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## An Eligibility Determination Algorithm for Part C Early Intervention Enrollment

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Procedures for using a decision algorithm for determining whether an infant or toddler is eligible for Part C early intervention is the focus of this eligibility determination practice guideline. An algorithm is a step-by-step problem-solving procedure or decision-making process that results in a solution or accurate decision in a finite number of steps. A *decision algorithm* involves a set of decision-making questions where each decision (answer) yields a *yes* or *no* result (e.g., *Yes*, the child has an identified condition; *No*, the child does not have an identified condition). The particular procedures used to develop the decision algorithm are based on findings from a practice-based research synthesis examining the accuracy of different decision-making processes (Dunst & Gorman, 2005). This synthesis examined the characteristics of decision-making rules that result in the highest degree of accuracy.

### Part C Early Intervention Program Eligibility

As stated in the Individuals with Disabilities Education Act (IDEA), states are required to serve infants and toddlers with diagnoses or identified conditions that have a high probability of resulting in developmental delays. These identified conditions include, but are not limited to, “chromosomal abnormalities; genetic or congenital disorders; severe sensory impairments, including hearing and vision; inborn errors of metabolism; disorders reflecting disturbances of the development of the nervous system; congenital infections; disorders secondary to exposure to toxic substances, including fetal alcohol syndrome; and severe attachment disorders” (Early Intervention Program for Infants and Toddlers with Disabilities, 34 C.F.R. § 303, 2002).

States are also required to serve children without identified conditions or diagnoses who are demonstrating developmental delays as determined by each state’s definition of developmental delay (Shackelford, 2005). These delays may be in one or more of the following developmental areas: cognitive, physical, communication, social, emotional, or adaptive.

States at their discretion may serve infants and toddlers who are at risk for developmental delays because of biological or environmental risk factors. Biological risk factors include, but are not limited to, low birth weight, prematurity, intraventricular hemorrhage at birth, chronic lung disease, failure to thrive, and seizures or other medically-related complications. Environmental risk factors include, but are not limited to, living in poverty, family disorganization, parental substance abuse, low parental education level, parental developmental disability, and child abuse or neglect (see Dunst, 1993, for a review of environmental risk factors).

### Additional Considerations

Although it is generally believed that a multidisciplinary developmental evaluation is needed to make an eligibility determination, this is not the case. A developmental evaluation is needed for eligibility determina-

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tion only if a child has no identified condition or diagnosis or, in states serving at-risk children, if a child has no risk factors that would make him or her eligible for early intervention. According to IDEA, a child may be enrolled in early intervention without a multidisciplinary evaluation “to facilitate the provision of services in the event that a child has obvious needs that are identified at the time of referral.” In many cases, multidisciplinary developmental evaluations would simply be a waste of time. For example, administering a developmental test to a 2-week-old child with Down syndrome will, in almost every instance, show that the child is not demonstrating a developmental delay of sufficient magnitude to meet a state’s eligibility criteria.

States are required to use, as appropriate, informed clinical opinion to both make an eligibility determination and to periodically ascertain a child’s continued eligibility for early intervention (Shackelford, 2002). Clinical opinion refers to the judgments and decisions made by persons knowledgeable about a child’s behavior that warrants early intervention (eligibility determination) in order to improve child functioning. Somewhat ironically, nearly half of the states do not make an explicit reference to clinical opinion as part of their eligibility definitions (Dunst & Hamby, 2004). This is unfortunate since informed clinical opinion or judgment can be a valuable means for making an eligibility determination (Bagnato, Matesa, Fevola, & Smith-Jones, *in press*).

The procedures described in this practice guideline are a common sense approach to eligibility determination. The approach is informed by evidence about the characteristics of decision-making processes that have the highest probability of resulting in correct and accurate decisions (Dunst & Gorman, 2005). This information together with other relevant source material (e.g., Rivest, 1987; Siminski & Wakuliez-Deja, 2004; Webb & Brkic, 1993) was used to develop a decision algorithm for facilitating the eligibility determination of infants and toddlers for Part C early intervention program participation.

## **Eligibility Determination Decision Algorithm**

A three-step process was used to develop the decision algorithm and accompanying decision-making rules and steps for facilitating an eligibility determination. First, a finite number of decision rules were developed that were intended to be exhaustive of all possible eligibility scenarios. Second, the decision rules were used to develop a decision-making flowchart of the decision algorithm. Third, the flowchart was used to develop the step-by-step decision-making procedures (questions) for making an eligibility determination (see Appendix).

### **Decision Rules**

The decision algorithm is based on a hierarchy of eligibility categories that specifies the conditions that need to be met to conclude that a child is eligible for Part C early intervention. The five decision rules are:

1. **If** a child has an identified condition **or** diagnosis that has a high probability of resulting in a developmental delay **and** the condition or diagnosis is included in the state’s eligibility definition, **then** the child is eligible for early intervention.
2. **If** a child has one or more biological at-risk conditions **and** any of these conditions is included in the state’s eligibility criteria, **then** the child is eligible for Part C early intervention.
3. **If** a child has one or more environmental risk conditions **and** the number of conditions a child is experiencing meets the state’s eligibility criteria, **then** the child is eligible for early intervention.
4. **If** the child has no identified condition or diagnosis **and** no biological or environmental risk factors **but** has a developmental delay **and** the degree of the delay meets a state’s eligibility criteria, **then** the child is eligible for early intervention.
5. **If** the child does not meet any of the above conditions **but** informed clinical opinion indicates that the child has an obvious need, **then** the child may be considered eligible for early intervention.

### **Decision-Making Process**

The above five decision rules were used to develop the decision-making process shown in Figure 1 for facilitating an eligibility determination. The Appendix includes the flowchart and the step-by-step decision-making procedures that can be duplicated and used by practitioners responsible for eligibility determination. At each step in the process, knowledge about a child’s circumstances (either or both internal and external factors) are used to decide if the stated condition is met. The flowchart is used for further specification of the conditions that need to be met for making an eligibility determination. The step-by-step process is described next. The use of a decision-making algorithm assumes a user is knowledgeable about his or her state’s eligibility definition and criteria.

## **Step-by-Step Decision-Making Algorithm**

The decision algorithm includes the questions below for each step in the decision-making process. If *all* the answers to the questions at any one step are *yes*, then the child is eligible for early intervention. If an answer to any one question is *no* at any one step, then you proceed

to the next step of questions in the hierarchy.

#### *1. Identified condition*

- 1A. Does the child have an identified condition or diagnosis?
- 1B. Is the identified condition or diagnosis associated with a high probability of a developmental delay?
- 1C. Is the condition or diagnosis included in the state's eligibility definition or list of identified conditions?

#### *2. Biological risk*

- 2A. Does the child have a biological or medical condition that places the child at risk for a poor outcome?
- 2B. Is (are) the biological or medical risk factor(s) associated with a high probability of a developmental delay?
- 2C. Does the state's eligibility definition include biological or medical risk factors?
- 2D. Is (are) the biological or medical risk factor(s) included in the state's eligibility definition?

#### *3. Environmental risk*

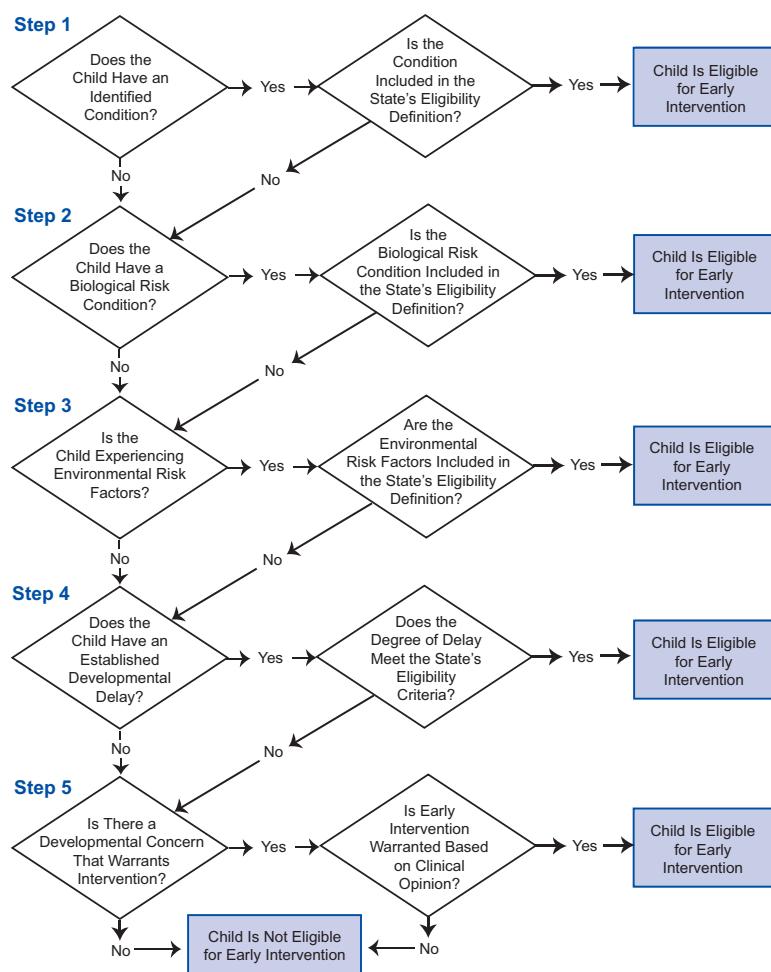
- 3A. Does the child live in the presence of environmental risk factors?
- 3B. Are the environmental risk factors known to be associated with subsequent developmental delays?
- 3C. Does the state's eligibility definition include environmental risk factors?
- 3D. Are the number of environmental risk factors the child is experiencing equal to or greater than the number needed to meet the state's eligibility criteria?

#### *4. Developmental delay*

- 4A. Does the child have an established developmental delay in one or more areas of functioning?
- 4B. Does the degree or nature of developmental delay meet the state's eligibility criteria?

#### *5. Clinical concern*

- 5A. Is the child manifesting behavioral or developmental aberrations that warrant concern?
- 5B. Are the behavioral or developmental aberrations known to be associated with a subsequent poor outcome?



**Figure 1. A decision algorithm for determining eligibility for Part C early intervention. (See the text or Appendix for the step-by-step procedural questions facilitating an eligibility determination.)**

- 5C. Is there consensus or agreement that early intervention is warranted?
- 5D. Does the nature of the concern meet the state's eligibility criteria for informed clinical opinion?

### Illustrative Examples

Several examples are provided to illustrate the use of the decision algorithm for making an eligibility determination. The examples include the kind of information that is needed to make eligibility determinations without the necessity of more traditional multidisciplinary developmental evaluations. In all the examples, multidisciplinary evaluations would not have produced information facilitating an eligibility determination.

### **Example 1**

A child born with a cleft lip and palate is referred to an early intervention program. The condition is not included in the state's eligibility criteria as an identified condition but is considered a medical condition that does make the child eligible for early intervention program participation. The child is therefore eligible under the biological-risk-factor category because the state's eligibility criterion includes cleft lip and palate.

### **Example 2**

A 3-month-old child of a 15-year-old single mother is referred to an early intervention program. The mother and child are living in a homeless shelter. The mother dropped out of school at the time she became pregnant. Her parents and siblings live in another state. The state where she now resides uses environmental risk factors for determining early intervention eligibility. A child must be experiencing at least four risk factors to be eligible. The child is eligible for early intervention program enrollment for these reasons: child of a single and teenage mother, low parental educational attainment, homelessness, and lack of social support, all of which are included in the state's eligibility criteria.

### **Example 3**

A newborn screening test identifies an infant as having Fragile X syndrome. The state's eligibility definition and criteria do not include Fragile X syndrome as an identified condition. It is known that children with this condition have a high probability of subsequent behavioral and learning difficulties. Both the early intervention program staff and parents agree that parenting supports are warranted and that the child would benefit from early intervention. Informed clinical judgment is used to establish eligibility.

## **Conclusion**

Decision-making rules and processes can be extremely helpful in arriving at accurate answers to questions such as, "Is this child eligible for Part C program participation?" The decision algorithm described in this practice guideline should be helpful in expediting the enrollment of eligible infants and toddlers in early intervention. The need for the algorithm is based on the fact that the eligibility determination procedures currently used by practitioners responsible for this Part C activity may be either overenrolling or underenrolling children because the procedures are not valid (Dunst & Stuart, 1999) or may be delaying an eligibility determination for various other procedural reasons (Mott & Dunst, 2005). Hopefully, the process and procedures described in this

practice guide will shift the focus away from gathering information not needed to make an eligibility determination toward a more informed, logical approach to enrolling eligible children in early intervention.

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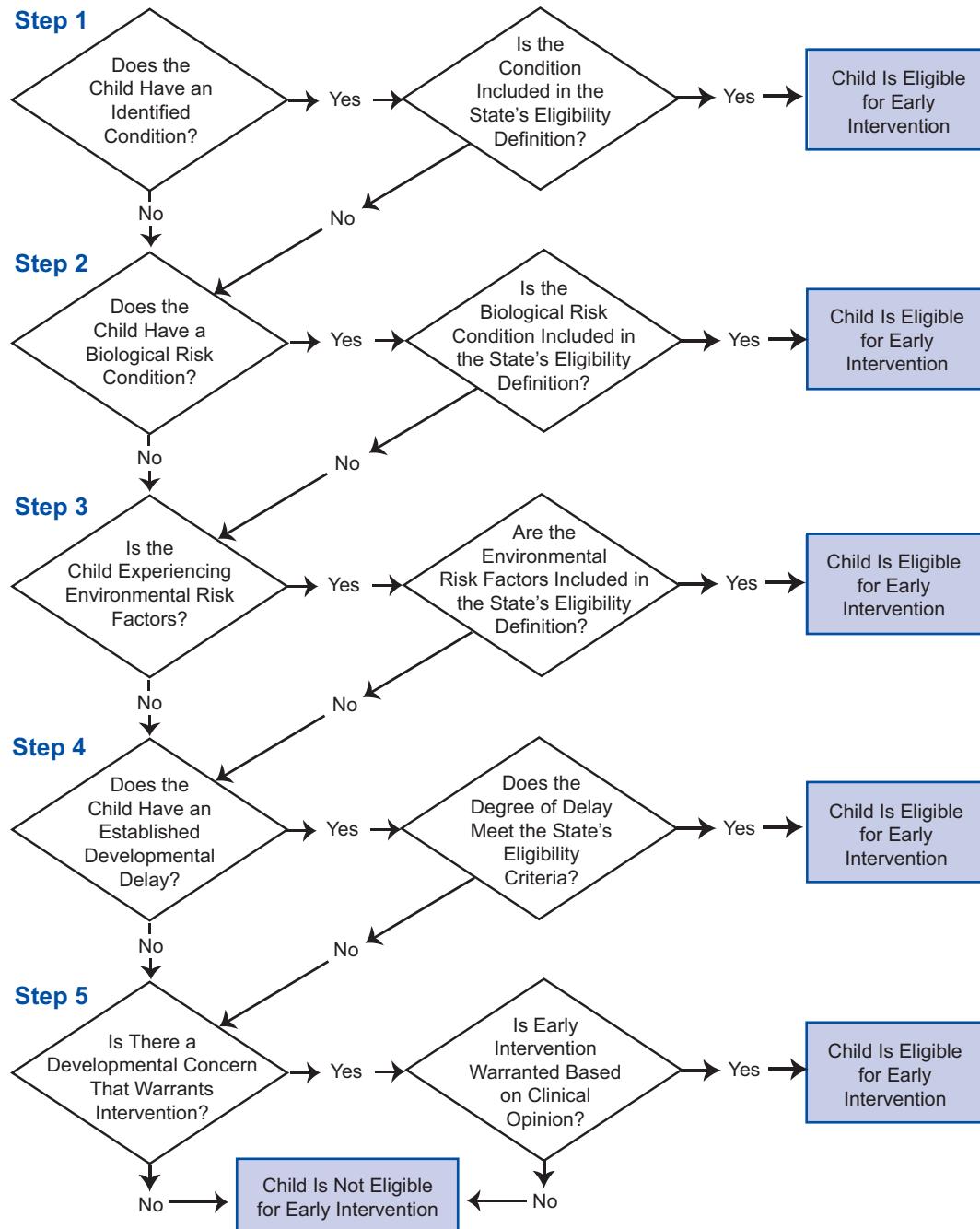
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## Appendix

### Eligibility Determination Decision Algorithm

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## **Step-by-Step Decision Making Algorithm**

The decision algorithm includes the questions below for each step in the decision-making process. If **all** the answers to the questions at any one step are **yes**, then the child is eligible for early intervention. If an answer to any one question is **no** at any one step, then you go to the next step of questions in the hierarchy.

### ***Identified Condition***

- 1A. Does the child have an identified condition or diagnosis?
- 1B. Is the identified condition or diagnosis associated with a high probability of a developmental delay?
- 1C. Is the condition or diagnosis included in the State's eligibility definition or list of identified conditions?

### ***Biological Risk***

- 2A. Does the child have a biological or medical condition that places the child at-risk for a poor outcome?
- 2B. Is the biological or medical risk factor(s) associated with a high probability of a developmental delay?
- 2C. Does the State's eligibility definition include biological or medical risk factors?
- 2D. Is the biological or medical risk factor(s) included in the State's eligibility definition?

### ***Environmental Risk***

- 3A. Does the child live in the presence of environmental risk factors?
- 3B. Are the environmental risk factors known to be associated with subsequent developmental delays?
- 3C. Does the State's eligibility definition include environmental risk factors?
- 3D. Are the number of environmental risk factors the child is experiencing equal to or greater than that needed to meet the State's eligibility criteria?

### ***Developmental Delay***

- 4A. Does the child have an established developmental delay in one or more areas of functioning?
- 4B. Does the degree or nature of developmental delay meet the State's eligibility criteria?

### ***Clinical Concern***

- 5A. Is the child manifesting behavioral or developmental aberrations that warrant concern?
- 5B. Are the behavioral or developmental aberrations known to be associated with a subsequent poor outcome?
- 5C. Is there consensus or agreement that early intervention is warranted?
- 5D. Does the nature of the concern meet the State's eligibility criteria for informed clinical opinion?