to Loaning* section in this Policy):
  - initial hearing aids
  - earmolds for hearing aids
  - initial care kits for hearing aids
  - batteries for hearing aids
  - FM systems
- 4. Augmentative Communication** – Any device, system or method that improves the ability of a child with communication impairment to communicate effectively. The inclusion of a variety of different augmentative communication strategies is particularly

important for young children and may include a program that uses devices, signing, gestures and pictures. Items may include but are not limited to:

- picture or object communication boards
- symbol systems
- voice output devices

**5. Mobility and Positioning** – Devices to promote and enhance access to and function in a child’s environments, which are not for typically developing children. Items may include but are not limited to:

- ankle-foot orthoses and splints
- adapted special needs car seats
- floor mobility and positioning devices
- feeder seats
- walkers
- standers

### **Ineligible Assistive Technology Categories for Early Intervention**

Assistive Technology is **NOT** required to be made available by the Infant-Toddler Program as described in the following ineligible categories.

1. Devices that are prescribed by a physician, life sustaining or medical in nature, and not directly related to a child’s developmental needs. Items may include but are not limited to:
  - apnea monitors
  - feeding pumps
  - craniofacial helmets
  - portable nebulizers
  - suction machines
  - ventilators
  - other medical supplies such as colostomy supplies and wound dressings
2. Devices which are surgically implanted, including cochlear implants, or the optimization (e.g., mapping) or the maintenance or replacement of that device.
3. Devices for which developmental necessity and relationship to achieving the IFSP outcomes are **not** clearly established.
4. Devices that are not developmentally appropriate for a child. For example, devices that the child is not able to physically manipulate, purposefully control, or use functionally.
5. Devices for which an appropriate lower technology or less expensive option will meet the child’s developmental need and assist with meeting the IFSP outcome(s). The IFSP team maintains the right to make available the substitution of a lower technology device of comparable function if deemed appropriate.

6. Power mobility system - Consistent with loaning guidelines for assistive technology, the Infant-Toddler Program will not purchase a power mobility system for an individual child. The service coordinator should work with families through the period of discovery and trials and as they address the transition needs of the child and family. This may include assistance to identify available funding, reimbursement or loaning resources that can be used to pursue the appropriate power mobility device, or assistance to obtain the equipment for use after the child exits the Infant-Toddler Program.
7. Standard devices, materials and supplies commonly utilized by all infants and toddlers, which are commercially available for purchase by all families, through regular stores and other sources, and which are not specifically designed for children with special needs. Items may include but are not limited to:
  - car seats
  - clothing and shoes, including special order clothing and shoes
  - cribs and beds
  - diapers
  - high chairs and other child-sized chairs and seats (such as the bumbo baby seat)
  - infant monitors
  - infant swings, rocking and bouncing equipment
  - strollers
  - toys that are not adapted, or which can be used by all children and not specifically designed to increase, maintain, or improve the functional capabilities of children with disabilities. Examples include building blocks, dolls, puzzles, balls, shape sorters and other common play materials
  - typical infant-toddler bottles, nipples, cups and utensils
8. Standard devices, not needing adaptations to meet the unique needs of a child, used by service providers in the provision of early intervention services, regardless of the service delivery setting. Items may include, but are not limited to:
  - tables and desks
  - therapy mats, balls and benches
9. Devices which would be considered duplicative in nature, generally promoting the same or other outcomes, with currently provided assistive technology devices or services.
10. Devices or services that are not based on scientifically, peer-reviewed research.
11. The following hearing aid related products and services:
  - battery chargers or testers
  - adapters for telephones, television, or radios
  - shipping/handling fees, postage, or insurance
  - loss and damage insurance
  - extended warranty policies

12. Battery chargers or testers for any assistive technology device.
13. Computers, computer software and related equipment, unless determined by the IFSP team to meet the specific and unique needs of an infant or toddler with a disability, and not used by typically developing children.
14. Ramps to vehicles and homes.
15. Home modifications and vehicle adaptations.

### **Individualized Family Service Plan Process**

All decisions about the need for and provision of assistive technology devices and services must be made through the Individualized Family Service Plan (IFSP) process, as with all other Infant-Toddler Program services that are required to be made available to families. *(For additional information about required and recommended services, see Policy on Infant-Toddler Program Services and IFSP Procedural Guidance.)* Parents are a vital part of the IFSP team and decision making process.

#### **Identification of Concern**

When a family expresses a concern about their child's development and participation in daily routines and activities, a functional outcome is developed. If the IFSP team agrees that some category of assistive technology may be needed by the child and family in order to achieve the established outcome(s), the exploration of assistive technology begins. The *Assistive Technology (AT) Framework* can be used as a guide for decision making when the IFSP team agrees that some category of AT may be needed by a child and family to achieve an established outcome. The *AT Framework* will lead the IFSP team through a process that will result in the appropriate identification of an AT device to meet the needs of the child and family. The results of this decision making process should be clearly documented in the child's early intervention record, e.g., EISC service notes, IFSP, evaluation or assessment, and/or provider notes and monthly summaries.

#### **Adaptations in Natural Environments**

The IFSP team should discuss what immediate options there are for assisting the child and family with the established outcome(s). Modifications or adaptations in the natural environment should first be considered.

#### **Assessment and Equipment Trials**

The process of assessment and trials can be included as activities to achieve specific IFSP outcome(s). If appropriate for trial and implementation, the team will identify on the IFSP, the assistive technology device or service and the schedule, such as time period for trials. Assessing the child's development and assistive technology needs is an ongoing process rather than a one-

time event. There are no standardized tests to determine what kind of technology a child needs. Some information for making assistive technology decisions may be available within current evaluations, assessments, and intervention information.

In determining whether an assistive technology device will be listed as a service on the IFSP, the team must consider whether the device is needed to increase, maintain, or improve the child's functional abilities to achieve an IFSP outcome. The IFSP team should address and document the following during the assessment and device selection process:

- The child's and family's feelings about the actual devices tried must be considered, to assure that a family is willing and able to use the device to address the IFSP outcomes. Even very young children can show what they like and dislike by how they interact with different devices. A primary reason for assistive technology abandonment (rejection / non-use of the device) is lack of family or caregiver input into the evaluation and selection process.
- Consideration should be given to the child's current developmental age and appropriateness of the assistive technology devices for achieving IFSP outcomes. Because technology devices and the needs of children and their families change, devices should be used to enhance the child's *current development* and functioning and address *immediate needs*.
- The need for assistive technology devices or services must be assessed functionally within the context of the child's everyday activities and routines. Assessment should always include observation and a trial of the device used in a range of the child's and family's natural environments. Different devices may be considered and carefully matched to the different environments in which they will be used, appreciating that while a device may be useful in one setting, it may not be appropriate or effective in other settings.
- An attempt should be made to identify a single device that may serve several developmental needs or IFSP outcomes, rather than obtaining several separate devices for each.
- The selection of devices should always start with simpler or low technology devices. If a simpler or low technology device meets the child's needs, then that should be the device provided. The IFSP team maintains the right to make available the substitution of a lower technology device of comparable function if deemed appropriate. As appropriate, the IFSP team will reconvene to consider the trial process and will consider and review alternative devices.

### **Device Selection**

When an assistive technology device is selected after the assessment and equipment trial process, the device is added to the IFSP Service Delivery Plan, and made available to the child and family in a timely manner. In addition, activities need to be in place that describes how the selected

device will be used to achieve the outcomes; delivery and set-up of the device if necessary; and any training needed for the child, family, and other service providers on the use of the device.

### **Monitoring**

The early intervention service coordinator should provide ongoing monitoring to ensure that the IFSP is effectively implemented and adequately addresses the needs of the child and family. This process will include monitoring to assure that the selected assistive technology device continues to be appropriate to assist the child and family in meeting the established IFSP outcome(s). Additional IFSP team members may be consulted to assist the service coordinator in assuring that the assistive technology device remains appropriate.

### **Transition**

Children enrolled in the Infant-Toddler Program must transition out of the Program by the age of three. It is important to discuss and identify the child's assistive technology needs as the IFSP team considers future settings for the child exiting the program. Federal regulations describe these steps as discussions with, and training of parents regarding future placement and other matters related to the child's transition. In addition, procedures to prepare the child for changes in service delivery, including steps to help the child adjust to, and function in a new setting should be considered during transition planning. If the IFSP team determines that in the new setting, the child continues to need a device similar to or different from the device made available by the Infant-Toddler Program, the service coordinator will assist the family in accessing the appropriate resources to arrange for the device or support needed to enhance the child's ability to participate actively in his or her new setting. The Infant-Toddler Program does not purchase or loan assistive technology devices to be used after a child exits the Program. Planning for assistive technology needs after the child exits the Infant-Toddler Program should be documented on the transition plan of the IFSP.

## **Assistive Technology Loaning System**

### **Making Assistive Technology Available**

To the maximum extent possible, all assistive technology determined as a need through the IFSP process, will be made available by loan (*see Exceptions to Loaning section in this Policy and the AT Loan Procedural Guidance*). The loaned technology will be made available as long as needed by the child and family to achieve established IFSP outcomes up to the child's third birthday or when the child exits the program.

### **Loaning Guidelines:**

- **Loan Agreement** - Before a family can take possession of an assistive technology device, they must enter into a signed loan agreement with the Infant-Toddler Program regarding the care and proper use of the device and return requirements and procedures. Failure or refusal to enter into a loan agreement with the Infant-Toddler Program is in essence a declination of assistive technology services and a loan cannot be provided.

- **Provider Loans** - Assistive technology devices can be loaned to contracted provider agencies and service providers during the assessment and equipment trial phase of device selection. A signed loan agreement is also required for providers.
- **Returns** - Loaned items must be returned to the Infant-Toddler Program when they are determined to be no longer needed to achieve an IFSP outcome or when the child exits the Program. The early intervention service coordinator or other Children's Developmental Services Agency (CDSA) staff should assist the provider or family with the return process as needed.
- **Assistive Technology Loaning Bank Additions** - If a needed assistive technology device is not available for loan by the Infant Toddler Program or by another community loaning resource, the item may be purchased as an addition to the Infant-Toddler Program Assistive Technology Loaning Bank. The purchased device would be the property of the Infant-Toddler Program and would be loaned to the family following the guidelines for all other devices.
- **Family Purchases** - Some families may have alternate funding sources such as Medicaid, private insurance, other community resources, or self pay. In these situations, and if desired by the family, 100% of the cost of the device needs to be covered by the alternate funding source, or by a combination of funding sources, and the family would then own the purchased device. It is appropriate for the early intervention services coordinator to assist the family with accessing alternate funding sources, and any assistive technology services needed to use the assistive technology device and to implement the IFSP outcome. These assistive technology devices will be listed on the IFSP service delivery page, if they were determined as a need through the IFSP process. Short term loans by the Infant Toddler Program may be available while a family is waiting for a purchased device.
- **Cost Sharing** - The Infant-Toddler Program will not enter into cost sharing arrangements with a family for any assistive technology device, other than for the exceptions noted in the *Exceptions to Loaning* section of this Policy. Needed assistive technology devices will be made available to families through the Infant-Toddler Assistive Technology Loaning Bank. Alternatively, the family may chose to pay the full cost of the device through self pay, or through other funding sources, and then own the device.
- **Batteries** - All devices that require batteries will initially be loaned to families with working batteries. The family then becomes responsible for supplying the batteries needed to maintain the device.
- **Training** – Training, by a qualified professional, must be provided to the family or caregiver on proper use and care of the device prior to a loan. Evidence of the required training must be documented in the child's early intervention record.

- **Repair and Maintenance** – The operational condition of a device will be checked before each loan to ensure that the device is in proper working order. The Infant-Toddler Program is responsible for repair and maintenance of assistive technology devices as attributed to normal wear and tear. Charges may apply to a family if it is determined that repair is needed due to improper care of the device, as specified in the loan agreement.
- **Loss or Damage** - Families may be responsible for the estimated value of a lost or damaged device, as specified in the loan agreement. Payment arrangements can be made with the family if needed.

### Exceptions to Loaning

Some assistive technology items must be customized and purchased per child and are therefore considered exceptions to loaning for the Infant Toddler Program. The decision making protocols detailed in the IFSP process section of this policy must be followed for all assistive technology including these exceptions to loaning. For the assistive technology listed below by category, the sliding fee scale and family cost participation policies will apply. The Infant-Toddler Program uses a sliding fee scale to determine a family's ability or inability to pay for services. A family determined to be unable to pay for early intervention services, based on the sliding fee scale, will not be have a cost for assistive technology devices or services and will not be denied access to these services. Sliding fee scale percentages are calculated based on, and the Infant Toddler Program will pay vendors no more than, the current Medicaid rate for a device or service. If there is not a Medicaid rate for the device, the Manufacturer's Suggested Retail Price will apply. As with all other required services, the Infant Toddler Program is the payor of last resort. (*For additional information, see NC Infant-Toddler Program Fees, Billing and Reimbursement Policy.*)

#### Adaptive Car Seats

For children ages birth to three, often a conventional or commercial car seat will meet the safety and positioning needs of a child with special needs. Conventional or commercial car seats are not considered assistive technology and are listed in the ineligible category section of this policy along with other standard devices, materials and supplies commonly utilized by all infants and toddlers. In some cases, an adaptive or specialized car seat may be necessary to assist with achieving an IFSP outcome. Due to safety considerations related to car seat expiration and reuse cautions, car seats should not be loaned and therefore, the program may assist with funding in these rare situations.

#### Adaptive Mobility Systems

The Infant Toddler Program recognizes the benefits of adaptive mobility equipment for young children when trying to achieve IFSP outcomes related to activities such as greater freedom in movement and increased access to community activities and natural environments. All attempts should be made to adapt or modify equipment typically used by young children to accommodate the needs of the child. In circumstances where a child's individual needs cannot be accommodated by items such as a commercial stroller or other items purchased by the family,

then the program may assist with the funding of a customized mobility system and appropriate attachments to ensure proper alignment and function, such as a head rest and lateral supports. This category does not include power mobility which is listed in the ineligible assistive technology section of the policy.

### **Ankle Foot Orthotics and Splints**

Most orthotics and splints are customized per child and therefore unavailable through the loan program. The IFSP team, with appropriate consultation from qualified professionals, will determine if a customized or an off-the-shelf device is most appropriate for a child. If a customized device is needed to meet the developmental needs of a child, as identified on the IFSP, the Infant Toddler Program will assist with funding for 1 pair every 6 months, per each type of orthotics or splint.

### **Augmentative Communication**

An augmentative communication device may be considered for purchase, instead of loan, if it must be customized for a child (physical access, vocabulary, specific mounting) and if it serves to replace or significantly augment the child's speech or communication.

### **Hearing Aids, FM systems and Related Supplies and Fees**

A hearing aid in general is not covered because it is considered a personal device used for daily purposes. However, if the hearing aid is identified as a needed assistive technology device by the child's IFSP team in order to meet the specific developmental outcomes of the infant or toddler with a disability, Infant-Toddler Program funds may be used to provide this assistive technology device. Funding assistance may be available for the following:

- Initial hearing aid and dispensing fee - 1 per impaired ear
- Initial Care Kit for the initial hearing aid(s)  
*(Pediatric initial care kits typically include a stethoscope, forced air blower, dry aid kit and a retention strap for loss prevention.)*
- Batteries for hearing aids – (6 packs, per 365 days, per impaired ear)
- Custom earmolds and dispensing fees – 8 per year, for each impaired ear
- FM systems
- Repairs and Replacements

### **Repairs**

- a. Reimbursement for the repair of a hearing aid or FM system covered under the manufacturer's warranty or loss and damage policy is limited to a service fee.
- b. Reimbursement for the repair of a hearing aid or FM system not covered by the manufacturer's warranty or loss and damage policy is limited to the factory invoice cost of the repair and a hearing aid dispensing fee.

**Replacement Aids** (limit one per ear, per 365 days)

- a. If the hearing aid is covered under the manufacturer's warranty or loss and damage policy, reimbursement is limited to the manufacturer's loss and damage replacement fee, if applicable, and a dispensing fee.
- b. If the hearing aid is no longer covered under the manufacturer's warranty or loss and damage policy, reimbursement is limited to the invoice cost of the approved replacement aid and a dispensing fee.
- c. A provider cannot bill a dispensing fee for a replacement aid if the manufacturer pays a dispensing fee to the provider for replacing an aid that is under warranty.