

Family Hope Center WeeFIM® Explanation and Results (April 2025)

Part A: Family Hope Center WeeFIM® Explanation

About the WeeFIM®

The effectiveness of any therapeutic approach must be periodically assessed using standardized and validated measures. At the Family Hope Center, we assess the effectiveness of our approach using the WeeFIM® instrument, the pediatric version of the Functional Independence Measure® (FIM®). Patient assessment data are recorded in an independent system called the WeeFIM II®.

The WeeFIM II® System

The WeeFIM II® System is the most respected pediatric outcomes management tool in the market. Used by pediatric inpatient, outpatient, and community-based rehabilitation programs, the WeeFIM II® System provides a simple, uniform construct that measures function in children. Based on the principal underpinnings of the FIM® instrument, the system allows clinicians to quickly assess functional status and track progression. It also provides patient-level data, profile reports, and program summary reports that demonstrate individual patient progress and overall program effectiveness (www.udsmr.org/products-pediatric-rehab).

The WeeFIM® Instrument

Both the FIM® and the WeeFIM® were developed from the World Health Organization's biopsycho-social model of disability – the International Classification of Functioning, Disability, and Health – which identifies individuals as having a disability according to functional ability along various domains, their limitations in basic activities, and participation (or restrictions) in work, school, family life, and other social activities.

Both instruments have also been researched extensively and have high reliability and validity as diagnostic tools. (See **Psychometric Properties** references below.) This makes them especially useful in measuring the outcome of rehabilitative treatment.

The WeeFIM® itself measures how well children independently perform activities of daily living (ADL) and documents their decrease in need for assistance over time in response to therapy. It assesses functional independence in children with developmental disabilities aged 6 months to 21 years.



The WeeFIM® instrument is divided into three domains: Self-care, Mobility, and Cognition.

- The <u>Self-care</u> domain refers to how well a child can feed, groom, bathe, dress, and complete toileting tasks including the management of bowel and bladder.
- The Mobility domain refers to how well a child can transfer in/out of a chair or wheelchair, on/off a toilet, or in/out of a tub or shower. Mobility also includes a child's ability to walk, crawl, or use a wheelchair, and to go up/down stairs.
- The <u>Cognition</u> domain refers to how well a child understands information, expresses themselves, interacts with peers, solves daily problems, and recalls information.

Each domain is made up of a number of items that are individually assessed. In total, there are 18 items distributed across the three domains. Each item is assessed on a 7-level ordinal scale by the clinician, either through parent interview or by observing a child's performance of essential daily functional skills measured against criterion standards. (See **Appendix 1** below.) What this means is that the minimum possible WeeFIM® score is 18 (18 items x 1 on the ordinal scale), and the maximum possible WeeFIM® score is 126 (18 items x 7 on the ordinal scale).

Scoring is categorized into 2 main functional streams: "Dependent" (i.e., requires a helper: scores 1–5) and "Independent" (i.e., requires no helper: scores 6–7). (See **Appendices 2 and 3** below.)

Using the WeeFIM® to Track Therapeutic Outcomes Over Time

In their seminal WeeFIM® research, Msall, DiGaudio, Duffy, et al. (1994) administered the WeeFIM® to 417 children without developmental delays or disabilities aged 6 months to 8 years. Their results show a progressive increase in independence regarding daily living skills as children age.

This progressive increase in independence for children without developmental delays or disabilities is summarized in the following table which is based on data included in the Results section of the above-referenced research paper.



Mean Age	Mean Total WeeFIM®	Level of Independence
(Months)	Score*	
12	20 ± 5	Total assistance
18	38 ± 9	Maximal assistance
24	54 ± 13	Moderate assistance
36	84 ± 12	Minimal assistance
42	91 ± 12	Supervision
60	110 ± 11	Modified independence
84	120 ± 4	Complete independence

^{*}Pearson correlation coefficients for all age groups and total WeeFIM® score are significant at the P < 0.01 level of significance, with the highest correlation between ages 2-5 years (r = 0.8).

Following is a more detailed table (from the WeeFIM II® Clinical Guide v6.4, Appendix B: WeeFIM® Normative Data, 2016) showing this progressive increase in independence for children without developmental delays or disabilities.

Age			Total WeeFIN	M® Rating (Ran	ge: 18–126)
Interval (Months)	Mean Age (Months)	Sample Size	Mean	Standard Deviation	Median
5–7	6.78	18	18.00	0.00	18
8–10	9.50	25	28.00	12.52	24
11–13	12.24	17	32.88	7.72	31
14–16	15.33	19	36.00	6.18	37
17–19	18.62	17	45.80	12.47	42
20–22	21.99	8	55.33	13.05	52.5
23–25	24.18	21	63.50	13.37	61
26–28	27.56	12	67.63	27.38	65
29–31	30.88	11	74.90	9.64	78.5
32–34	33.25	14	89.92	10.69	92
35–37	36.38	20	89.15	13.08	90.5
38–40	39.48	16	90.87	8.09	88
41–43	42.57	12	100.00	9.99	98
44–46	45.60	14	101.00	10.81	101
47–49	48.65	25	102.57	9.40	103
50-52	51.37	17	106.60	9.10	108
53-55	54.22	21	108.53	10.37	111
56–58	57.96	10	110.25	11.22	112.5
59–61	60.53	18	115.63	7.76	117
62-64	63.07	6	112.17	9.70	114
65–67	66.43	9	111.25	9.27	107.5
68–70	69.86	14	116.38	6.36	118
71–73	72.16	12	117.82	6.63	121
74–76	75.92	12	113.27	7.99	113
77–79	78.61	8	120.00	7.75	123
80–82	81.35	9	120.33	5.27	121
83+	90.33	29	119.74	5.40	122

Table 2. Source data for normative data figures



Appendices 4, 5 and 6 (also from the WeeFIM II® Clinical Guide v6.4, Appendix B: WeeFIM® Normative Data, 2016) below show the progressive increase in independence for children without developmental delays or disabilities as a function of age for the three domains of Selfcare, Mobility and Cognition.

In their discussion, the authors also conclude that the WeeFIM®'s ability to measure functional independence over time – for both children developing normally <u>and</u> those with developmental disabilities – represented a significant improvement over other widely used developmental assessment tools such as the Battelle Developmental Inventory, the Vineland Adaptive Behavior Scales, and the Pediatric Evaluation of Disability Inventory.

WeeFIM® Quotients

In subsequent papers, Msall, DiGaudio, Rogers et al. (1994) and Msall (2005) use two *quotients* that provide a normalized way to view a child's score and progress over time.

(Normalizing is a way of adjusting values so they can be compared more fairly or meaningfully. It helps put things into the same "scale" or "perspective," even if the original numbers are very different.)

These quotients are defined as follows (Msall, DiGaudio, Rogers et al., 1994):

Functional Independence Quotient = total score / maximum score x 100 **Developmental Functional Quotient** = total score / mean score for age x 100

The authors also define similar quotients at the domain level:

Functional Independence Quotient = total domain score/ maximum score x 100 **Developmental Functional Quotient** = total domain score / mean score for age x 100

Additionally, it is important to note that the Uniform Data System for Medical Rehabilitation (UDSMR) also utilizes these quotients as standardized outputs for every child's WeeFIM® Profile Report (WeeFIM II® Clinical Guide v6.4, Appendix B: WeeFIM® Normative Data, 2016).

The Family Hope Center also makes use of these normalized measures when analyzing the WeeFIM® data it collects.

How the WeeFIM® is Used Globally



The WeeFIM® is used by inpatient and outpatient rehabilitation facilities around the world to provide an easily understandable record of a child's progress.

The WeeFIM® is used to:

- Track functional improvement and goal attainment for individuals or groups of children.
- Evaluate the effectiveness and efficiency of the care individual facilities provide by comparing facility outcomes to national benchmarks.
- Predict the burden of care at discharge.
- Network with other pediatric rehabilitation providers.

How the WeeFIM® is Used at the Family Hope Center

At the Family Hope Center, the WeeFIM® is used to evaluate the effectiveness of the therapeutic plans we teach parents to implement at home. The WeeFIM® allows us to measure a child's score prior to (or soon after) beginning treatment and then measure a child's progress over time, thereby providing clear insight into how children with neurodevelopmental disabilities are functioning in the most important environments in which they live, learn, and play.



Appendices:

Appendix 1: WeeFIM Assessment

Case Identification	WeeFIM® instrument
. Facility Code	17 WeeFIM® instrument
	Rate the child for each of the items below.
	Self-Care
. Admission Date MMDD/YYYY	Assessment* Goal G
	a. Eating
Assessment Information	b. Grooming
. Assessment Type	c. Bathing
(0) Pre-admission (1) Admission (2) Interim (3) Discharge (4) Politie-up	d. Dressing - Upper Body
. Assessment Date MM/DD/YYYY	e. Dressing - Lower Body
i. Information Source	f. Toileting
Record one item from the list below for follow-up and outpatient only. (1) Staff (2) Parent (3) Caregiver (4) Patient (5) Other	g. Bladder Management
	h. Bowel Management
Assessment Method Record one item from the list below for follow-up and outpatient only.	Self-Care Total
(1) In person (2) Telephone (3) Mailed questionnaire (4) Linable to reach	<u> </u>
Living Setting (1) Home (2) Acute care unit of own facility (3) Acute care unit of enother facility	Mobility Assessment* Goal
(1) nome (2) Acuse care unt or own tacing (3) Acuse care unt or anomer facing (4) Rehabilitation facility (5) Residential facility (6) Transitional living center (7) Skilled nursing facility (8) Shelter (8) Other (10) Dad	i. Chair. Wheelchair
	i. Toilet
Living With Record one item from the list below <u>only</u> if Living Setting (item 8) was recorded (1) Home.	II' — —-
(1) Two parents (2) One parent (3) Relatives (4) Foster care (5) Other	k. Tub, Shower w-wak
Educational Category	I. Walk, Wheelchair, Crawl C-wheelchair
(1) Not a student (2) Early intervention program (3) Pre-school (4) Kindergarten through 12 th (5) Other	m. Stairs =
Educational Setting	Mobility Total
(1) Regular clasz (2) Regular clasz with accommodation (2) Special clasz (4) Home based or home schooled (3) Deycare, nursery action), center based, or community	Motor Total
2. Health Maintenance	Cognition Assessment* Goal C
Record one item from the list below for follow-up and outpatient only.	A Author
(1) Own care (2) Unpaid person or family (3) Paid attendant or aide (4) Paid skilled professional	n. Comprehensionv-vosasi
3. Therapy	o. Expression v-Vocal
Record one item from the list below for admission, follow-up and outpatient only. (1) None (2) Outpatient (3) Home-based paid professional therapy (4) Both 2 & 3	p. Social Interaction B-Both
(5) Inpatient hospital (6) Day treatment (7) School based (8) Other	q. Problem Solving
4. Therapy Services	r. Memory
Record one item from the list below for admission, follow-up and outpatient only. (1) None (2) Physical therapy (3) Occupational therapy (4) Speech therapy	
(5) Physical & occupational therapy (6) Physical, occupational, and speech therapy (7) Other combination	Cognition Total
5. Gait Training Equipment	WeeFIM® total
	*Leave no blanks for this column. If an item is not testable due to risk, enter 1.
6. Communication Devices	WeeFIM© rating levels
Custom Information	No Helper 7 Complete Independence (no device, timely, safely)
Seizures 0 to 4	6 Modified Independence (device, not timely, or not safely)
	Helper - Modified Dependence 5 Supervision (subject performs 100% of the effort)
blind Y N	4 Minimal Assistance (subject performs 75% or more of the effort) 3 Moderate Assistance (subject performs 50% to 74% of the effort)
Deaf Y N	Helper - Complete Dependence 2 Maximal Assistance (subject performs 25% to 49% of the effort)
Dr. visits	Miscomal Assistance (subject performs 25% to 40% of the effort) Total Assistance or Not Testable (subject performs less than 25% of the effort)



Appendix 2: WeeFIM Levels of Function (Ratings, Descriptions, and Categories):

Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
		Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Modified Dependence		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Appendix 3: Scoring Criteria for a Particular Item (Ratings, Descriptions, and Categories)

Eating

Eating includes the use of suitable utensils to bring food and liquid to the mouth, chewing and swallowing, once a meal has been presented in the customary manner on a table or tray. Rating guidelines:

- Presenting a meal in the customary manner includes opening containers, cutting meat, buttering bread, and pouring liquids.
- When rating this item, do not consider the child's use of a knife
- If the child functions at different levels during the day (for example, level 5 in the morning and level 4 in the evening), record the lower rating.
- If the child has a feeding tube that is not used for hydration or nutrition and a helper flushes
 the tube to maintain patency, do not consider the feeding tube and the parenteral line when rating this item.

No Helper:

- 7 Complete Independence: The child safely performs all the eating tasks without assistance by eating from a dish, managing a variety of food consistencies, and drinking from a cup or glass after the meal is presented in the customary way on a table or tray. The child uses a spoon or fork to bring food to the mouth, where it is chewed and
- 6 Modified Independence: The child performs all the eating tasks without assistance from a helper, and one or more of the following are true:
 - . The child requires an assistive/adaptive device (e.g., long straw, spork, plate guard) to
 - The child requires more than a reasonable amount of time to eat.
 - The child requires modified food consistency, modified liquid consistency, or blenderized food.
 - · The child self-administers parenteral or gastrostomy feedings
- There is a concern for the child's safety when he eats.

Helper:

- 5 Supervision/Setup: The child performs all the eating tasks, and one or both of the following are true:
- The child requires supervision (standby supervision, cues, or coaxing) to eat
- The child requires setup (including application of an orthosis or an assistive/adap device necessary for eating) to eat.

Example: A helper applies a universal cuff, after which the child eats without assistance.

4 Minimal Assistance: The child performs 75% or more of the eating tasks.

Example: The child eats most of each meal by himself and only requires a helper to feed him the last three or four bites.

Section III: The WeeFIM® Instrument

3 Moderate Assistance: The child performs 50% to 74% of the eating tasks

Example: A helper scoops each bite of food onto a fork or spoon, after which the child brings the food to his mouth, chews the food, and swallows it.

2 Maximal Assistance: The child performs 25% to 49% of the eating tasks by eating solid food, finger feeding, or holding a bottle, but the child requires maximal assistance to do

Example: A helper scoops each bite of food and provides hand-over-hand assistance to the child.

Example: The child uses his fingers to feed himself crackers, cookies, and bite-size pieces of fruit, but a helper must feed him other foods.

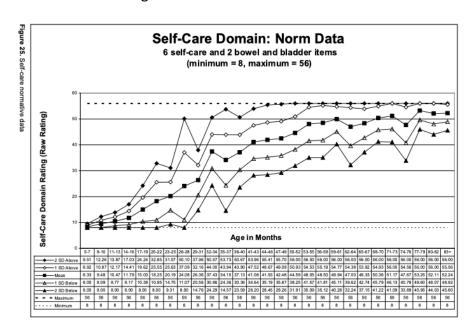
- 1 Total Assistance: One or more of the following are true:
 - The child performs less than 25% of the eating tasks (or none of them) by taking a bottle or breast-feeding within a reasonable amount of time, but the child requires total assistance to do so.
- The child does not eat or drink full meals by mouth, relying instead on other means of alimentation (e.g., parenteral feedings, gastrostomy feedings).
- . The child requires assistance from two helpers to eat.

Example: The child takes three or four bites of each meal, and a helper feeds the remainder of each meal to the child.

Example: A helper performs 100% of the work necessary to feed the child.

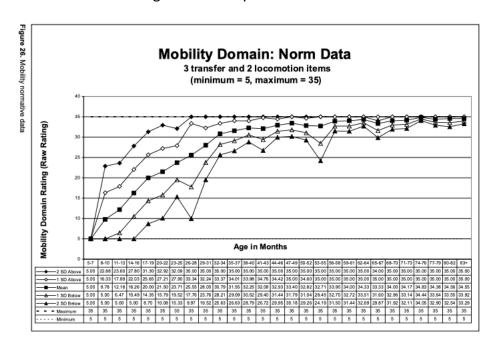


Appendix 4: Progressive Increase in Independence for Children Without Developmental Delays or Disabilities as a Function of Age for Self-care Domain



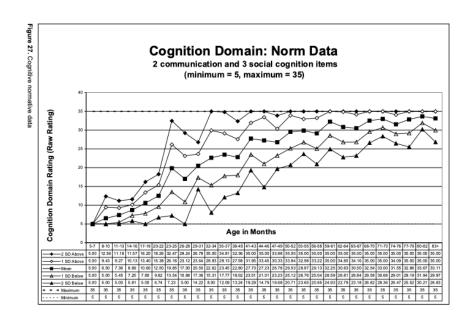


Appendix 5: Progressive Increase in Independence for Children Without Developmental Delays or Disabilities as a Function of Age for Mobility Domain





Appendix 6: Progressive Increase in Independence for Children Without Developmental Delays or Disabilities as a Function of Age for Cognition Domain





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About the WeeFIM (UDSMR Resources):

- Uniform Data System for Medical Rehabilitation (UDSMR)
- The FIM Instrument: Its Background, Structure, and Usefulness
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Part B: Family Hope Center WeeFIM® Results

In Section 1, we will present Family Hope Center WeeFIM® results for 1461 children who were classified as having one of the following seven disability types:

- ADD/ADHD
- Autism Spectrum Disorder
- Brain Dysfunction
- Cerebral Palsy
- Developmental Delay
- Genetic Disorders
- Speech and Language Impairments

The results cover the period from 2002 to 2021.

In Section 2, we will present a subset of these same Family Hope Center WeeFIM® results that focuses on the three most common disability types present in the overall data set:

- Autism Spectrum Disorder
- Cerebral Palsy
- Developmental Delay

These three disability types represent more than 78% of the total results (1142 children in the subset/1461 children in total).

In Section 3, we will present Family Hope Center WeeFIM® results from the same overall data set that show WeeFIM® progress as a function of age for select individual children with developmental delays or disabilities compared to WeeFIM® progress as a function of age for children without developmental delays or disabilities for the following disability types:

- ADD/ADHD
- Autism Spectrum Disorder
- Brain Dysfunction
- Cerebral Palsy
- Developmental Delay
- Genetic Disorders
- Speech and Language Impairments



<u>Section 1: Family Hope Center WeeFIM® Results for 1461 Children Who Were Classified As Having One of Seven Disability Types (Data From 2002 to 2021)</u>

The seven disability types represented in the data set are:

- ADD/ADHD
- Autism Spectrum Disorder
- Brain Dysfunction
- Cerebral Palsy
- Developmental Delay
- Genetic Disorders
- Speech and Language Impairments

Following is a breakdown of the number of children with each disability type:

Disability Type	# of Children	% of Total
ADD / ADHD	120	8.2%
Autism Spectrum Disorder	252	17.2%
Brain Dysfunction	74	5.1%
Cerebral Palsy	388	26.6%
Developmental Delay	502	34.4%
Genetic Disorders	97	6.6%
Speech and Language Impairments	28	1.9%

For each child whose results are in the data set, a WeeFIM® evaluation was conducted at each visit during the child's treatment period.

Treatment periods for children in the data set ranged from a single visit to more than 20 visits.

The plots in this section show the average WeeFIM® total score and the average domain scores (Self-care, Mobility, and Cognition) for Visit 1 (Admission) through Visit 10. Stopping at Visit 10 ensures that the number of data points for each visit is greater than or equal to 10% of the total analyzed population.

(In Section 3, we will present plots for some individual children whose treatment period extends beyond Visit 10.)



The interval between visits is approximately 6 months. The elapsed time between Visit 1 (Admission) and Visit 10 is approximately 4.5 years.

The results in this section are presented as follows:

First, summary statistics about the entire analyzed population are shown.

Second, a series of four plots is presented:

- The 1st plot presents the total WeeFIM® scores for the entire population being analyzed.
- The 2nd plot presents the Self-care WeeFIM® scores for the entire population being analyzed.
- The 3rd plot presents the Mobility WeeFIM® scores for the entire population being analyzed.
- The 4th plot presents the Cognition WeeFIM® scores for the entire population being analyzed.

All plots are laid out in the same way:

- The left y-axis is the *Functional Independence Quotient* (total score or total domain score/ maximum score x 100). Values can range from a minimum of 14% (18/126) to a maximum of 100% (126/126). Given that the minimum possible score is 14% (18/126), the left y-axis scale starts at 10% not 0%.
- The right y-axis is the **Rating Descriptor** hierarchy. Descriptors from minimum to maximum are:
 - Total Assistance
 - Maximal Assistance
 - Moderate Assistance
 - Minimal Assistance
 - Supervision/Setup
 - Modified Independence
 - Complete Independence
- The x-axis has markers for each visit, starting with Admission (Visit 1) on the far left and continuing out through Visit 10 on the far right.

Following each plot is a WeeFIM® Levels of Function chart with markers to show the Level of Function at Visit 1 (Admission) and the Level of Function at Visit 10.



Summary Statistics:

Group Name	Family Hope Center WeeFIM® Results for
	Seven Disability Types
Date Range Covered (years)	2002 - 2021
Number of Children in Treatment	1461
Group	
Average Starting Age (years)	6.3
Average Ending Age (years)	8.9

Figure 1: Seven Disability Types: Number Per Group and Percent of Total

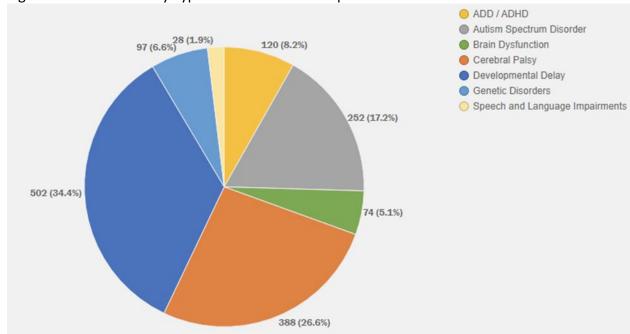
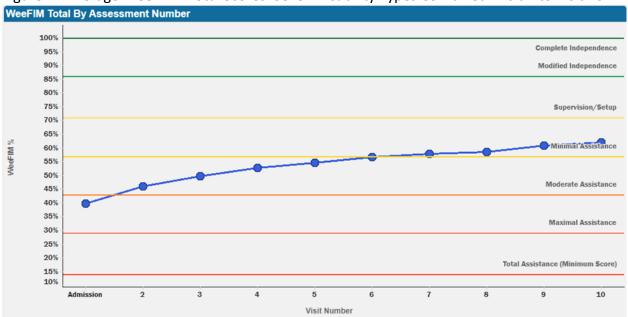




Figure 2: Average WeeFIM® Total Scores: Seven Disability Types Combined: Visit 1 to Visit 10

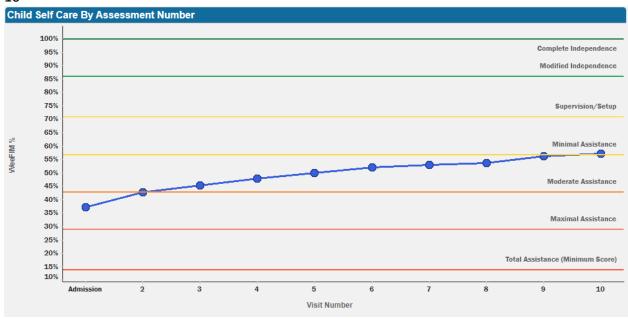


Description	Start (%)	End (%)	Percent Gained (%)
Average	40	62	22

Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 3: Average WeeFIM® Self-Care Scores: Seven Disability Types Combined: Visit 1 to Visit 10

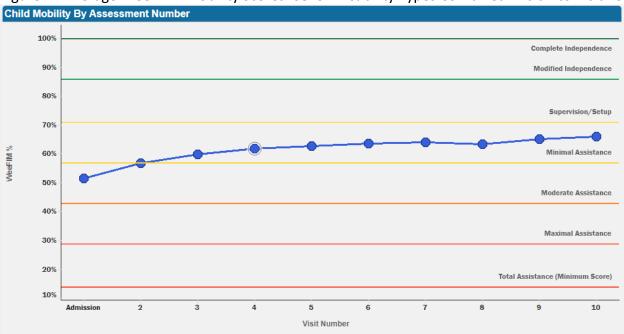


	Description	Start (%)	End (%)	Percent Gained (%)
ĺ	Self-Care	37	57	20

Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function	
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids	
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety	
	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	,
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	





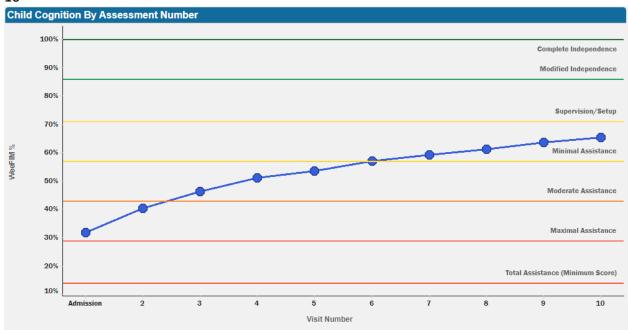


Description	Start (%)	End (%)	Percent Gained (%)
Mobility	51	67	16

Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Helper		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 5: Average WeeFIM® Cognition Scores: Seven Disability Types Combined: Visit 1 to Visit 10



Description	Start (%)	End (%)	Percent Gained (%)
Cognition	32	65	33

Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
		Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
	Modified Dependence	Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



<u>Section 2: Family Hope Center WeeFIM® Results for the Three Most Common Disability</u> Types Present in the Overall Data Set (Data From 2002 to 2021)

In this section, we will present a subset of the Family Hope Center WeeFIM® results that focuses on the three most common disability types present in the overall data set:

- Autism Spectrum Disorder
- Cerebral Palsy
- Developmental Delay

First, summary statistics about the entire analyzed population are shown.

Second, a series of four plots is presented:

- The 1st plot presents the total WeeFIM® scores for these three most common disability types.
- The 2nd plot presents the Self-care WeeFIM® scores for these three most common disability types.
- The 3rd plot presents the Mobility WeeFIM® scores for these three most common disability types.
- The 4th plot presents the Cognition WeeFIM® scores for these three most common disability types.

All plots are laid out in the same way:

- The left y-axis is the *Functional Independence Quotient* (total score or total domain score/ maximum score x 100). Values can range from a minimum of 14% (18/126) to a maximum of 100% (126/126). Given that the minimum possible score is 14% (18/126), the left y-axis scale starts at 10% not 0%.
- The right y-axis is the **Rating Descriptor** hierarchy. Descriptors from minimum to maximum are:
 - Total Assistance
 - Maximal Assistance
 - Moderate Assistance
 - Minimal Assistance
 - Supervision/Setup
 - Modified Independence
 - Complete Independence
- The x-axis has markers for each visit, starting with Admission (Visit 1) on the far left and continuing out through Visit 10 on the far right.



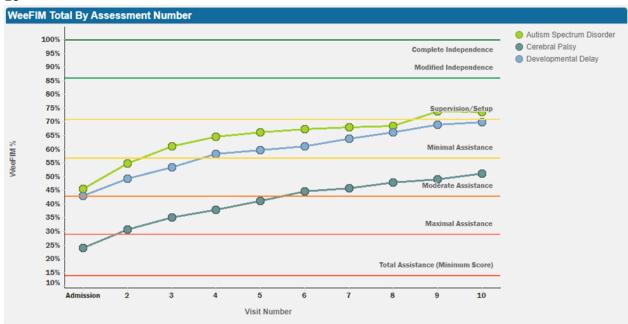
Following each plot is a chart that characterizes Level of Function at Visit 1 (Admission), Level of Function at Visit 10 and notes the change in the number of levels between Visit 1 and Visit 10.

Summary Statistics:

Group Name	WeeFIM® Results for Autism Spectrum
	Disorder, Cerebral Palsy and Developmental
	Delay
Date Range Covered (years)	2002 - 2021
Total Number of Children in the 3	1142 (78% of total of 1461)
Treatment Groups	
Number of Children in Each Group	252-Autism Spectrum Disorder (17%)
	388-Cerebral Palsy (27%)
	502-Developmental Delay (34%)



Figure 6: Average WeeFIM® Total Scores: Three Most Common Disability Types: Visit 1 to Visit 10

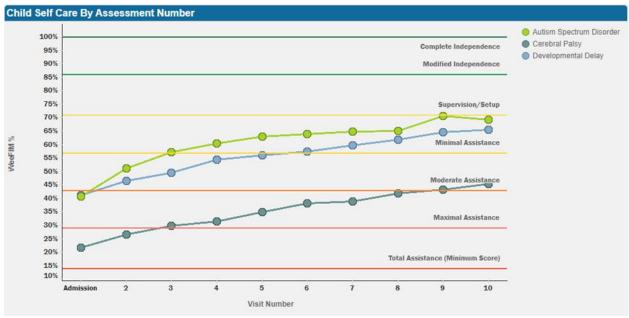


Disability Type	Start (%)	End (%)	Percent Gained (%)
Autism	45	74	29
Cerebral Palsy	24	51	27
Developmental Delay	43	70	27

Average	Autism Spectrum	Cerebral Palsy	Developmental
WeeFIM [®]	Disorder		Delay
Total			
Score			
Visit 1 (Admission):	Moderate	Total Assistance	Moderate
Level of Function	Assistance		Assistance
Visit 10:	Supervision/Setup	Moderate Assistance	Minimal Assistance
Level of Function			
Change in Levels of			
Function	+2	+2	+1



Figure 7: Average WeeFIM® Self-Care Scores: Three Most Common Disability Types: Visit 1 to Visit 10

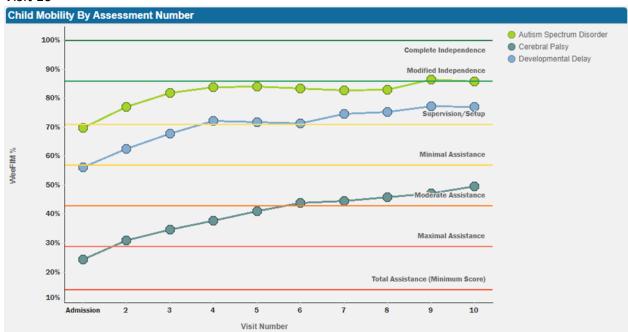


Disability Type	Start (%)	End (%)	Percent Gained (%)
Autism	41	69	28
Cerebral Palsy	22	45	23
Developmental Delay	41	65	24

Average WeeFIM® Self-care Score	Autism Spectrum Disorder	Cerebral Palsy	Developmental Delay
Visit 1 (Admission):	Maximal Assistance	Total Assistance	Maximal Assistance
Level of Function	iviaximal / issistance	10ta1713313ta1166	TVI de Allina i e de Salacia de Caracia de C
Visit 10:	Minimal Assistance	Moderate Assistance	Minimal Assistance
Level of Function			
Change in Levels of			
Function	+2	+2	+2



Figure 8: Average WeeFIM® Mobility Scores: Three Most Common Disability Types: Visit 1 to Visit 10

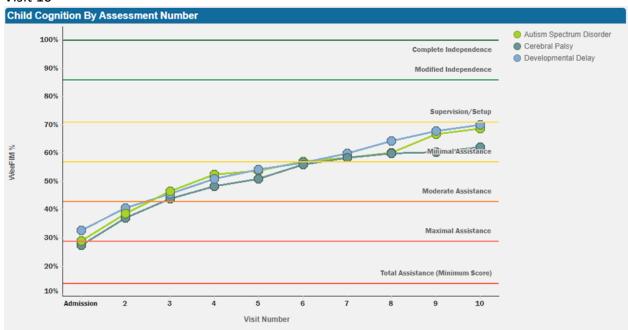


Disability Type	Start (%)	End (%)	Percent Gained (%)
Autism	70	86	16
Cerebral Palsy	24	50	26
Developmental Delay	56	77	21

Average	Autism Spectrum	Cerebral Palsy	Developmental
WeeFIM [®]	Disorder		Delay
Mobility			
Score			
Visit 1 (Admission):	Minimal Assistance	Total Assistance	Moderate
Level of Function			Assistance
Visit 10:	Modified	Moderate Assistance	Supervision/Setup
Level of Function	Independence		
Change in Levels of			
Function	+2	+2	+2



Figure 9: Average WeeFIM® Cognition Scores: Three Most Common Disability Types: Visit 1 to Visit 10



Disability Type	Start (%)	End (%)	Percent Gained (%)
Autism	29	69	40
Cerebral Palsy	27	62	35
Developmental Delay	33	70	37

Average WeeFIM°	Autism Spectrum Disorder	Cerebral Palsy	Developmental Delay
Cognition Score	Disoraci		Delay
Visit 1 (Admission): Level of Function	Maximal Assistance	Total Assistance	Maximal Assistance
Visit 10: Level of Function	Minimal Assistance	Minimal Assistance	Minimal Assistance
Change in Levels of	. 2	. 2	. 2
Function	+2	+3	+2



Section 3: Family Hope Center WeeFIM® Results for Select Children With

Developmental Delays or Disabilities That Show WeeFIM® Progress as a Function of Age

Compared to WeeFIM® Progress as a Function of Age for Children Without

Developmental Delays or Disabilities (Data From 2002 to 2021)

In this section, we will present Family Hope Center WeeFIM® results from the same overall data set that show WeeFIM® progress as a function of age for select individual children with developmental delays or disabilities compared to WeeFIM® progress as a function of age for children without developmental delays or disabilities for the following disability types:

- ADD/ADHD
- Autism Spectrum Disorder
- Brain Dysfunction
- Cerebral Palsy
- Developmental Delay
- Genetic Disorders
- Speech and Language Impairments

The results in this section are presented in a similar way for each subgroup.

There are 3 graphs and 2 charts in each subgroup.

The 1st graph presents the WeeFIM® progress as a function of age for five children in the subgroup being analyzed whose total WeeFIM® percent gained is 40% or greater, compared to WeeFIM® progress as a function of age for children without developmental delays or disabilities.

The 2nd graph presents the WeeFIM® progress as a function of age for one of the five children in the subgroup being analyzed whose age at the beginning of treatment was between 6 months and 3 years old, compared to WeeFIM® progress as a function of age for children without developmental delays or disabilities.

The 2nd graph is followed by a WeeFIM® Levels of Function chart with markers indicating the average Level of Function at the first assessment and the last assessment for the individual child whose results were presented in the 2nd graph.

The 3rd graph presents the WeeFIM® progress as a function of age for one of the five children in the subgroup being analyzed whose age at the beginning of treatment was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® progress as a function of age for children without developmental delays or disabilities.



The 3rd graph is followed by a WeeFIM® Levels of Function chart with markers indicating the average Level of Function at the first assessment and the last assessment for the individual child whose results were presented in the 3rd graph.

All graphs are laid out in the same way:

- The left y-axis is the *Functional Independence Quotient* (total score or total domain score/ maximum score x 100). Values can range from a minimum of 14% (18/126) to a maximum of 100% (126/126). Given that the minimum possible score is 14% (18/126), the left y-axis scale starts at 10% not 0%.
- The right y-axis is the **Rating Descriptor** hierarchy. Descriptors from minimum to maximum are:
 - Total Assistance
 - Maximal Assistance
 - Moderate Assistance
 - Minimal Assistance
 - Supervision/Setup
 - Modified Independence
 - Complete Independence
- The x-axis shows age in years. Each circle on each plot represents a WeeFIM®
 assessment score administered at a given age in years.
- The left-most plot on each graph presents the WeeFIM® progress as a function of age for children without developmental delays or disabilities.
- The other plots to the right of the left-most plot on each graph present progress for select children in each subgroup that show WeeFIM® progress as a function of age



1st Subgroup: ADD/ADHD

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
41% to 52%	3 - 4

Figure 10: WeeFIM Progress as a Function of Age for Five Children With ADD/ADHD Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

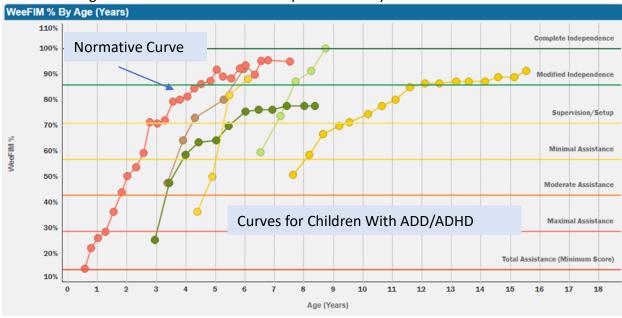
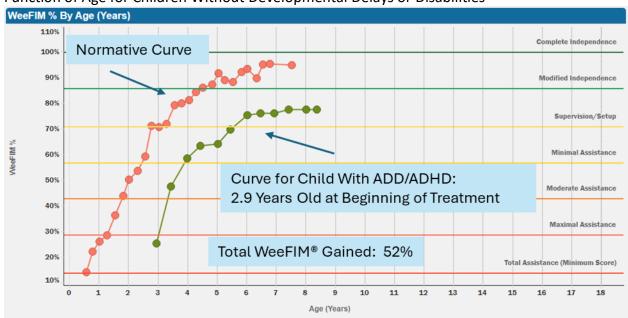




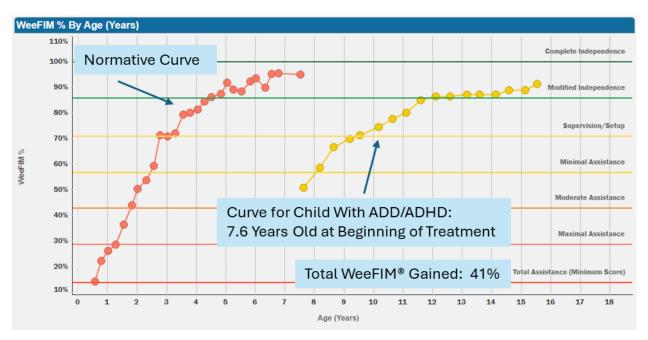
Figure 11: WeeFIM Progress as a Function of Age for One of the Five Children With ADD/ADHD Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
No Helper	Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
		Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
Helper	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 12: WeeFIM Progress as a Function of Age for One of the Five Children With ADD/ADHD Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
No Helper	Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
		Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
	Modified Dependence Helper	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Helper		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



2nd Subgroup: Autism Spectrum Disorder

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
55% to 71%	4 - 5

Figure 13: WeeFIM Progress as a Function of Age for Five Children With Autism Spectrum Disorder Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

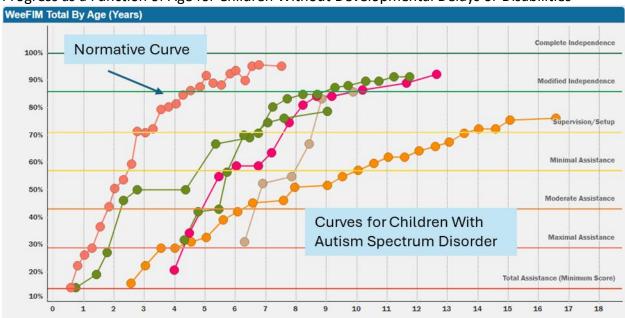
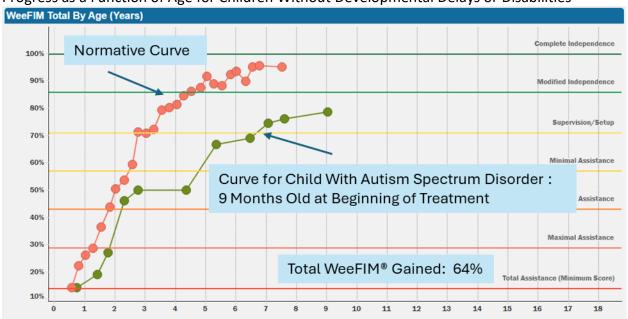




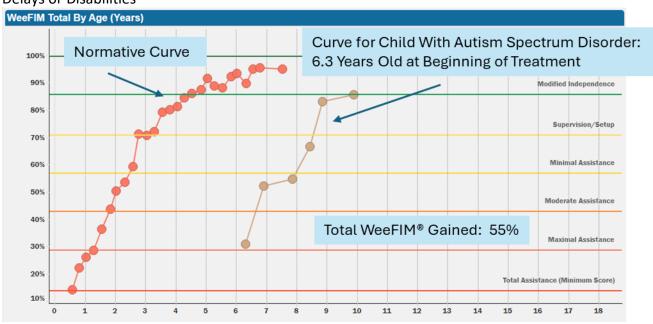
Figure 14: WeeFIM Progress as a Function of Age for One of the Five Children With Autism Spectrum Disorder Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
No Helper	Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
		Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
	Modified Dependence Helper	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Dependence		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 15: WeeFIM Progress as a Function of Age for One of the Five Children With Autism Spectrum Disorder Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function	
No Helper	Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids	
		Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety	Last Assessment
Helper	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	First Assessment
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	



3rd Subgroup: Brain Dysfunction

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
42% to 71%	3 - 5

Figure 16: WeeFIM Progress as a Function of Age for Five Children With Brain Dysfunction Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

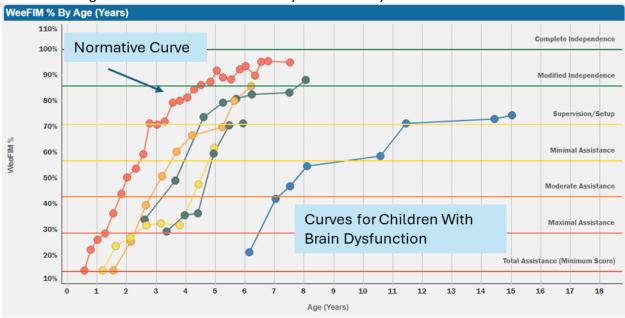
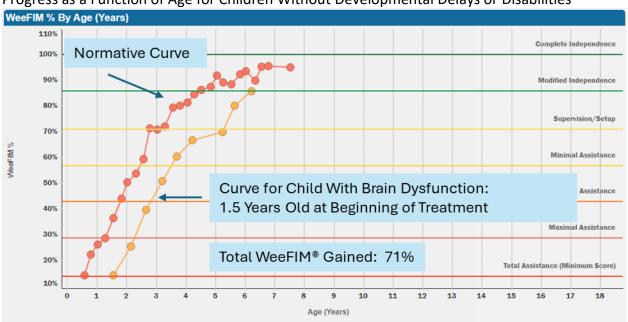




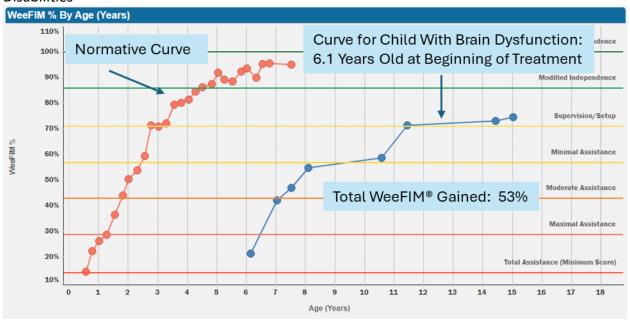
Figure 17: WeeFIM Progress as a Function of Age for One of the Five Children With Brain Dysfunction Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function	
No Helper Independence		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids	
	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety	Last Assessment	
	Modified Dependence Helper Complete Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	
		Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	First Assessment



Figure 18: WeeFIM Progress as a Function of Age for One of the Five Children With Brain Dysfunction Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



4th Subgroup: Cerebral Palsy

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
55% to 64%	4 - 5

Figure 19: WeeFIM Progress as a Function of Age for Five Children With Cerebral Palsy Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

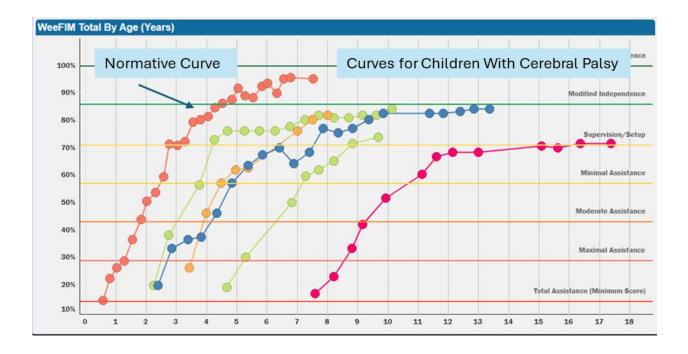
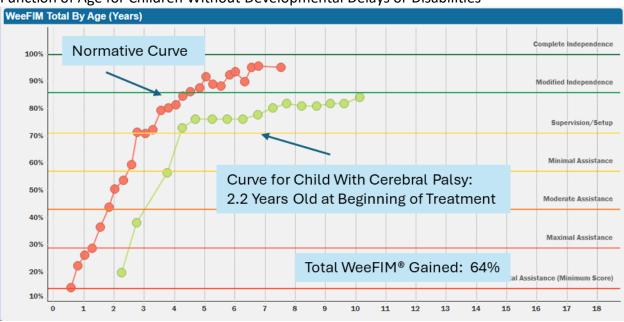




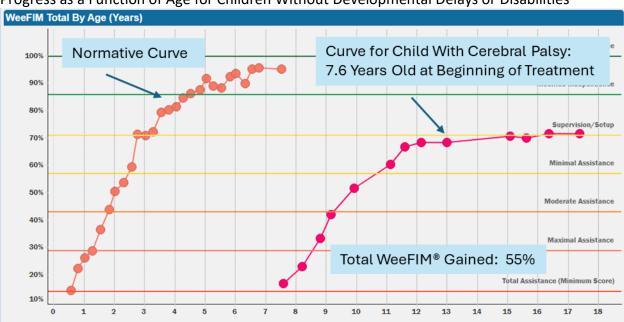
Figure 20: WeeFIM® Progress as a Function of Age for One of the Five Children With Cerebral Palsy Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
		Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Modified Dependence	Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 21: WeeFIM® Progress as a Function of Age for One of the Five Children With Cerebral Palsy Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
· · · · · · · · · · · · · · · · · · ·		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
	Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	
	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



5th Subgroup: Developmental Delay

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
69% to 75%	4 - 6

Figure 22: WeeFIM Progress as a Function of Age for Five Children With Developmental Delay Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

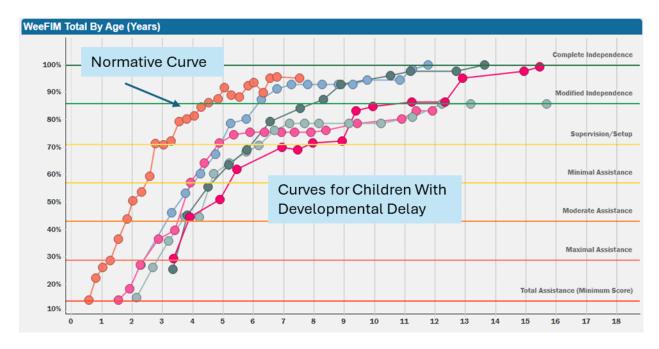
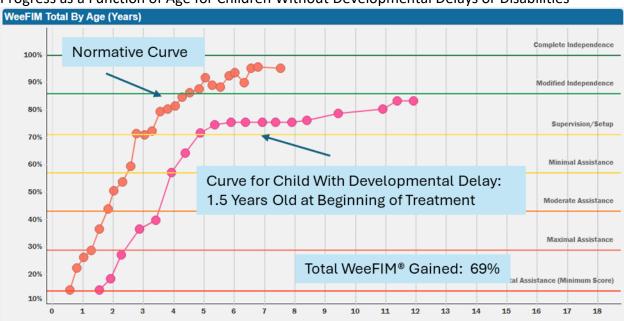




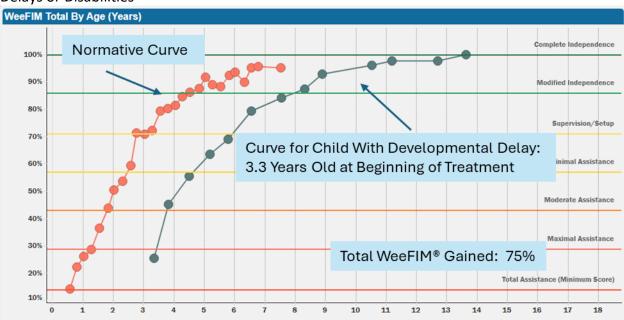
Figure 23: WeeFIM® Progress as a Function of Age for One of the Five Children With Developmental Delay Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function		
No Helper Independence		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids		
	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety			
			Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	Last Assessm
Modified Dependence	Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching			
Helper	Helper	Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching		
Co	Complete	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper		
	Dependence	Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	First Assessm	



Figure 24: WeeFIM® Progress as a Function of Age for One of the Five Children With Developmental Delay Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function	
	No Helper Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids	Last Assessment
No Helper		Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety	
	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
		Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	First Assessment



6th Subgroup: Genetic Disorders (Including Down Syndrome)

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
56% to 72%	4 - 5

Figure 25: WeeFIM Progress as a Function of Age for Five Children With Genetic Disorders Whose Total WeeFIM® Percent Gained is 40% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

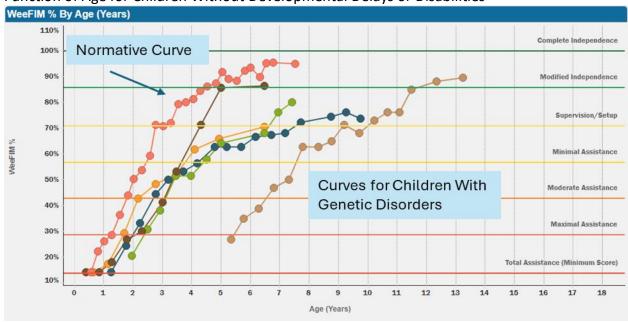
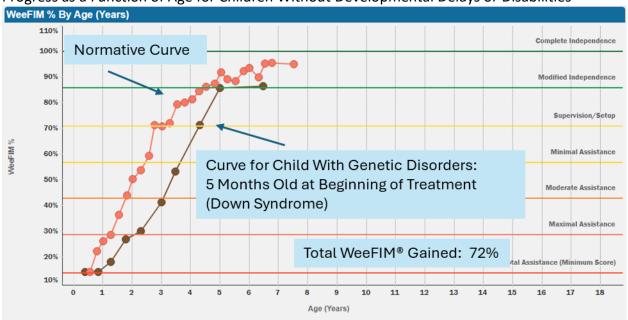




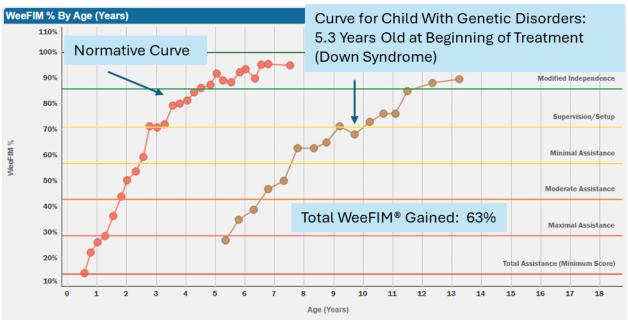
Figure 26: WeeFIM Progress as a Function of Age for One of the Five Children With Genetic Disorders Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
		Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
	Modified Dependence	Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



Figure 27: WeeFIM Progress as a Function of Age for One of the Five Children With Genetic Disorders Whose Total WeeFIM® Percent Gained is 40% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities



Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function
		Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids
No Helper	Independence	Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety
		Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance
Modified Dependence	Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
Helper		Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching
	Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper
		Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper



7th Subgroup: Speech and Language Impairments (*Note: Minimum % Gain Reduced From 40% to 17%*)

Total WeeFIM® Functional Independence	Rating Descriptor Levels Gained (Range
Quotient % Gained (Range Across 5 Children	Across 5 Children Selected)
Selected)	
17% to 50%	1-3

Figure 28: WeeFIM Progress as a Function of Age for Five Children With Speech and Language Impairments Whose Total WeeFIM® Percent Gained is 17% or Greater Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

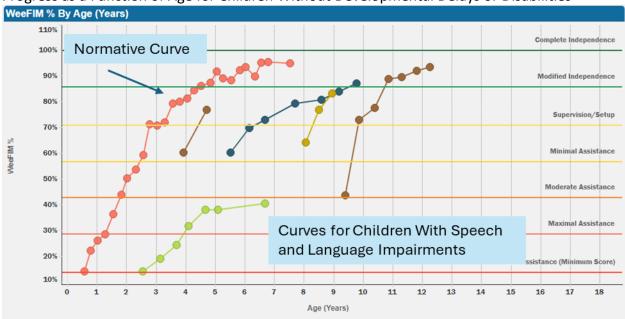




Figure 29: WeeFIM Progress as a Function of Age for One of the Five Children With Speech and Language Impairments Whose Total WeeFIM® Percent Gained is 17% or Greater and Whose Age at the Beginning of Treatment Was Between 6 Months and 3 Years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental Delays or Disabilities

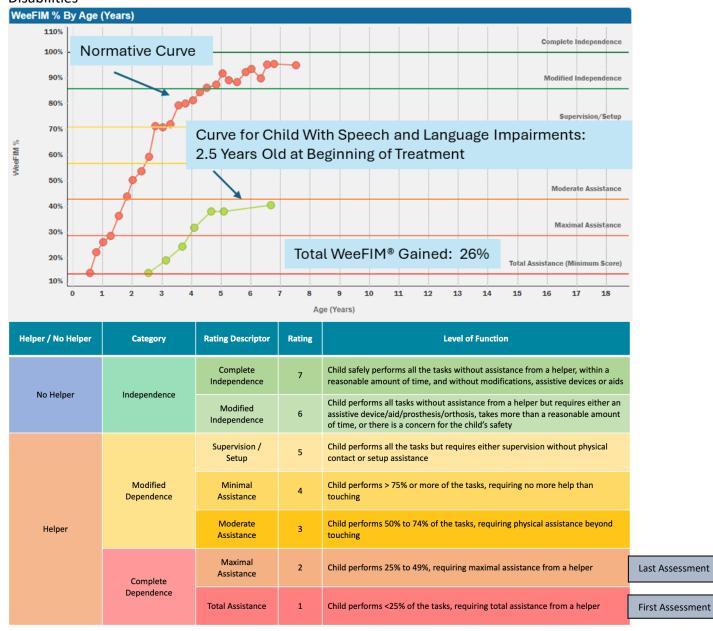
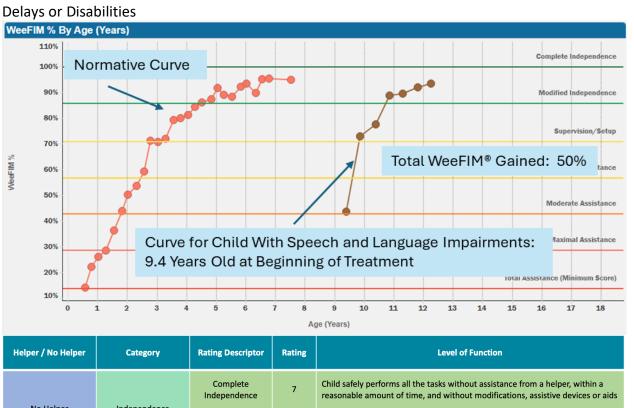




Figure 30: WeeFIM Progress as a Function of Age for One of the Five Children With Speech and Language Impairments Whose Total WeeFIM $^{\rm @}$ Percent Gained is 17% or Greater and Whose Age at the Beginning of Treatment Was Greater Than 3 years Old and Less Than 10 years Old Compared to WeeFIM® Progress as a Function of Age for Children Without Developmental



	Helper / No Helper	Category	Rating Descriptor	Rating	Level of Function	
	No Helper	Independence	Complete Independence	7	Child safely performs all the tasks without assistance from a helper, within a reasonable amount of time, and without modifications, assistive devices or aids	
			Modified Independence	6	Child performs all tasks without assistance from a helper but requires either an assistive device/aid/prosthesis/orthosis, takes more than a reasonable amount of time, or there is a concern for the child's safety	Last Assessment
	Helper	Modified Dependence	Supervision / Setup	5	Child performs all the tasks but requires either supervision without physical contact or setup assistance	
			Minimal Assistance	4	Child performs > 75% or more of the tasks, requiring no more help than touching	
			Moderate Assistance	3	Child performs 50% to 74% of the tasks, requiring physical assistance beyond touching	First Assessment
		Complete Dependence	Maximal Assistance	2	Child performs 25% to 49%, requiring maximal assistance from a helper	
			Total Assistance	1	Child performs <25% of the tasks, requiring total assistance from a helper	