



Service Cost Analysis for Fiscal Years 2009 - 2014

A study conducted by:
Philips & Associates, Inc.
with the
Missouri Department of Elementary and Secondary Education
Office of Special Education

September 2015

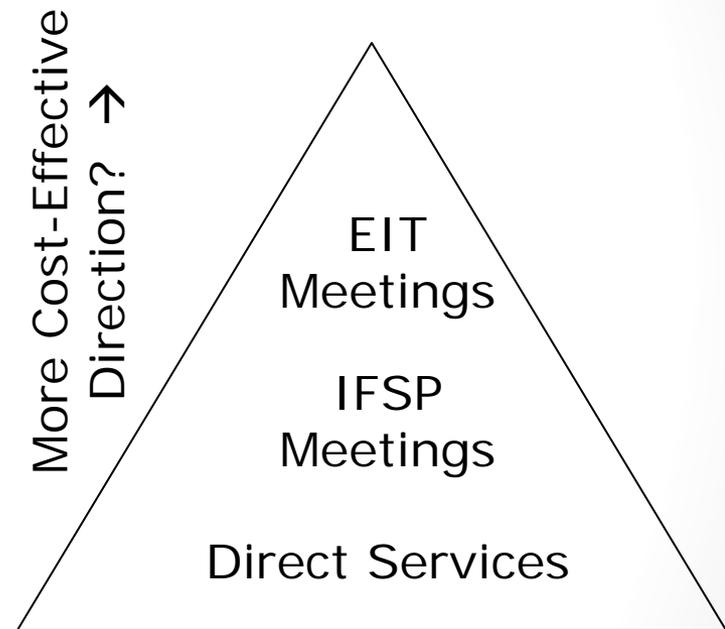
Background

- In July 2009, First Steps introduced a change in how services were delivered to families in order to organize providers more efficiently.
- The new model, called **Early Intervention Teams (EITs)**, requires the System Point of Entry (SPOE) to organize providers into teams with at least one Occupational Therapist, Physical Therapist, Speech/Language Pathologist, Special Instructor and Service Coordinator per team.
- Over the course of four years (2009 – 2013) new families referred to First Steps were assigned to EITs. Since July 2013, at least 95% of all new families in Missouri have been assigned to teams.

Common Assumptions about Teaming*

In a transdisciplinary team model:

- ✓ #1: A team model is more expensive than a traditional therapy model.
- ✓ #2: The use of ancillary providers will decrease.
- ✓ #3: The use of special instructors will increase.



*According to Rush, D., & Sheldon, M. (2008). *Common Misconceptions About Coaching in Early Intervention*. CASEinPoint, 4(1), 1-4.

Tracking Service Costs

- The state maintains a **monthly tracking report** of statewide expenditures and revenues.
- This study was initiated because service data from fiscal year 2013 (FY13) and fiscal year 2014 (FY14) were comparable, an indication that teams were fully implemented.

	FY 10	FY 11	FY 12	FY 13	FY 14
Program expenses	\$36,806,502	\$40,021,758	\$40,185,896	\$37,764,333	\$37,668,099
Program cost/child	\$4,008	\$4,057	\$3,770	\$3,374	\$3,243
Direct expenses	\$25,792,576	\$28,468,489	\$28,461,659	\$26,640,526	\$26,647,096
Direct cost/child	\$2,809	\$2,886	\$2,670	\$2,380	\$2,294

NOTE 1: *There were no changes to service rates during this time.*

NOTE 2: *FY09 - 10 data were prior to teaming.*

FY11 - 12 data were during implementation.

FY13 - 14 data were after full implementation.

Scope of Work

- For the six-year period of time (i.e., FY09 – 14), the contractor was asked to **analyze financial data** for each year and provide a summary of statewide trends in services, including any increase or decrease in costs from year to year.
- For the purpose of this study, First Steps services were divided into three types:
 - ✓ Direct Services
 - ✓ Individualized Family Service Plan (IFSP) Meetings
 - ✓ EIT Meetings

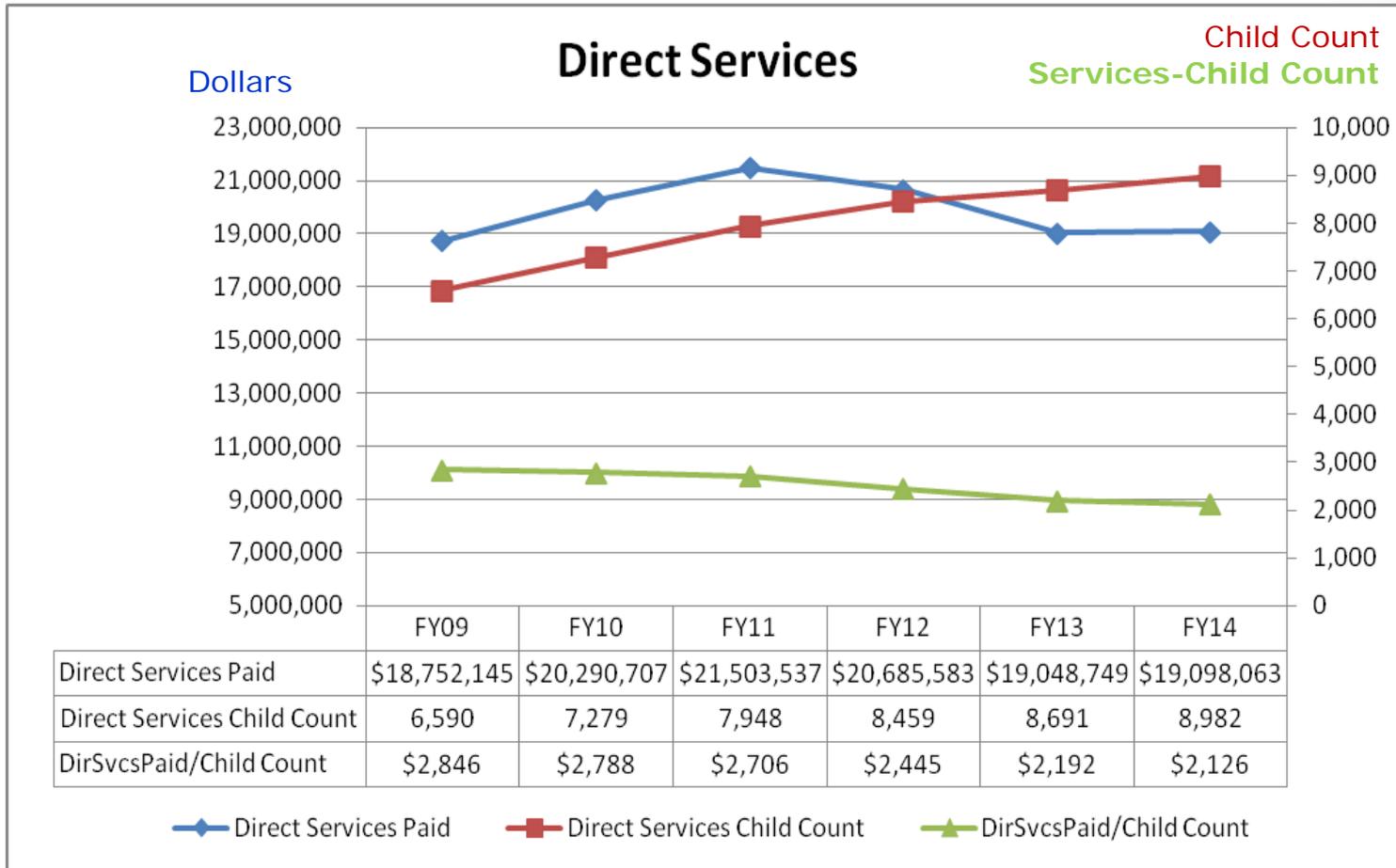
Types of Services

- **Direct Services** are the services identified by the child's IFSP team and delivered by qualified providers, generally in the natural environment. Examples include consultation with others, a support joint visit or a direct visit.
- **IFSP Meetings** are held to determine outcomes important to the family and the services necessary for the child and family to reach those outcomes.
- **EIT Meetings** are held on a regular basis (e.g., monthly) to give time for members to plan for upcoming IFSP meetings, determine availability for upcoming assessments, and strategize with one another on activities for families served by the team.
 - Children requiring services not represented on the EIT receive those services from other disciplines (i.e., ancillary providers) enrolled with the Central Finance Office (CFO).

Results

- The outcome of the data analyses are presented in three sections: Direct Services, IFSP Meetings and EIT Meetings.
- Results are presented in statements related to:
 - ✓ Efficiencies
 - ✓ Red Flags

Results for Direct Services Data

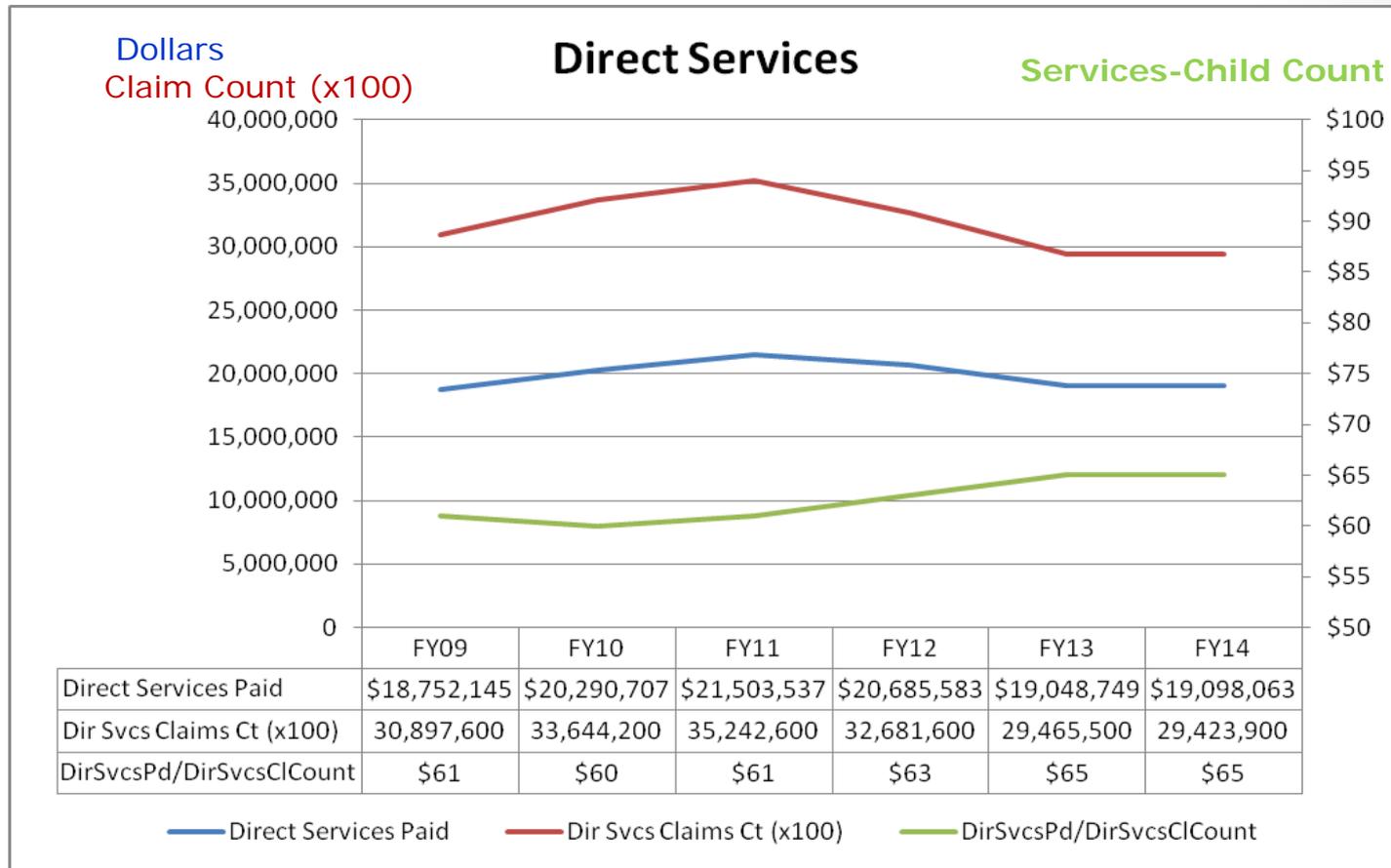


Blue Line is the total paid for direct services.

Red Line is the child count.

Green Line is annual cost of direct services per child.

Efficiency: As child count increased, the average cost per child for direct services decreased.



Blue Line is the total paid for direct services.

Red Line is the direct services count (x 100).

Green Line is the ratio of direct service claim cost to child count.

Red Flag: Over the five year period there was an increase in the average cost per claim (\$61 to \$65).

Possible Reasons for Increase in Cost Per Claim

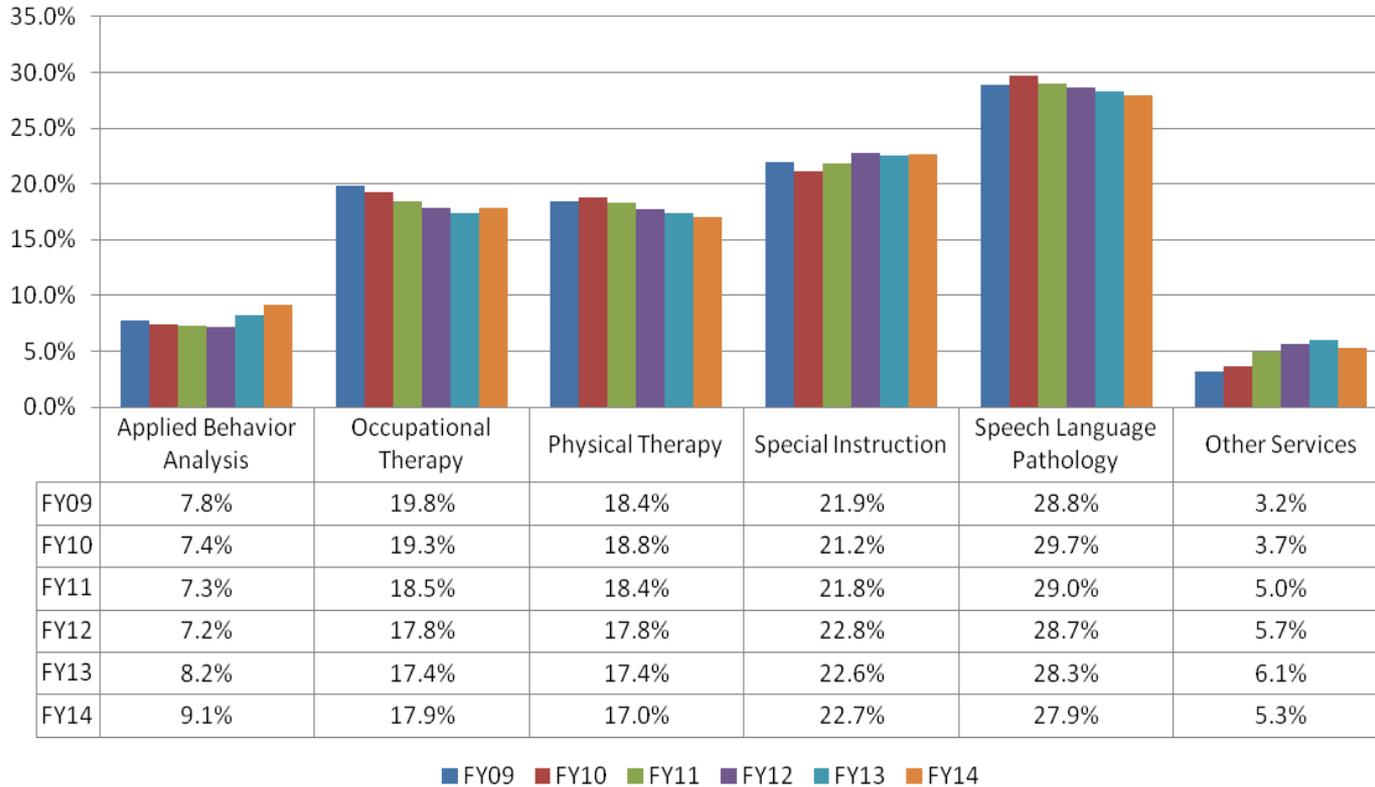
- Use of specialists vs. assistants?
- Use of the natural environment vs. clinic?
- Other?

Missouri Part C State Performance Plan/ Annual Performance Report (SPP/APR) Indicator 2: Natural Environments

	FY10	FY11	FY12	FY13	FY14
Home	93.4%	94.8%	94.8%	94.7%	95.2%
Community	4.8%	4.1%	4.1%	4.3%	4.1%
Total	98.2%	98.9%	98.9%	99%	99.3%

Percent to Total
Direct Services Paid

Direct Services

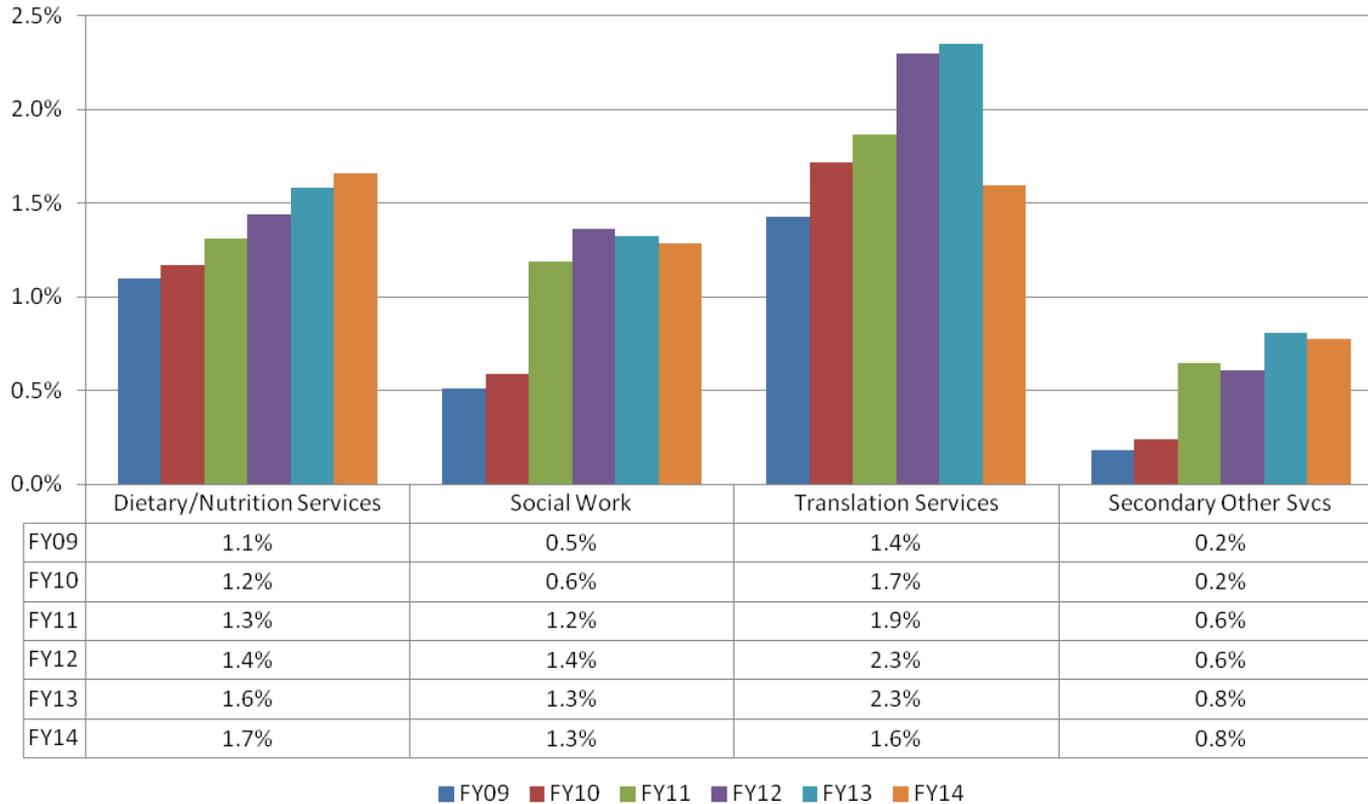


Change Compared to Total Paid Claims for Top 5 Services

- Applied Behavior Analysis, slight increase
- Occupational Therapy, slight decrease
- Physical Therapy, slight decrease
- Special Instruction, slight increase
- Speech Language Pathology, slight decrease
- Other Services, steady increase

Percent to Total
Direct Services Paid

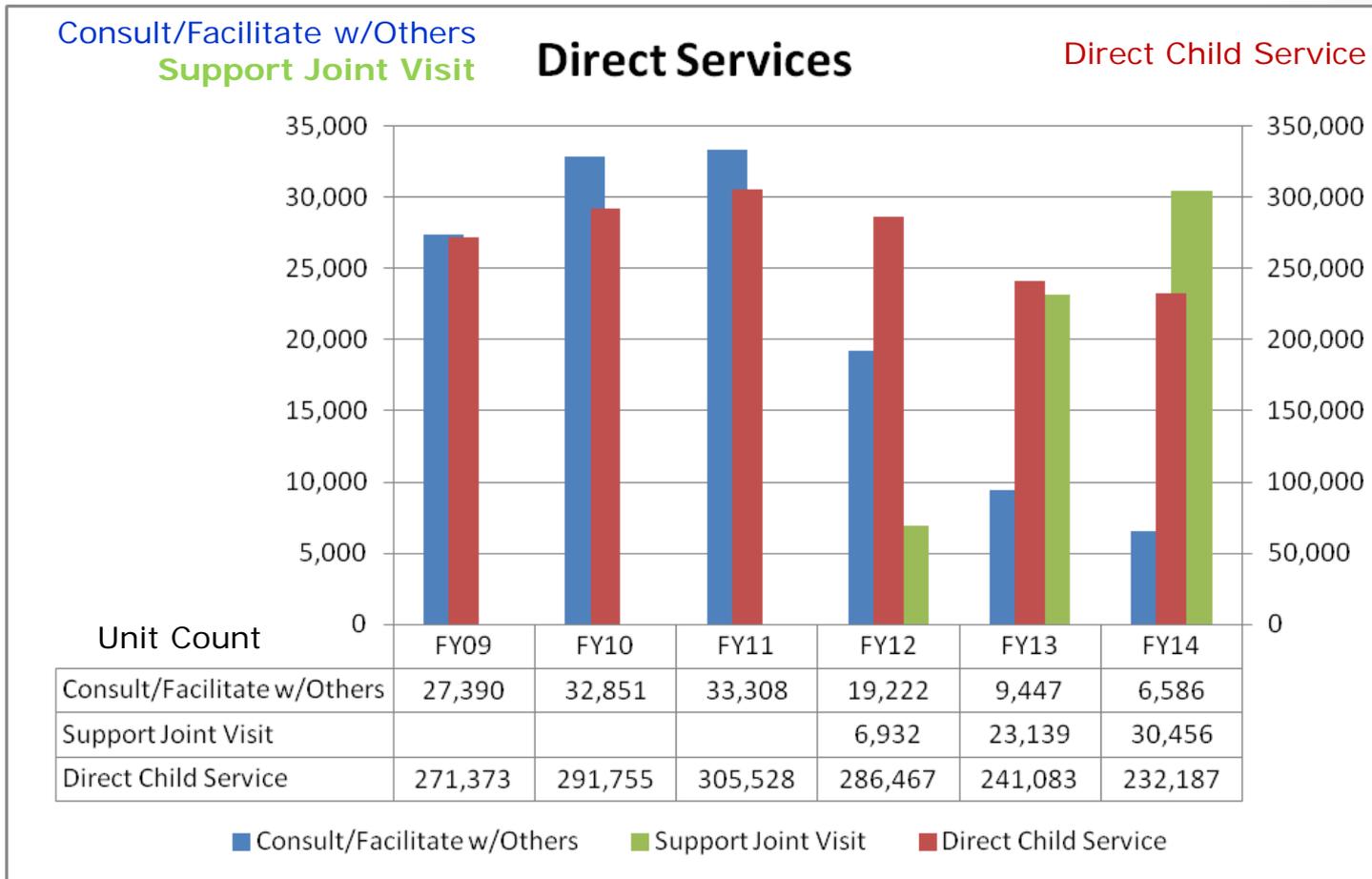
Direct Services



Change Compared to Total Paid Claims for "Other Services"

- Dietary/Nutrition, consistent increase
- Social Work, overall increase
- Translation, consistent increase until FY14*
- Secondary Other Services, overall increase (e.g., counseling, health, vision)

Red Flag: Decrease in Translation Services in FY14 due to an increase in the use of state contracted translators, which are not included in the claims database.



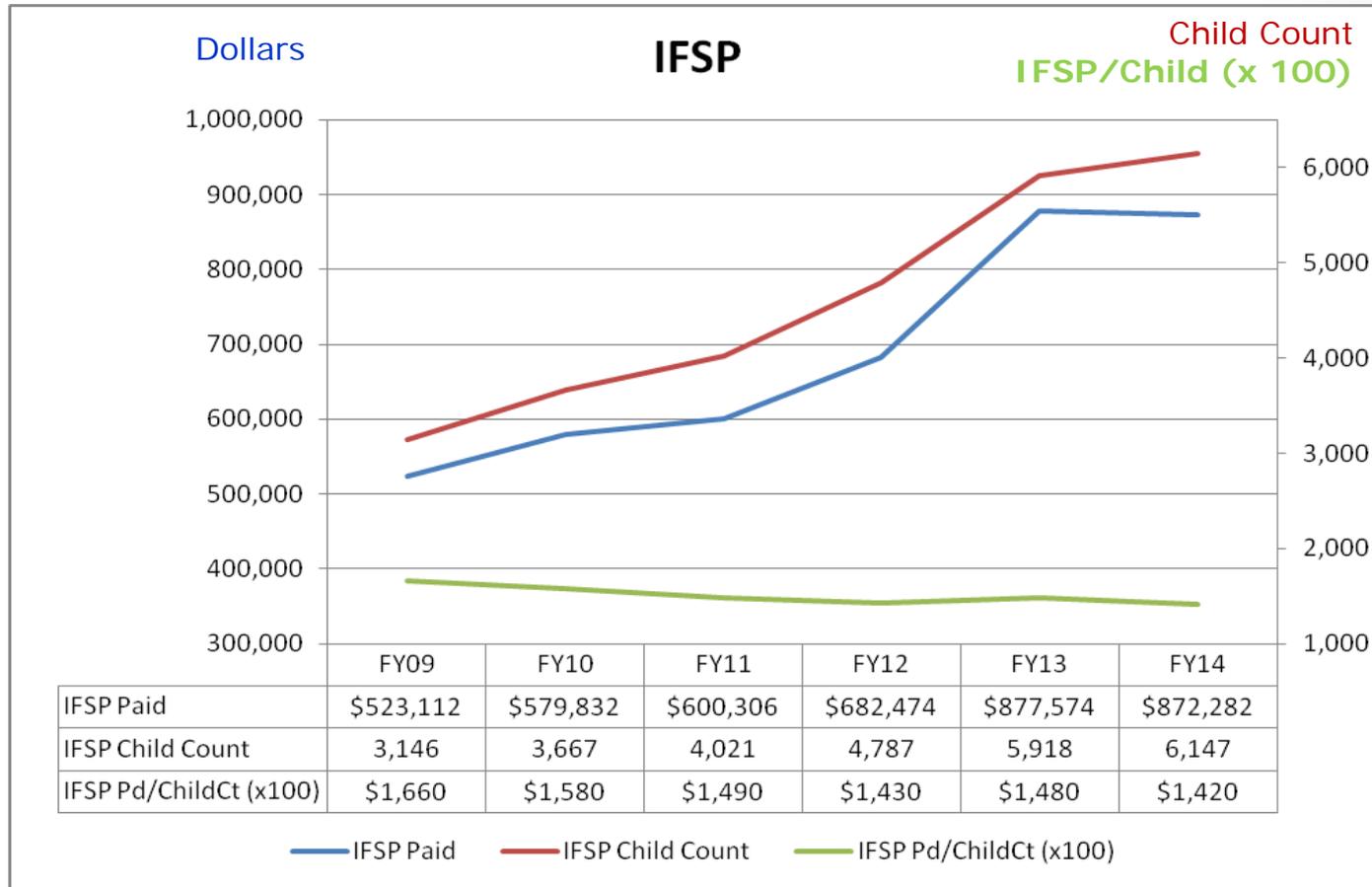
Blue Bar is Consultation/ Facilitation with Others.

Red Bar is Direct Services.

Green Bar is Support Joint Visits.

Efficiency: Consultation/Facilitation with Others decreased sharply between FY 11 and FY14, which directly related to the use of a team model.

Results for IFSP Meeting Data



Red Line is child count for IFSP Meetings.

Blue Line is total paid for IFSP Meetings.

Green Line is ratio of IFSP Meetings per child count (x 100).

Efficiency: As number of meetings and child count increased, the average cost per child decreased.

IFSP Meetings

	FY09	FY10	FY11	FY12	FY13	FY14
Number IFSP/Child Count	2.2	2.2	2.0	2.2	2.4	2.4

Annual number of IFSP meetings per child steadily increased.

	FY09	FY10	FY11	FY12	FY13	FY14
IFSP Paid/Child Count	\$166	\$158	\$149	\$143	\$148	\$142

Annual IFSP meeting cost per child steadily decreased.

	FY09	FY10	FY11	FY12	FY13	FY14
Total IFSP Claims	\$523,112	\$579,832	\$600,306	\$682,474	\$877,574	\$872,282
Number IFSP	6,910	8,038	8,281	10,311	14,453	14,633
Average	\$76	\$72	\$72	\$66	\$61	\$60

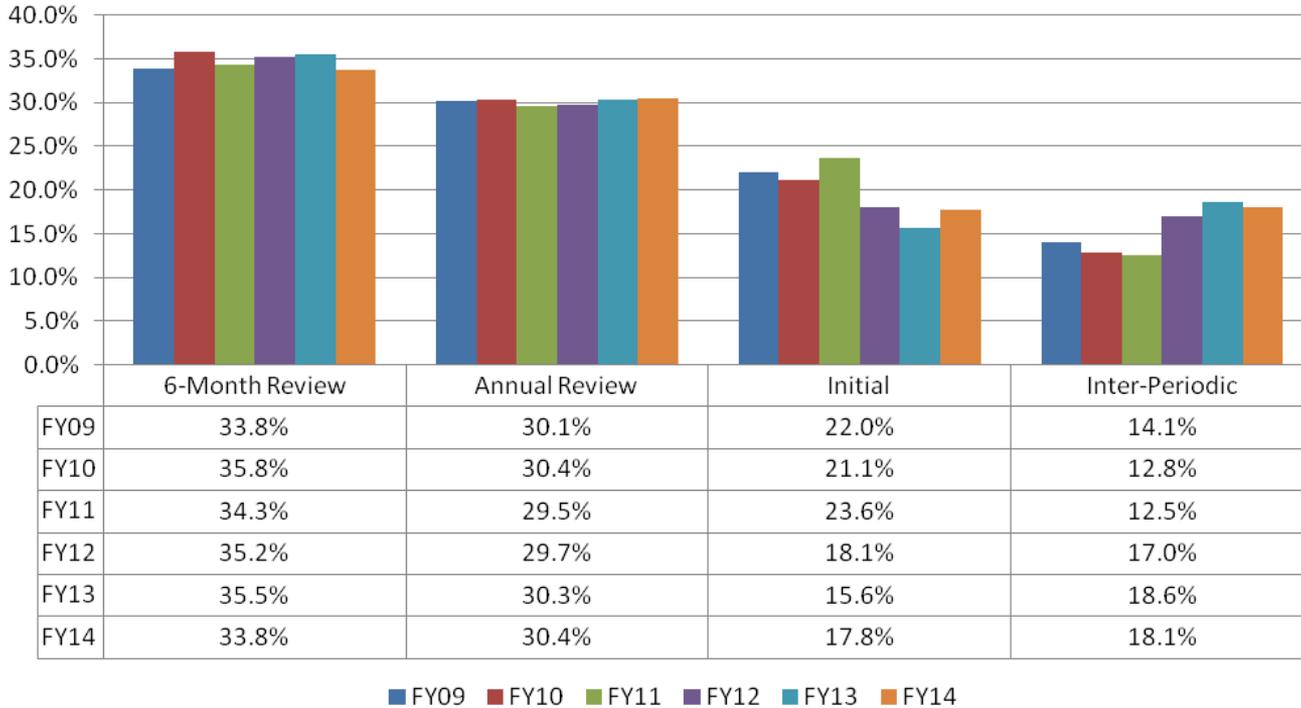
Average cost for a single IFSP meeting steadily decreased.

Red Flag: The number of IFSP Meetings increased.

Efficiency: The average amount paid for IFSP Meetings per child decreased.

Percent of IFSP Claims

IFSP



Change in IFSP Meeting Claims:

6-month IFSP Meetings, steady

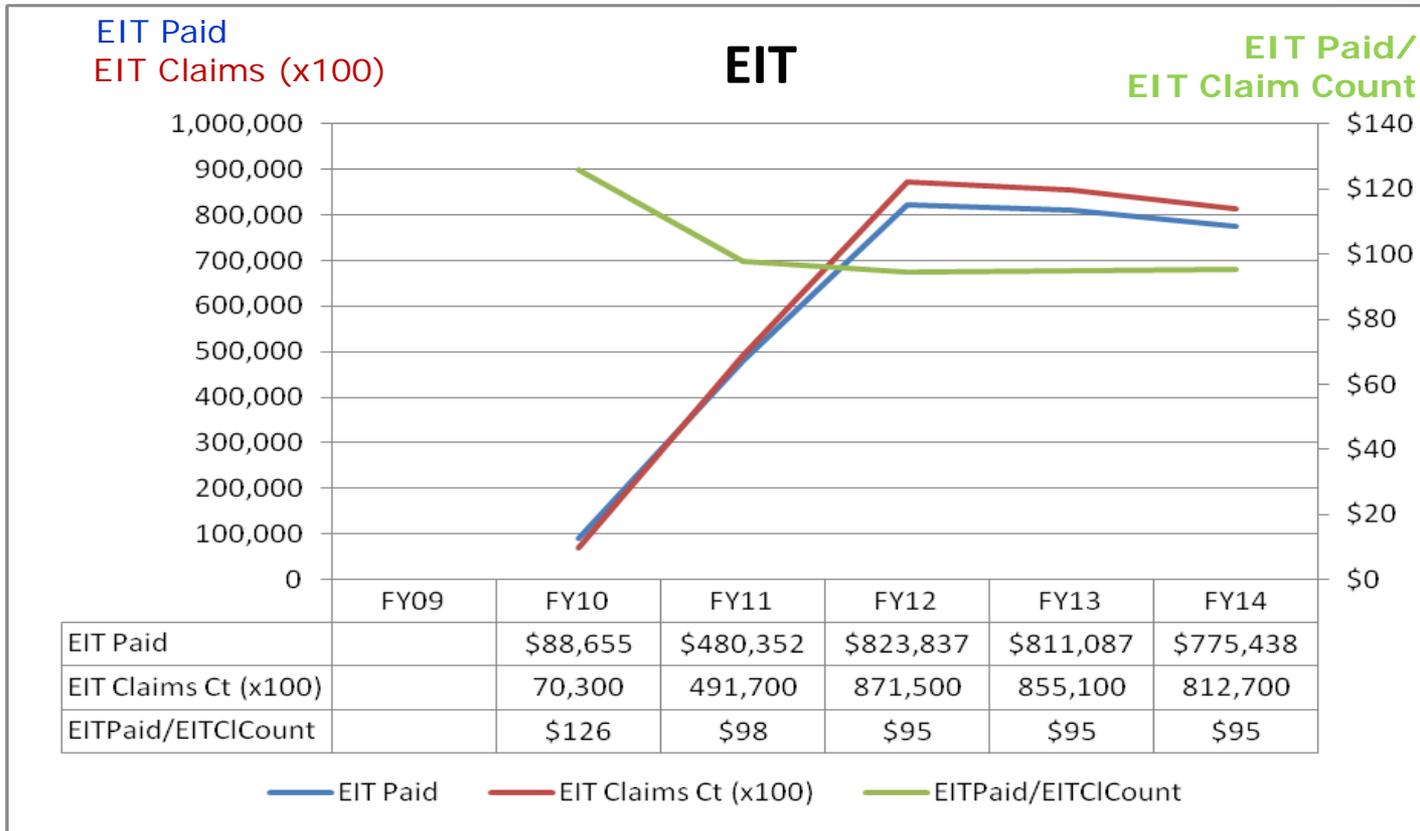
Annual IFSP Meetings, slight increase

Initial IFSP Meetings, slight decrease

Inter-periodic IFSP Meetings, consistent increase

Red Flag: Paid Initial IFSP meetings decreased due to fewer providers attending the initial meeting (in-person or by conference call).

**Results for
EIT Meeting
and Summary
Data**



Change in EIT Meetings:

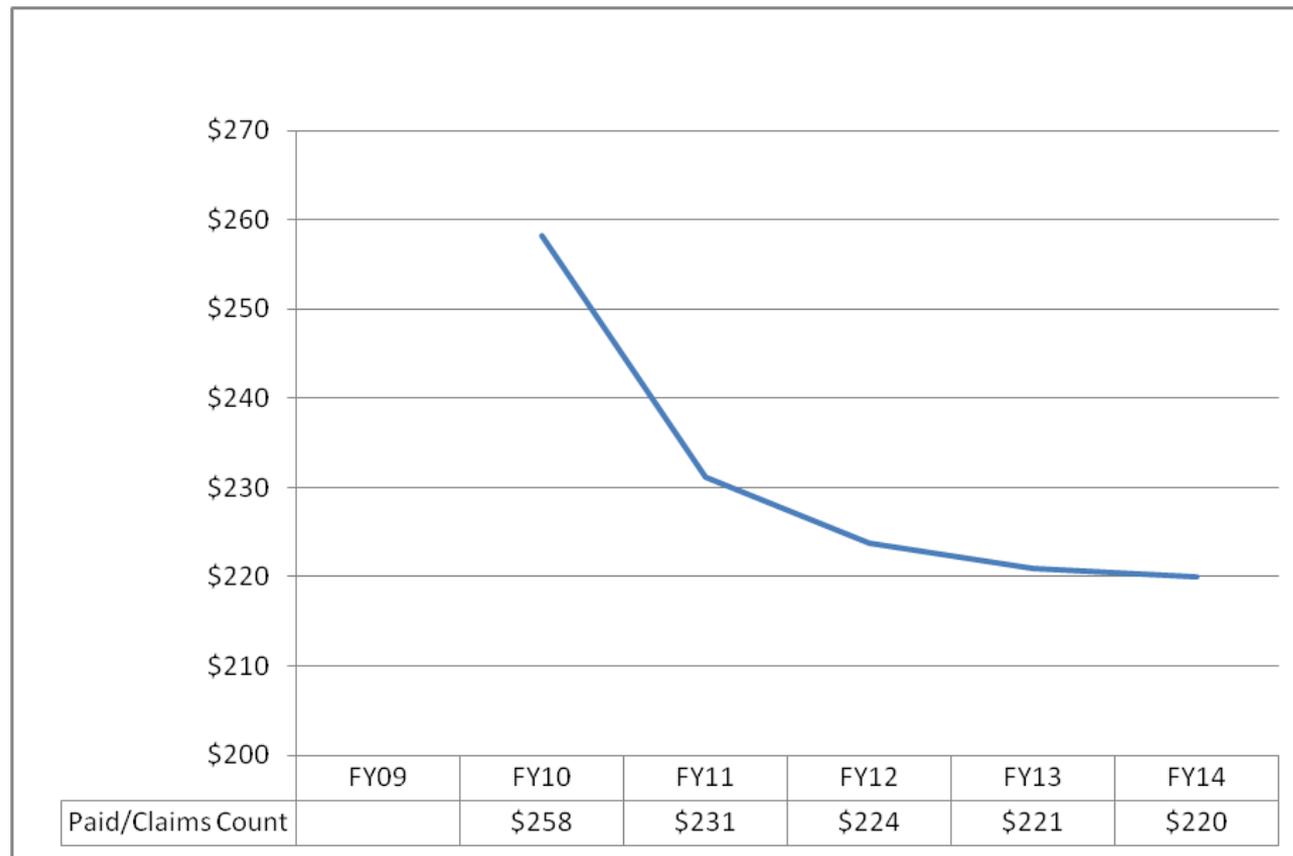
Blue Line is amount paid for EIT Meetings.

Red Line is number of EIT Meeting claims.

Green Line is number of EIT Meeting claims to number of meetings.

Efficiency: The number of EIT Meetings decreased between FY12 and FY14.

Statewide Summary of Costs



Blue Line is an aggregate of Direct Services, IFSP Meetings and EIT Meetings, presented as a ratio of amount paid to count of services.

Efficiency: When aggregating data for all three service types, the total cost decreased between FY10 and FY14. *

*FY09 data excluded from aggregate due to EIT Meeting data not available until FY10.

What about Child Outcomes?

- The state is working to improve child outcome data as part of the Annual Performance Report and the State Systemic Improvement Plan required by the U.S. Department of Education, Office of Special Education Programs.
- Although outcome data are not available at this time, the state's transition data for children who exit at age three show little change.

	FY10	FY11	FY12	FY13	FY14
Completion of IFSP	3.65%	3.02%	4.22%	3.91%	3.77%
Eligible and Transition to Part B	59.58%	60.51%	56.31%	57.58%	56.32%
Part B ineligible	14.22%	14.97%	16.60%	17.14%	15.49%
Total children exiting	2,932	3,079	3,392	2,994	3,764

Revisiting the Common Assumptions

In a transdisciplinary team model:

- ✓ #1: A team model is more expensive than a traditional therapy model. **Myth Busted** – the EIT model is actually more cost effective.
- ✓ #2: The use of ancillary providers will decrease. **Myth Busted** – claims for other services increased approximately 2% when compared to the total claims.
- ✓ #3: The use of special instructors will increase. **True** – overall, claims for special instruction increased slightly (~1%) when compared to the total claims.

For More Information

- Missouri First Steps website
<http://dese.mo.gov/special-education/first-steps>
 - ✓ Early Intervention Teams
 - ✓ Data, Budget & Reports
 - ✓ Practice Manual
- Missouri First Steps contact information
(573) 522-8762
sefirststeps@dese.mo.gov