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Who Receives Early Intervention Services in Washington State?

An Analysis of Early Support for Infants and Toddlers Program Administrative Data



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ABOUT THE ERDC

The research presented here uses data from the Education Research and Data Center, located in the Washington Office of Financial Management. ERDC works with partner agencies to conduct powerful analyses of learning that can help inform the decisionmaking of Washington legislators, parents, and education providers. ERDC's data system is a statewide longitudinal data system that includes de-identified data about people's preschool, educational and workforce experiences.

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Abstract

Washington State Early Support for Infants and Toddlers (ESIT) program provides early intervention services to children birth to three who have disabilities or developmental delays. This Washington State Education Research and Data Center (ERDC) report profiled ESIT services recipients by demographic characteristics, eligible reason, services received and outcomes. Secondly, we captured the growing trends of participation of ESIT program over time. We also described the critical steps children go through in ESIT program, including referral, evaluation, service plan development and review, outcome and transition out of the program. At last, we identified multiple birth children as an important sample population of ESIT recipients and analyzed their characteristics.

Introduction

Birth to three are critical years for children's physical, language, and social emotional development.¹ The provision of early intervention services to vulnerable children and their families is of particular economic and social importance. Washington State Early Support for Infants and Toddlers (ESIT) program² provides individualized and quality early intervention services to children birth to three who have disabilities or developmental delays, in accordance with the federal Individuals with Disabilities Education Act (IDEA), Part C³. Two main purposes of ESIT program are 1) finding eligible children including screening, tracking, monitoring, and referral services for at risk children, and 2) early intervention services including providing developmental and therapeutic services for children who are identified as developmentally delayed or have an established condition for delay.

Background of ESIT Program

ESIT Local Lead Agencies (LLAs) coordinate response to referrals and recognition of eligible children. In this step, a Family Resources Coordinator (FRC) will lead the communication between ESIT program and families. With parents' consent, potential eligible children will be evaluated in the following areas:

- Physical, such as vision, hearing, movement, and health.
- Cognitive, such as thinking, learning and reasoning.

1 International Perspectives on Early Intervention: A Search for Common Ground; Michael Guralnick; Journal of Early Intervention 2008, 30(2): 90-101

2 <https://www.dcyf.wa.gov/services/child-development-supports/esit>

3 Early Intervention Program for Infants and Toddlers with Disabilities, U.S. Department of Education <https://www2.ed.gov/programs/osepeip/index.html>

- Social emotional, such as getting along with others, expressing feeling, developing relationships, ability to relate to others.
- Communication, such as understanding and using sounds, gestures, and words, pointing, understanding your words, expressing thoughts and needs.
- Adaptive areas, such as feeding, dressing, and taking care of himself or herself.

To be eligible, a child must have a 25 percent delay or show a 1.5 standard deviation below his or her age in one or more of the developmental areas. In addition to the above developmental areas, physical or medical condition such as Down Syndrome, serious hearing or vision problems, Cerebral Palsy, cleft lip/palate etc. also establish the eligibility of a child for ESIT services. The ESIT team then considers the evaluation results, together with each family's priorities and concerns, to develop an Individualized Family Service Plan (IFSP)⁴ for eligible children and their families to gain access to services and resources specified in the plan. Early intervention services may include but are not limited to specialized instruction, speech therapy, occupational therapy, or physical therapy, which can be provided in a variety of settings including home, childcare, preschool or school programs, and communities. The ESIT program also provides families with information and skills to support them as the most critical influence on their children's early learning and development. An established IFSP is subject to periodical or as needed reviews, which determine whether progress has been made, and whether modifications to services and outcomes are necessary.

Together with child's family, ESIT team also develops the Child Outcomes Summary Form (COSF) to record the child evaluation outcomes at entry and exit respectively. Three outcomes are measured in the areas of Positive Social/Emotional Skills, Acquiring and Using Knowledge and Skills, and Use of Appropriate Behaviors. Results indicate if child has Age-Expected Skills, Decreasing Degree of Age-Expected Skills, or No Age-Expected Skills, as well as Decreasing Degree of Immediate Foundational Skills.

Early intervention services end on the child's third birthday or upon achieving satisfactory results before the age cut off. Transition also happens voluntarily based on the decision of the family or status changes such as moving out of state or out of reach of current service providers. Prior to transition taking place, a transition plan will be developed. The plan may include other programs or services for this child. Some children are eligible for early childhood special education services provided by the local school district, as IDEA Part B.

4 <https://www.dcyf.wa.gov/sites/default/files/pdf/esit/IFSP-SOPAF.pdf>

A Profile of ESIT Participants and Their Experiences

Washington State Department of Children, Youth and Families (DCYF) shared ESIT administrative data with ERDC. The relational database consists of 139 tables and 1,203 columns, including child/family information, referral, eligibility, evaluation, IFSP, COSF, transition etc.

The number of children referred and served by the ESIT program is increasing over time. We summarized count of children in ESIT administrative data, from 2009 to 2017, in areas of referral received, initial IFSP created, number of active IFSPs and transition out children in Table 1. Note that the results were counts of children, meaning multiple referral, IFSP or transition records were counted only once by the earliest record per child. All these metrics showed a substantial growing trend of ESIT program in number of enrollment and services prescribed over studied years. In 2009, ESIT received referrals for 2,598 children, whereas in 2017, ESIT program received referrals for 11,045 children and 7,138 of them had their initial IFSP created. In the same year, 12,521 children transferred out of the program and 10,272 children had active IFSPs served by ESIT program.

Table 1. Count of children in ESIT administrative data by program steps, from 2009 to 2017

Year	ESIT Program Counts of Children			
	Referral Received	First IFSP Created	Active IFSP	Transitioned Out
2009	2,598	1,890	2,163	896
2010	5,694	4,555	6,047	2,120
2011	6,578	5,677	8,150	6,705
2012	7,662	5,817	8,310	7,314
2013	8,929	6,223	8,978	9,396
2014	10,802	6,782	9,751	10,617
2015	12,231	7,459	10,621	12,223
2016	12,326	7,856	11,433	13,726
2017	11,045	7,138	10,272	12,521

Children were most likely to be referred to ESIT program around two years old and receive services until three, then transition out age. The majority of children receive services for 6 to 15 months

Main sources of referral included parents, physicians, child welfare services, public health agencies, childcare providers, schools, etc. ESIT service candidates were referred to ESIT program in different stages of their early life. Among these children, 14.3 percent of them were referred when they were between 0 to 5 months old, 13.1 percent between 6 to 10 months old and 18 percent between 26 to 30 months old, which was the leading age window

of referral. 21.6 percent of first IFSPs were generated between 26 to 30 months. At the same time, 57.6 percent of children transitioned out of ESIT between 31 and 35 months of age.

Table 2. Count of children in ESIT administrative data by age, from 2009 to 2017

in Months	All Children Ever Served By ESIT Program		
	By Age Referral Received	By Age Initial IFSP Created	By Age Transition Out
0 to 5	11,236 (14.3%)	5,990 (11.0%)	48 (0.8%)
6 to 10	10,258 (13.1%)	7,029 (12.9%)	235 (4.0%)
11 to 15	8,091 (10.3%)	5,788 (10.6%)	483 (8.3%)
16 to 20	12,431 (15.8%)	7,474 (13.7%)	485 (8.3%)
21 to 25	13,724 (17.5%)	9,242 (17.0%)	485 (8.3%)
26 to 30	14,548 (18.5%)	11,742 (21.6%)	635 (10.9%)
31 to 35	8,123 (10.3%)	6,921 (12.7%)	3,378 (57.9%)
36 and Above	105 (0.1%)	175 (0.3%)	89 (1.5%)

Finally, we found that 36.5 percent of ESIT children were served by the ESIT program for 6-10 months, followed by 21.1 percent served for 11-15 months, while 4.7 percent were served for over 31 months. Notice that not all children have IFSP created date and end date recorded in the ESIT database and therefore appearing in this table.

Table 3. Count of children in ESIT administrative data by length of services received, in months, from 2009 to 2017

Total Time Served in Months	Number of All Children Ever Served By ESIT Program
0 to 5	5,534 (14.2%)
6 to 10	14,212 (36.5%)
11 to 15	8,217 (21.1%)
16 to 20	3,960 (10.2%)
21 to 25	2,661 (6.8%)
26 to 30	2,565 (6.6%)
31 to 35	1,647 (4.2%)
36 and Above	176 (0.5%)

There are more males than females, more whites than other races, and more English speakers than other languages among ESIT children, but ratios are lower than corresponding ratios among overall WA residents.

We next examined the demographic characteristics of ESIT children by gender, race/ethnicity, and language speaking in table 4, table 5 and table 6. In 2017, 64.5 percent of ESIT enrollees were boys, while there were 64.1 percent male enrollees from 2009 to 2017 overall. We summarized count of children ever enrolled in ESIT program by

their primary spoken language and found out 63.6 percent of them reported English as primary language, 9.5 percent speaking Spanish while 24.3 percent of them left the field either missing or unknown. As we can tell from table 5 and table 6, there are more whites and English speakers in ESIT programs than other races and languages, respectively. However, these ratios are low comparing with overall Washington population that 71.8 percent of all WA zero to three years old residents are white and 77.9 percent of WA young residents speak only English, based on Census estimate⁵.

Table 4. Count of children in ESIT administrative data by gender, from 2009 to 2017

		All Children Ever Served By ESIT Program from 2009-2017								
		2009	2010	2011	2012	2013	2014	2015	2016	2017
Female		793 (41.6%)	1670 (36.5%)	1976 (35.3%)	2083 (34.7%)	2135 (34.0%)	2356 (34.7%)	2671 (35.5%)	2782 (35.2%)	2618 (35.5%)
Male		1115 (58.4%)	2911 (63.5%)	3616 (64.7%)	3925 (65.3%)	4145 (66.0%)	4437 (65.3%)	4861 (64.5%)	5114 (64.8%)	4748 (64.5%)

Table 5. Count of children in ESIT administrative data by race and ethnicity, from 2009 to 2017

		All Children Ever Served By ESIT Program from 2009-2017								
		2009	2010	2011	2012	2013	2014	2015	2016	2017
White		1072 (56.2%)	2610 (57.0%)	3068 (54.9%)	3494 (58.2%)	3679 (58.6%)	3884 (57.2%)	4361 (57.9%)	4543 (57.5%)	4179 (56.7%)
Hispanic		449 (23.5%)	1160 (25.3%)	1417 (25.3%)	1218 (20.3%)	1318 (21.0%)	1475 (21.7%)	1609 (21.4%)	1681 (21.3%)	1598 (21.7%)
Asian		102 (5.3%)	238 (5.2%)	325 (5.8%)	439 (7.3%)	382 (6.1%)	452 (6.7%)	561 (7.4%)	556 (7.0%)	538 (7.3%)
Multiracial		117 (6.1%)	246 (5.4%)	370 (6.6%)	416 (6.9%)	412 (6.6%)	437 (6.4%)	448 (5.9%)	563 (7.1%)	513 (7.0%)
Black		76 (4.0%)	177 (3.9%)	237 (4.2%)	269 (4.5%)	298 (4.7%)	344 (5.1%)	346 (4.6%)	366 (4.6%)	354 (4.8%)
AIAN		49 (2.6%)	90 (2.0%)	114 (2.0%)	117 (1.9%)	128 (2.0%)	131 (1.9%)	139 (1.8%)	112 (1.4%)	108 (1.5%)
NHPI		9 (0.5%)	33 (0.7%)	61 (1.1%)	52 (0.9%)	62 (1.0%)	69 (1.0%)	65 (0.9%)	72 (0.9%)	67 (0.9%)
NA		34 (1.8%)	27 (0.6%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Total		1,908	4,581	5,592	6,008	6,281	6,793	7,532	7,896	7,366

5 Data retrieved from Washington State Office of Financial Management Census estimate 2010-2018. Race ratio was a proportional estimate from subgroup of WA residents zero to four old; Language spoken ratio was a reported estimate for WA resident 5-17 years old, as no estimate for younger group is available.

Table 6 Count of children in ESIT administrative data by primary language, from 2009 to 2017

Primary Language	All Children Ever Served by ESIT Program from 2009-2017	
	Count	Percentage
English	50,049	63.6%
Spanish	7,466	9.5%
Other	1,140	1.4%
Chinese	375	0.5%
Vietnamese	318	0.4%
Russian	259	0.3%
Arabic	210	0.3%
Hindi	159	0.2%
Somali	153	0.2%
Korean	98	0.1%
Punjabi	82	0.1%
Tagalog	47	0.1%
Sign	46	0.1%
Japanese	42	0.1%
Farsi	39	0.0%
Bengali	37	0.0%
French	37	0.0%
Portuguese	35	0.0%
Cambodian	27	0.0%
Oromo	15	0.0%
German	13	0.0%
Malay	7	0.0%
Laotian	4	0.0%

Most children have one to four IFSPs developed during their enrollment in ESIT and reaching three years old is the highest reason for transition out.

When eligibility was determined, an initial IFSP would be issued to the child based on evaluation results to direct the services to be provided. There would be annual reviews to revisit the child's status and possible other reviews for current IFSP to determine if the current one was either completed or required revision. Therefore, a child might undergo revisions in his IFSP resulting in multiple IFSPs during his participation in the ESIT program. Table 7 describes how many IFSPs were issued to ESIT participants. Majority of children (60.4 percent) ever enrolled in ESIT program had either one or two IFSP developed for them during their participation, while another 24.8 percent of them with between 3 to 4 IFSPs developed. The last 14.8 percent children had 6 to 13 of IFSPs.

Table 7 Count of children in ESIT administrative data by number of IFSP developed, from 2009 to 2017

All Children Ever Served by ESIT Program from 2008-2017		
Number of IFSP Developed	Count	Percentage
1 to 2	32,815	60.4%
3 to 4	13,485	24.8%
5 to 9	7,934	14.6%
10 and above	134	0.2%

ESIT program enrollees ended their participation for different reasons, voluntarily withdraw, reaching program cut off age, or successful improved etc., as shown in Table 8 (below). Next steps following transitioning out at three years old are of particular interest. A child might be eligible for continuous IDEA Part B services in special education, or other programs. From 2009 to 2017, 24.6 percent left ESIT program without a completed IFSP; 28.8 percent children transitioned out of ESIT program at the age of 3 while 18.2% children transitioned out under 3; 19.4 percent children transitioned out from ESIT program to a part B program while 9.4 percent transitioned out at age 3 but not going to a Part B program. At last, 18.2 percent children transitioned out before the age 3, deceased, no longer eligible, by parents’ choice or moving out of Washington State.

Table 8. Count of children in ESIT administrative data by reasons of transition, from 2009 to 2017

	All Children Ever Served by ESIT Program from 2009-2017									
	2009	2010	2011	2012	2013	2014	2015	2016	2017	
Child exited program without a completed IFSP	22 (1.2%)	81 (1.8%)	95 (1.7%)	53 (0.9%)	49 (0.8%)	49 (0.7%)	92 (1.3%)	230 (3.7%)	679 (26.9%)	
Moved out of county - not reactivated	29 (1.5%)	90 (2.0%)	31 (0.6%)	*	*	*	*	*	*	
Transitioned at age 3										
Eligible for Part B/Special Education	734 (38.5%)	1938 (42.3%)	2440 (43.7%)	2651 (44.1%)	2705 (43.1%)	2852 (42.0%)	2753 (39.2%)	2149 (35.0%)	527 (20.9%)	
Eligible for Part B/Special Education, but parents declined	10 (0.5%)	25 (0.5%)	58 (1.0%)	76 (1.3%)	70 (1.1%)	83 (1.2%)	68 (1.0%)	53 (0.9%)	17 (0.7%)	
Not eligible for Part B, exited to other program	136 (7.1%)	374 (8.2%)	397 (7.1%)	437 (7.3%)	512 (8.2%)	613 (9.0%)	557 (7.9%)	412 (6.7%)	65 (2.6%)	

All Children Ever Served by ESIT Program from 2009-2017									
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Not eligible for Part B, exited with no Referral	112 (5.9%)	311 (6.8%)	342 (6.1%)	430 (7.2%)	357 (5.7%)	331 (4.9%)	286 (4.1%)	235 (3.8%)	45 (1.8%)
Part B eligibility not determined	75 (3.9%)	232 (5.1%)	380 (6.8%)	372 (6.2%)	326 (5.2%)	364 (5.4%)	420 (6.0%)	372 (6.1%)	119 (4.7%)
Transitioned under age 3									
Deceased	12 (0.6%)	11 (0.2%)	18 (0.3%)	19 (0.3%)	18 (0.3%)	13 (0.2%)	16 (0.2%)	21 (0.3%)	8 (0.3%)
Moved out of state	150 (7.9%)	241 (5.3%)	328 (5.9%)	350 (5.8%)	320 (5.1%)	380 (5.6%)	458 (6.5%)	374 (6.1%)	172 (6.8%)
No longer eligible for Part C	370 (19.4%)	544 (11.9%)	345 (6.2%)	369 (6.1%)	427 (6.8%)	428 (6.3%)	482 (6.9%)	443 (7.2%)	128 (5.1%)
Other: Attempts to contact or locate unsuccessful	129 (6.8%)	314 (6.9%)	380 (6.8%)	374 (6.2%)	440 (7.0%)	521 (7.7%)	531 (7.6%)	508 (8.3%)	192 (7.6%)
Parent choice, not typically developing	*	46 (1.0%)	231 (4.1%)	369 (6.1%)	505 (8.0%)	544 (8.0%)	689 (9.8%)	726 (11.8%)	348 (13.8%)
Parent choice, typically developing	124 (6.5%)	370 (8.1%)	541 (9.7%)	508 (8.5%)	551 (8.8%)	609 (9.0%)	667 (9.5%)	618 (10.1%)	223 (8.8%)

Ratio of multiple birth children is high in ESIT and establishes a potential case to study program effectiveness

There has been a significant increase in the number of births for twins and higher multiples in Washington State; in 2016, one child in 33 born was a child of a multiple birth. Children of multiple births may require special consideration starting from an early stage of education. In 2016, one in 12 children served by ESIT program was a multiple. We identified multiple birth children in ESIT population, and compared the results with Washington State birth data⁶. We discovered that number of ESIT twins per 100 enrollees is significant higher than the overall Washington State ratio of twins per 100 births. Ratio of triplets or higher was 5.5 times larger among ESIT children comparing with general Washington State population, on average from 2008 to 2016. The use of ESIT data can help us better understand the educational needs of this overrepresented population, and assess impact of early learning intervention on their long-term educational outcomes.⁷

6 <https://www.doh.wa.gov/DataandStatisticalReports/HealthStatistics/Birth>

7 Long term outcome of small versus appropriate size for gestational age co-twins/triplets; M Mon-

Table 9 Ratio of multiple birth children among ESIT population and Washington State, from 2008 to 2016

Birth Year	Comparison Between Children Referred to ESIT Program and Overall WA Population								
	2008	2009	2010	2011	2012	2013	2014	2015	2016
ESIT Twins per 100 enrollees	5.5	6.0	5.4	5.0	5.4	6.1	5.9	7.1	8.4
WA State Twins per 100 births	3.2	3.1	3.2	3.1	3.1	3.1	3.0	3.2	2.9
ESIT Triplets and Higher per 100,000 enrollees	0.356	0.527	0.517	0.461	0.386	0.592	0.401	0.666	0.408
WA State Triplets and Higher per 100,000 births	0.108	0.102	0.080	0.074	0.112	0.122	0.091	0.071	0.073

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