

Missouri Department of Elementary and Secondary Education, First Steps Program: 2012 Eligibility Review and Forecasting

June 29, 2012

Update on 2007 Report

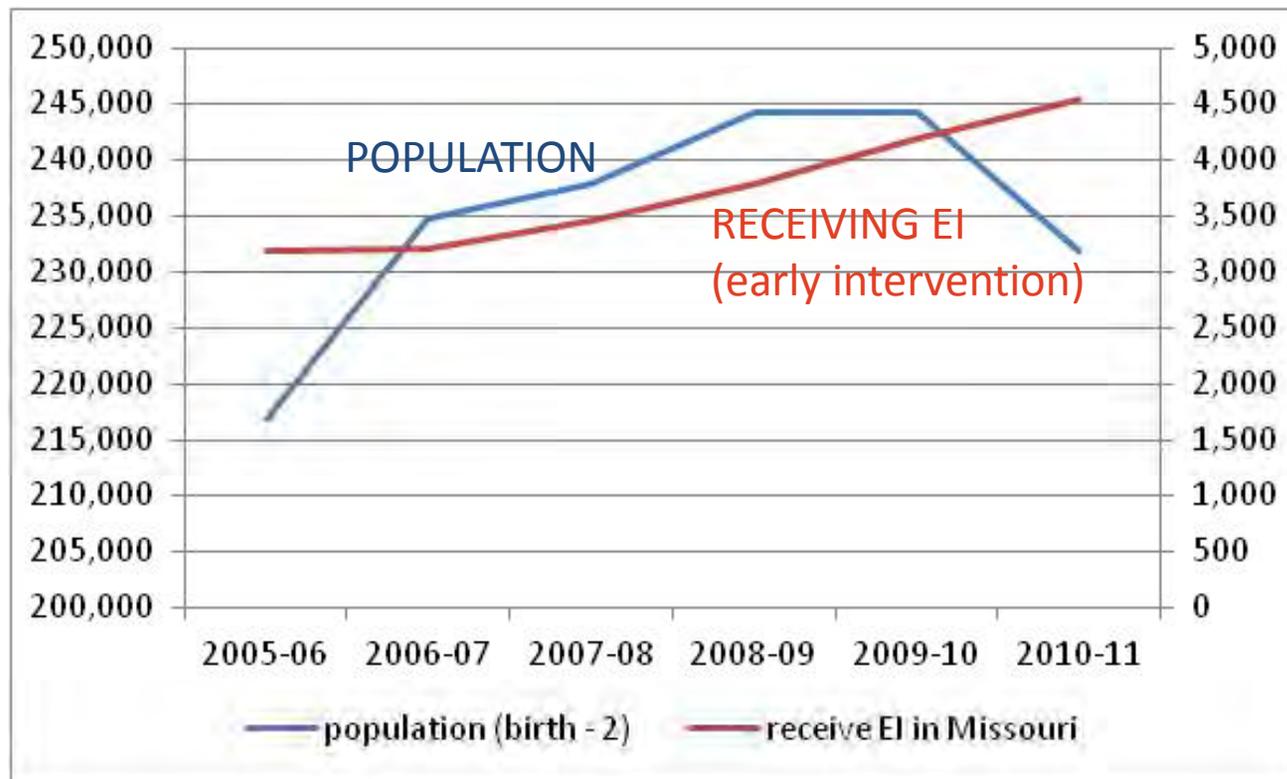
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Final Report

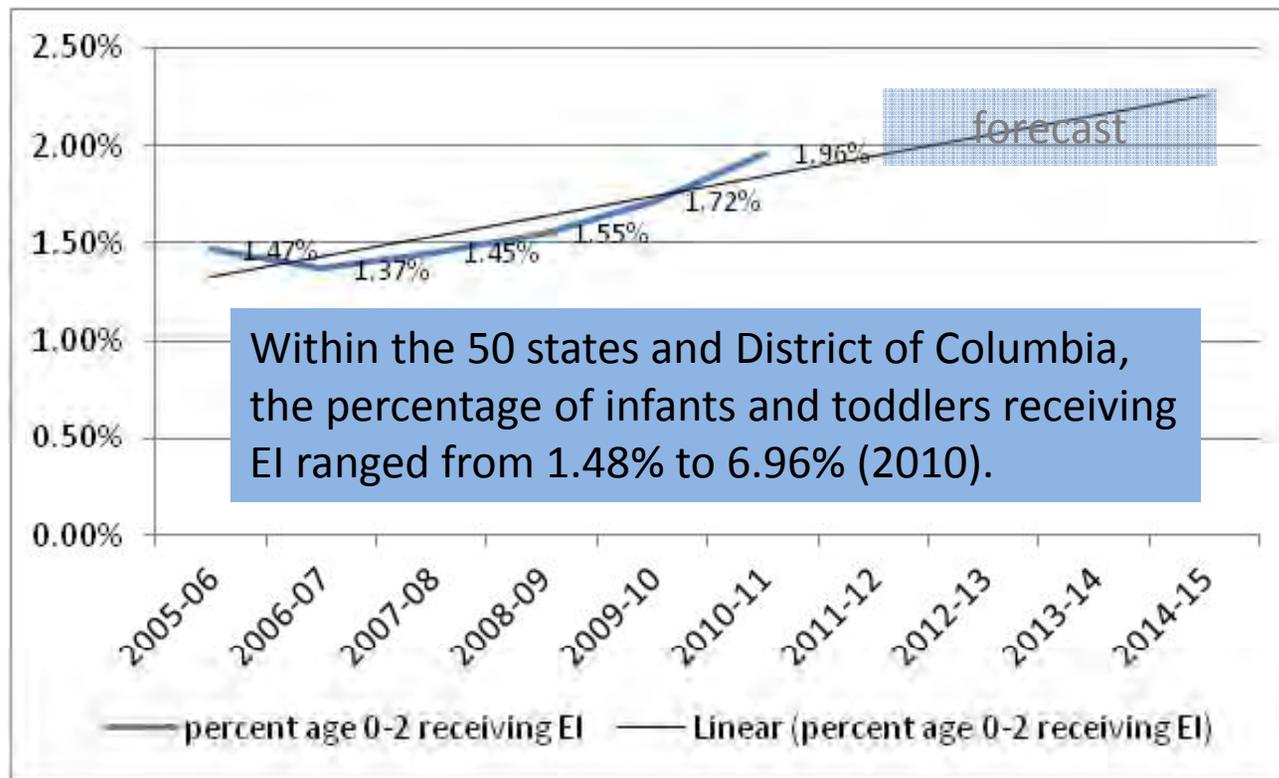
Children served under IDEA, Part C, in Missouri

- In Missouri, between 2005 and 2011, the number of infants and toddlers served under IDEA Part C has **increased steadily**, despite a leveling and subsequent decline in relevant population beginning in about 2008-09.



Percentage of children served under IDEA, Part C.

- In 2010-11, the percentage of Missouri infants and toddlers receiving early intervention (EI) was 1.96%. *May 2012: 2.28%* (SPOE Key Indicators Report).
- Based on observed trend in Missouri, percentage is forecast to **increase** over the next three years.



Early Intervention Variables

Early Intervention Variables include the following:

- Very low birth weight
- Medical conditions (associated with impaired development)
- Developmental Delay*

**Established the “category” for state comparison*

Gap Analysis

Variables are the three eligibility criteria.

This study will identify gaps between the prevalence measure for each of the three variables and the current performance level for each variable.

- Prevalence is defined as the estimated population of a variable at any given time and is expressed as a rate (i.e., # per 1,000 applicable population). Based on stable population.
- Performance level is defined as the actual number of children participating in early intervention in Missouri.

These gaps indicate the opportunity to identify children with disabilities who are not receiving early intervention.

Very Low Birth Weight

- Very low birth weight infants are born with a birth weight less than 1,500 grams, or three pounds, four ounces. Besides having a 24% mortality risk in their first year, very low birth weight infants are at increased risk of long-term disability and impaired development.
- The rate of very low birth weight births in Missouri has remained roughly the same in recent years, matching the steady national rate of 1.5%. The most recent very low birth weight prevalence (the estimated population with very low birth weight at any given time) is 5.3 per 1,000 births.

SOURCES:

Children's Hospital of Philadelphia - Health Information, 2012;

Centers for Disease Control (CDC) - Very Low Birth Weight Births by State, 2009.

Gap Analysis: Very Low Birth Weight

- In 2011-12, the number of infants and toddlers with very low birth weight receiving EI in MO was 998, or 0.43% of the eligible population.
- In 2011-12, the expected percentage of the population birth to three years of age (prevalence measure) with very low birth weight was 0.53%.
- The difference between the expected percentage and actual percentage of infants and toddlers receiving early intervention was 0.10%, **a gap of 232 infants and toddlers with very low birth weight.**

Category	Year of Study	Prevalence Measure	Percent receiving EI		Number receiving Early Intervention		
			MO		Projection based on	MO	
			First Steps	GAP	Prevalence	First Steps	GAP
Very Low Birth Weight	2011-12	0.53%	0.43%	0.10%	1,230	998	232
	2006-07	0.51%	0.28%	0.23%	1,182	649	533
measure: <i>percentage of infants born</i>							

- Since the last study in 2006-07, the gap (opportunity for additional early intervention) has been reduced by 301.

Medical Conditions

Medical Conditions associated with increased risk of long-term disability and impaired development include the following:

- Cerebral Palsy
- Deaf/Hard of hearing
- Blind
- Down syndrome
- Autism
- Multiple Conditions
- Other

Medical Conditions

- In 2011-12, the number of infants and toddlers with medical conditions in EI in MO was 1,369, or 0.59% of the eligible population.
- In 2011-12, the expected percentage of the population birth to three years of age (prevalence measure) with medical conditions was 0.76%.
 - Computed prevalence of medical conditions was reduced by 30% due to expected overlap among medical conditions.
- The difference between the expected percentage and actual percentage of infants and toddlers receiving early intervention was 0.17%, **a gap of 394 infants and toddlers with applicable medical conditions.**
- Since the last study in 2006-07, the gap (opportunity for additional early intervention) has been reduced by 662.

Gap Analysis: Medical Conditions

Category	Year of Study	Prevalence Measure	Percent receiving EI		Number receiving Early Intervention		
			MO	GAP	Projection based on	MO	
			First Steps		Prevalence	First Steps	GAP
Medical Conditions							
Total	2011-12	0.76%	0.59%	0.17%	1,763	1,369	394
<i>reduced by 30% for overlap</i>	2006-07	0.97%	0.51%	0.46%	2,238	1,182	1,056
Total	2011-12	1.08%					
	2006-07	1.38%					
cerebral palsy	2011-12	0.20%					
	2006-07	0.17%					
	measure: 2011-12 - 2.0-2.5 per 1000 live births; 2006-07 - 1.7-2.0 per 1000 1 year survivors						
hearing impairment	2011-12	0.14%					
	2006-07	0.11%					
	measure: 2011-12 - 1.4 per 1000 infants screened; 2006-07 - 1.1 per 1000 10-year old children						
legal blindness	2011-12	0.07%					
	2006-07	0.07%					
	measure: 2011-12 - 0.65-2.75 per 1000 children; 2006-07 - 6.8 per 10,000 10-year old children						
down syndrome	2011-12	0.12%					
	2006-07						
	measure: 2011-12 - 11.8 per 10,000 live births						
autism	2011-12	0.55%					
	2006-07	0.23%					
	2011-12 - 5.5-5.7 per 1000 children 4-17 years of age						
other	2011-12						
	2006-07	0.80%					
Other Physician Directed							
Total	2011-12	0.08%	0.08%	0.00%	189	189	0
	2006-07	0.07%	0.07%	0.00%	162	162	0

Developmental Delay

- Developmental delays in young children may occur when developmental milestones are not met and/or the child experiences atypical development in one of the five developmental domains (adaptive, cognitive, communication, physical, social/emotional).
- There is variance among states regarding the identification and use of developmental delay criteria.
- For this study, the prevalence rate for developmental delay has been determined by calculating the overall experience (weighted average) of the states using the same criteria as Missouri (i.e., narrow category).

Gap Analysis: Developmental Delay (narrow)

- In 2011-12, the number of infants and toddlers with developmental delay receiving EI in MO was 2,733, or 1.21% of the eligible population.
- In 2011-12, the expected percentage of the population birth to three years of age (prevalence measure) with developmental delay was 12.1 per 1,000 children, or 1.21%. (SOURCE: states utilizing 50% DD criteria, 2010.)
- The difference between the expected percentage and actual percentage of infants and toddlers receiving early intervention was 0.03%, **a gap of 64 infants and toddlers with developmental delay.**

Category	Year of Study	Prevalence Measure	Percent receiving EI		Number receiving Early Intervention		
			MO	GAP	Projection based on	MO	
			First Steps		Prevalence	First Steps	GAP
Developmental Delay	2011-12	1.21%	1.18%	0.03%	2,797	2,733	64
	2006-07	0.81%	0.61%	0.20%	1,877	1,413	464
prevalence measure: <i>weighted average of states using 50% developmental delay criteria</i>							

- Since the last study in 2006-07, the gap (opportunity for additional early intervention) has been reduced by 400.

Gap Analysis: All Variables

- In 2011-12, the number of infants and toddlers receiving EI in MO (all variables) was 5,289, or 2.28% of the eligible population.
- In 2011-12, the expected percentage of the population birth to three years of age (prevalence measure) receiving early intervention was 2.58%.
- The difference between the expected percentage and actual percentage of infants and toddlers receiving early intervention was 0.30%, **a gap of 690 infants and toddlers.**

Category	Year of Study	Prevalence Measure	Percent receiving EI		Number receiving Early Intervention		
			MO	GAP	Projection based on	MO	GAP
			First Steps		Prevalence	First Steps	
All Variables	2011-12	2.58%	2.28%	0.30%	5,979	5,289	690
	2006-07	2.36%	1.47%	0.89%	5,459	3,406	2,053

- Since the last study in 2006-07, the gap (opportunity for additional early intervention) has been reduced by 1,363.

Gap Analysis: Summary

Year of Study: 2011-12

	Prevalence			
Variable	Measure	Missouri	Gap %	Gap #
Very Low Birth Weight	0.53%	0.43%	0.10%	232
Medical Conditions	0.76%	0.59%	0.17%	394
Other Conditions	0.08%	0.08%	--	--
Developmental Delay	1.21%	1.18%	0.03%	64
Total	2.58%	2.28%	0.30%	690

Gap Analysis: Summary

- This chart illustrates the change in gap between the 2007 study and 2012 study. Although the gap has been significantly reduced, a continued opportunity (“2012 Opportunity”) exists to meet the needs of additional children brought into the First Steps Program.



Gap Analysis: Missouri Goal Range

- In order to provide **broad** incentive for achieving success, Missouri goals can fall into a range for each category.
- Each range is consistent with the observed trends within each category.
- Missouri recommended range median is 40% of prevalence goal (overall).
- Recommended calculation is illustrated below.

Year of Study: 2011-12

Variable	Actual Missouri	Recommended		Prevalence Measure
		Range Low	Range High	
Very Low Birth Weight	0.43%	0.45%	0.48%	0.53%
Medical Conditions	0.59%	0.63%	0.69%	0.76%
Other Conditions	0.08%	0.08%	0.08%	0.08%
Developmental Delay	1.18%	1.19%	1.20%	1.21%
Total	2.28%	2.35%	2.45%	2.58%
Median		2.40%		

Missouri Goal Range

The following table shows goal range by region.

Year of Study: 2011-12

	Prevalence Measure	2011-12			Projected GAP (percentage)			2011-12			Projected GAP (number)		
		GOAL Range			MO Fst Steps	GAP Range			MO Fst Steps	GAP Range			
		LOW	MEDIAN	HIGH	<i>actual</i>	LOW	MEDIAN	HIGH	<i>actual</i>	LOW	MEDIAN	HIGH	
ALL REGIONS	2.35%	2.40%	2.45%	2.28%	0.07%	0.12%	0.17%	5288	164	280	396		
1 Greater St. Louis	2.35%	2.40%	2.45%	2.37%	-0.02%	0.03%	0.08%	649		9	23		
2 St. Louis County	2.35%	2.40%	2.45%	2.37%	-0.02%	0.03%	0.08%	816		11	28		
3 Northeast	2.35%	2.40%	2.45%	2.50%	-0.15%	-0.10%	-0.05%	319					
4 Northwest	2.35%	2.40%	2.45%	2.16%	0.19%	0.24%	0.29%	469	42	52	63		
5 Kansas City	2.35%	2.40%	2.45%	2.28%	0.07%	0.12%	0.17%	854	26	45	64		
6 Central	2.35%	2.40%	2.45%	2.35%	0.00%	0.05%	0.10%	471		9	19		
7 Southwest	2.35%	2.40%	2.45%	2.22%	0.13%	0.18%	0.23%	311	18	25	32		
8 South Central	2.35%	2.40%	2.45%	2.13%	0.22%	0.27%	0.32%	518	53	65	77		
9 East Central	2.35%	2.40%	2.45%	2.31%	0.04%	0.09%	0.14%	538	9	21	32		
10 Southeast	2.35%	2.40%	2.45%	2.06%	0.29%	0.34%	0.39%	342	48	56	65		

Rounding, elimination of negative gaps affect gap range (number).

SOURCES: 2011-12 MO First Steps actual statistics (SPOE Key Indicators Report, May 2012); Goal Range and Projected Gap (this forecasting study: summary on page 21).