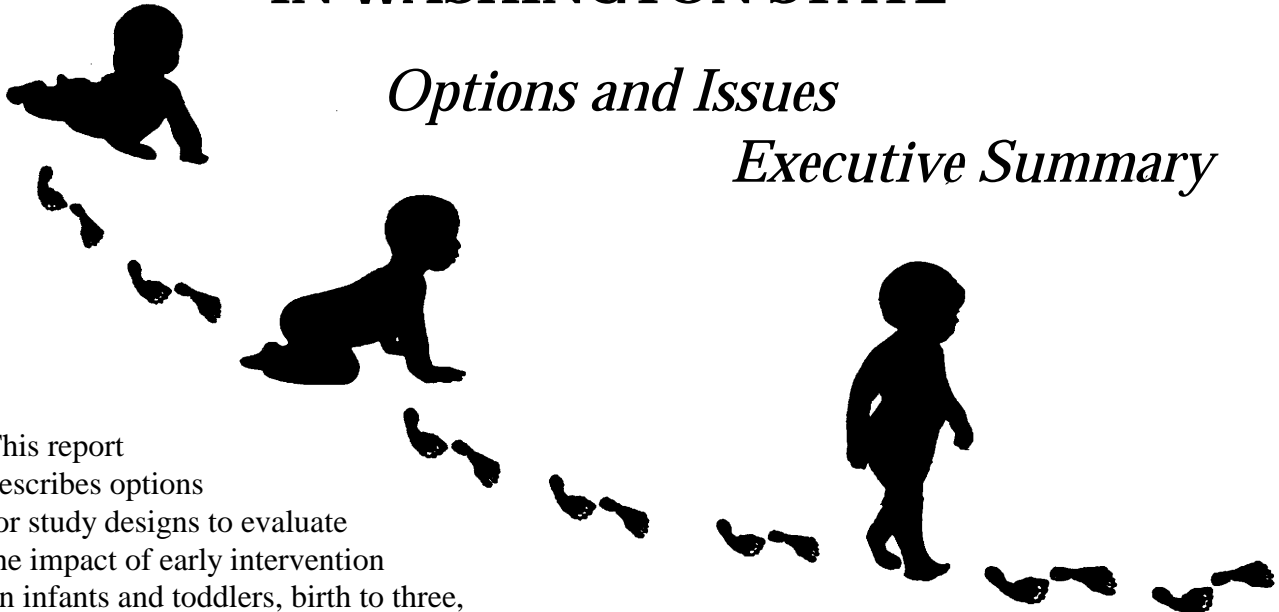


# EVALUATION OF EARLY INTERVENTION IN WASHINGTON STATE

## *Options and Issues*

## *Executive Summary*



This report describes options for study designs to evaluate the impact of early intervention on infants and toddlers, birth to three, with disabilities or developmental delays and their families in Washington State.

Information was gathered from an extensive literature review, a survey of local assessment efforts in Washington State, a technical data inventory, and consultation with stakeholders such as service providers, agency personnel [Department of Health (DOH), Department of Social and Health Services (DSHS), and the Office of Superintendent of Public Instruction (OSPI)], parents, and community supporters. Research and Data Analysis convened an advisory group to provide professional expertise in reviewing and commenting on materials prepared for this project.

The project was funded by the Department of Social and Health Services (DSHS), Infant Toddler Early Intervention Program (ITEIP). Its intent was to develop study designs to meet the evaluation goals of parents, the Joint Legislative Audit Review Committee (JLARC), DSHS, Division of Developmental Disabilities (DDD), ITEIP, and stakeholders.

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*Washington State Department of Social and Health Services*  
Research and Data Analysis  
Infant Toddler Early Intervention Program

**For a copy of the FULL REPORT (7.95a), call or write:  
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Report # 7.95c**



## OUTCOMES

The study designs, and their associated child and family outcomes, are intended to address the question: *what is the impact of early intervention services on children, birth to three, with disabling or delaying conditions and their families in Washington State?* The range of outcomes chosen for the child and the family and indicators are listed in the following table. The particular design of the study determines which outcomes are selected for that study.

### INDICATORS FOR CHILD AND FAMILY OUTCOMES

CHILD OUTCOMES/INDICATORS	FAMILY OUTCOMES/INDICATORS
<p><b>Developmental Skills</b></p> <ul style="list-style-type: none"> <li>* cognitive development</li> <li>* communication</li> <li>* social competence (social/emotional)</li> <li>* adaptive (level of independence)</li> <li>* physical (motor, vision, hearing)</li> </ul> <p><b>Health</b></p> <ul style="list-style-type: none"> <li>* children have the best possible health</li> </ul> <p><b>Readiness to Learn</b></p> <ul style="list-style-type: none"> <li>* confidence</li> <li>* curiosity</li> <li>* persistence</li> <li>* capacity to communicate</li> <li>* capacity to get along with others</li> </ul> <p><b>Child-Parent (Primary Caregiver) Interaction</b></p> <ul style="list-style-type: none"> <li>* reciprocity</li> <li>* responsivity</li> </ul>	<p><b>Knowledge</b></p> <ul style="list-style-type: none"> <li>* knowledge of child’s disability</li> <li>* understanding what the child needs to enhance development</li> <li>* ability to read child’s cues</li> </ul> <p><b>Empowerment</b></p> <ul style="list-style-type: none"> <li>* confidence in ability to enhance child’s development</li> <li>* confidence in ability to interact with professionals and advocate for services</li> <li>* locus of control</li> </ul> <p><b>Parent (Primary Caregiver)-Child Interaction</b></p> <ul style="list-style-type: none"> <li>* reciprocity</li> <li>* responsivity</li> </ul> <p><b>Support</b></p> <ul style="list-style-type: none"> <li>* family has economic resources</li> <li>* family has social support</li> </ul> <p><b>Impact of Early Intervention</b></p> <ul style="list-style-type: none"> <li>* perceived impact of services on child</li> <li>* perceived impact of services on family</li> <li>* perception of services delivered</li> </ul>

## **STUDY DESIGN OPTIONS**

Research on the effectiveness of early intervention involves a variety of methodological challenges. The absence of a control group presents the greatest problem. If subjects cannot be randomly assigned to treatment (early intervention) and non-treatment (no early intervention), it is difficult to conclude that changes in child/family outcomes are due specifically to early intervention. To control for effects on outcomes from factors other than early intervention, characteristics which affect child/family outcomes must be taken into account. The main study designs are as follows:

### **STUDY DESIGN TYPES**

- Child/Family Serves as Own Control—Large Scale Longitudinal Study
- Child/Family Serves as Own Control—Small Scale Longitudinal Study
- Comparison Group—Longitudinal Study
- Pre-Post Study
- Retrospective Cross-sectional Study
- Key Informant Study—Survey-only and Three-tiered Approach

Design options include the use of each child/family as its own control, which means there is no control or comparison group. These studies essentially measure changes in each individual and family that have occurred during the course of intervention, and compare beginning outcome data to outcome data at future points in time for each subject. Other studies seek to identify appropriate comparison groups. Some design options use perceptions of key informants and information provided in state data bases.

## **OUTCOME STUDY RECOMMENDATIONS**

- Research and Data Analysis and the Advisory Group were in agreement in recommending the design, Child/Family Serves as Own Control—Small Scale Longitudinal Study.

While this study design offers many advantages, its estimated direct cost, at least \$1.4 million, and the availability of results, not before the year 2004, caused Research and Data Analysis and the Advisory Group to include lower cost options that would provide more timely results.

If budget and timeliness are constraints:

- Research and Data Analysis recommends the Retrospective Cross-sectional Study as a less expensive and shorter timeline option.
- The majority of the Advisory Group recommends the Key Informant Study—Three-tiered Approach.

## **GENERAL RECOMMENDATION**

The need for a more comprehensive alternative approach to evaluation of early intervention in Washington became evident during the process used to complete this report. On the basis of all the information gathered during this process, Research and Data Analysis recommends:

- **An integrated research plan that logically and methodically addresses four questions:**

Step One: Who are the Children and Families Receiving Services?

Use enhanced profiles in annual child count to describe the children and families who are receiving early intervention in Washington State.

Step Two: What Are Their Needs?

Conduct a needs assessment of children and families who are receiving early intervention services in Washington State using focus groups, interviews, and surveys.

Step Three: How Are Services Addressing The Needs of Children and Families?

Conduct a review of program services provided to children with disabling or delaying conditions and their families in Washington State using monthly service reports and program observation.

Step Four: What Child and Family Outcomes Occur as A Result of Service Provision?

Conduct an outcome study which identifies positive child and family outcomes occurring as a result of early intervention services in Washington State.

In evaluating early intervention services, decision makers should determine what specific information they seek, at what price, and how long they wish to wait for the results. Once these parameters are defined, the information presented in this report can be used to make a well-informed decision as to how to evaluate early intervention services.