3.   OSEP Indicator 4 Estimates

This section presents survey results for OSEP Indicator 4, the percentage of families who report that early intervention services have helped them know their rights; effectively communicate their children's needs, and help their children develop and learn. Data are reported in relation to the Federal Fiscal Year (FFY) targets established in Maryland's State Performance Plan (SPP), as well as by respondent demographics and the Extended IFSP option.

Exhibit 3.1 displays 2018-19 results for Indicators 4a, 4b, and 4c, shown as the percentage of families who agreed, strongly agreed, or very strongly agreed to survey items 19, 17, and 21, respectively. As seen in the table, almost all respondents agreed with the indicator items. The percentages are well above the targets established in Maryland's SPP.

Exhibit 3.1: 2018-19 Actual and Target Data for Indicator 4

Indicator	Measurement	Actual	Target
4a- Know their rights	# of families who agree, strongly, agree or very strongly agree to Q19 (early intervention services have helped me or my family know about my child's and family's rights) divided by the # of families who answered Q19	97.52% (=4,172/4,278)	91.0%
4b- Effectively communicate their children's needs	# of families who agree, strongly, agree or very strongly agree to Q17 (early intervention services have helped me or my family communicate more effectively with the people who work with my child and family) divided by the # of families who answered Q17	97.88% (=4,165/4,255)	90.0%
4c- Help their children develop and learn	# of families who agree, strongly, agree or very strongly agree to Q21 (early intervention services have helped me or my family understand my child's special needs) divided by the # of families who answered Q21	98.15% (=4,127/4,205)	91.5%

Exhibit 3.2 displays the 2018-19 results for Indicator 4a (early intervention services have helped me or my family know about my child's and family's rights) by local jurisdiction and statewide. Jurisdictions with 100% agreement include Allegany, Garrett, Kent, and Talbot counties.

Exhibit 3.2: 2018-19 Estimates for Part C Indicator 4a

Jurisdiction	% Agreement	N*	Indicator 4a Std. error	Lower CI**	Upper CI**
Statewide	**97.52%**	**4,278**	**0.00**	**97.52%**	**97.53%**
Allegany	100.00%	71	0.00	99.57%	100.00%
Anne Arundel	96.77%	372	0.00	96.67%	96.87%
Baltimore City	97.84%	462	0.00	97.77%	97.90%
Baltimore County	97.42%	543	0.00	97.36%	97.48%
Calvert	92.96%	71	0.01	92.16%	93.76%
Caroline	97.06%	34	0.02	95.53%	98.59%
Carroll	94.64%	56	0.01	93.68%	95.60%
Cecil	98.39%	62	0.01	97.74%	99.03%
Charles	97.83%	92	0.00	97.41%	98.25%
Dorchester	95.83%	24	0.02	93.35%	98.32%
Frederick	98.17%	219	0.00	98.03%	98.32%
Garrett	100.00%	26	0.02	98.17%	100.0%
Harford	95.83%	144	0.00	95.53%	96.14%
Howard	98.40%	125	0.00	98.13%	98.67%
Kent	100.00%	19	0.03	97.16%	100.0%
Montgomery	97.79%	680	0.00	97.75%	97.84%
Prince George's	97.76%	805	0.00	97.73%	97.80%
Queen Anne's	98.21%	56	0.01	97.46%	98.96%
Saint Mary's	96.94%	98	0.00	96.51%	97.37%
Somerset	81.82%	11	0.08	73.99%	89.65%
Talbot	100.00%	24	0.02	97.95%	100.0%
Washington	98.25%	114	0.00	97.94%	98.55%
Wicomico	99.26%	136	0.00	99.06%	99.47%
Worcester	96.15%	26	0.02	93.93%	98.38%

Note: *The Ns will not add up to the statewide total, due to responses from families that did not indicate their county but responded to the question.
Note: **Confidence intervals are calculated at a 95% Confidence Level

Exhibit 3.3 displays 2018-19 results for Indicator 4b (early intervention services have helped me or my family communicate more effectively with the people who work with my child and family) by local jurisdiction and statewide. Jurisdictions with 100% agreement include Cecil, Dorchester, Garrett, Kent and Talbot counties.

Exhibit 3.3: 2018-19 Estimates for Part C Indicator 4b

Jurisdiction	% Agreement	N*	Indicator 4b Std. error	Lower CI**	Upper CI**
Statewide	**97.88%**	**4,255**	**0.00**	**97.88%**	**97.89%**
Allegany	98.59%	71	0.01	98.06%	99.12%
Anne Arundel	97.55%	368	0.00	97.46%	97.64%
Baltimore City	98.49%	463	0.00	98.43%	98.55%
Baltimore County	98.88%	537	0.00	98.84%	98.93%
Calvert	94.29%	70	0.01	93.53%	95.04%
Caroline	93.94%	33	0.02	92.12%	95.76%
Carroll	94.44%	54	0.01	93.44%	95.45%
Cecil	100.00%	61	0.01	99.46%	100.00%
Charles	96.81%	94	0.00	96.35%	97.26%
Dorchester	100.00%	24	0.02	97.95%	100.00%
Frederick	97.26%	219	0.00	97.09%	97.43%
Garrett	100.00%	25	0.02	98.06%	100.00%
Harford	98.61%	144	0.00	98.39%	98.83%
Howard	97.54%	122	0.00	97.23%	97.85%
Kent	100.00%	20	0.03	97.36%	100.00%
Montgomery	97.93%	676	0.00	97.89%	97.97%
Prince George's	98.13%	804	0.00	98.10%	98.17%
Queen Anne's	98.21%	56	0.01	97.46%	98.96%
Saint Mary's	97.94%	97	0.00	97.55%	98.33%
Somerset	81.82%	11	0.08	73.99%	89.65%
Talbot	100.00%	24	0.02	97.95%	100.00%
Washington	97.32%	112	0.00	96.97%	97.67%
Wicomico	98.52%	135	0.00	98.28%	98.76%
Worcester	92.59%	27	0.02	90.18%	95.00%

Note: *The Ns will not add up to the statewide total, due to responses from families that did not indicate their county but responded to the question.
Note: **Confidence intervals are calculated at a 95% Confidence Level

Exhibit 3.4 displays 2018-19 results for Indicator 4c (early intervention services have helped me or my family understand my child's special needs) by local jurisdiction and statewide. Jurisdictions with 100% agreement include Caroline, Dorchester, Garrett, Kent, and Talbot counties.

Exhibit 3.4: 2018-19 Estimates for Part C Indicator 4c

Jurisdiction	% Agreement	N*	Indicator 4c Std. error	Lower CI**	Upper CI**
Statewide	**98.15%**	**4,205**	**0.00**	**98.14%**	**98.15%**
Allegany	98.57%	70	0.01	98.03%	99.11%
Anne Arundel	97.48%	357	0.00	97.39%	97.57%
Baltimore City	99.13%	461	0.00	99.08%	99.18%
Baltimore County	98.12%	533	0.00	98.07%	98.18%
Calvert	95.77%	71	0.01	95.09%	96.46%
Caroline	100.00%	34	0.01	98.75%	100.00%
Carroll	92.59%	54	0.01	91.50%	93.69%
Cecil	98.33%	60	0.01	97.66%	99.01%
Charles	96.74%	92	0.00	96.27%	97.21%
Dorchester	100.00%	24	0.02	97.95%	100.00%
Frederick	95.85%	217	0.00	95.66%	96.05%
Garrett	100.00%	25	0.02	98.06%	100.00%
Harford	97.83%	138	0.00	97.57%	98.08%
Howard	96.72%	122	0.00	96.38%	97.06%
Kent	100.00%	20	0.03	97.36%	100.00%
Montgomery	99.25%	667	0.00	99.22%	99.28%
Prince George's	98.74%	795	0.00	98.71%	98.77%
Queen Anne's	98.11%	53	0.01	97.30%	98.92%
Saint Mary's	95.88%	97	0.00	95.40%	96.35%
Somerset	81.82%	11	0.08	73.99%	89.65%
Talbot	100.00%	24	0.02	97.95%	100.00%
Washington	98.23%	113	0.00	97.92%	98.54%
Wicomico	99.24%	132	0.00	99.03%	99.46%
Worcester	96.30%	27	0.02	94.18%	98.41%

Note: *The Ns will not add up to the statewide total, due to responses from families that did not indicate their county but responded to the question.
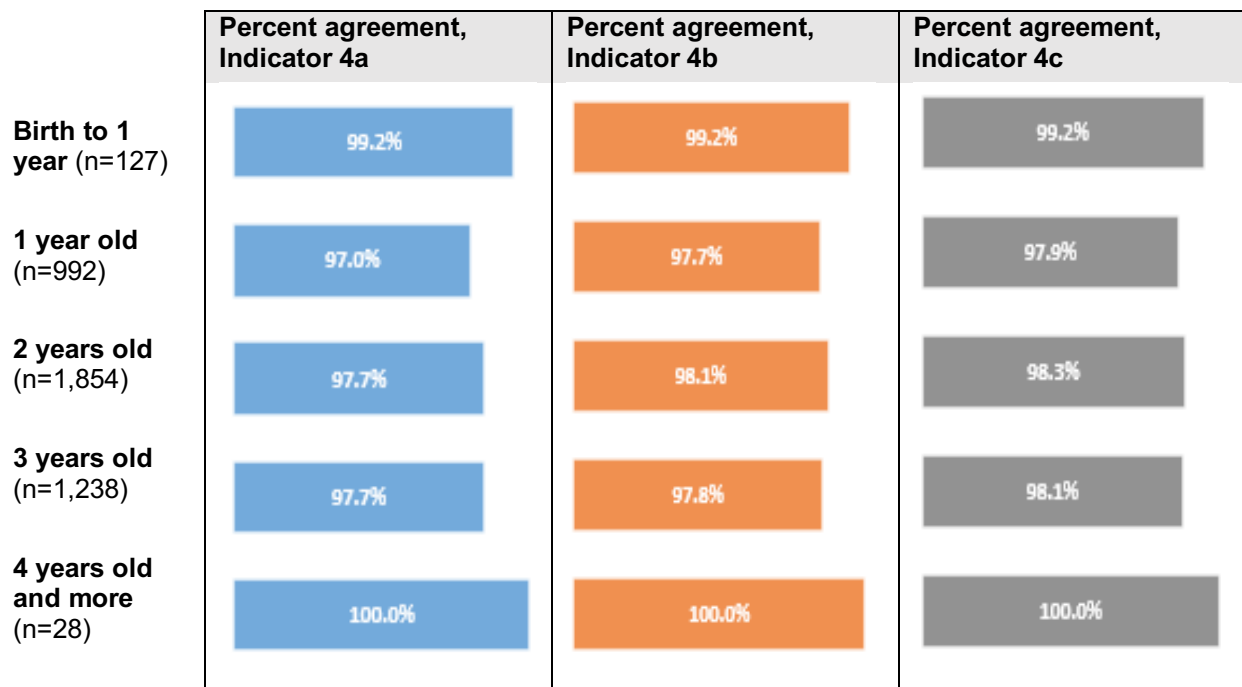**Note**: **Confidence intervals are calculated at a 95% Confidence Level

4.   OSEP Indicator 4 Estimates by Demographic Characteristics

The figures on the following pages show the differences in Indicator 4 results across key demographics: age of child at time of survey response and at time of referral, gender of child, survey language, length of time in program, extended IFSP option, race/ethnicity of families, respondent relationship to child, and eligibility determination.

Age of Child at Time of Survey Response: In this year's survey, families of children aged 4 years or more tend to show the highest levels of agreement across all indicators (at 100%), followed by those with children birth to 1 year old. The lowest levels of agreement tend to be with families of children aged 1 year old (97 percent) across all indicators.
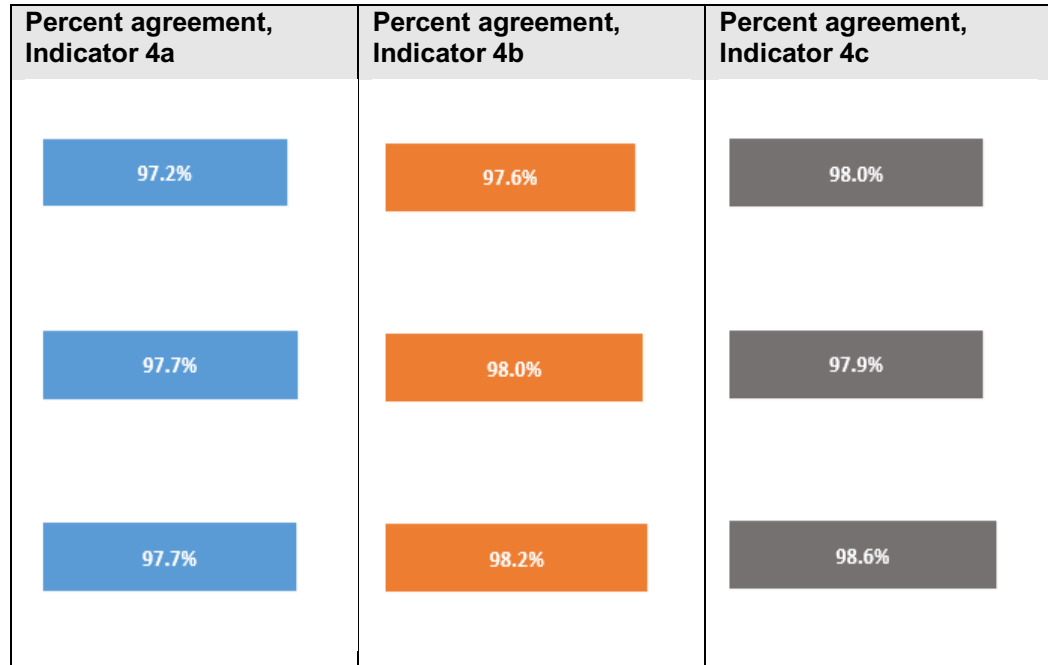
Exhibit 4.1: FFY 2018 Indicator 4 Results by Age of Child at Time of Survey Response

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Birth to 1 year (n=127)	99.2%	99.2%	99.2%
1 year old (n=992)	97.0%	97.7%	97.9%
2 years old (n=1,854)	97.7%	98.1%	98.3%
3 years old (n=1,238)	97.7%	97.8%	98.1%
4 years old and more (n=28)	100.0%	100.0%	100.0%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents in each category.

Age of Child at Referral: There were no discernable differences in agreements levels (less than 1 percentage point) between families who were referred birth to one year, 1-2 years, or 2-3 years of age. However, the percentage of agreement on all three indicators was highest for families referred to early intervention services between 2-3 years of age.
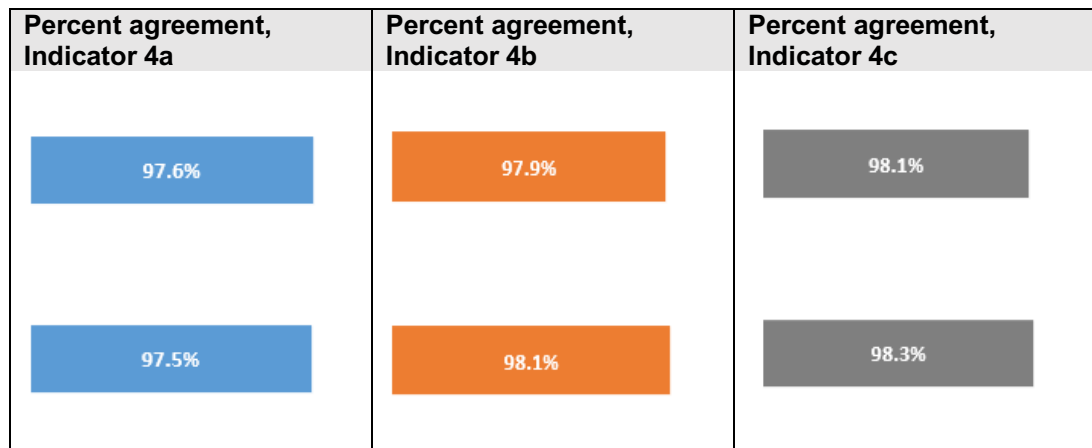
Exhibit 4.2: FFY 2018 Indicator 4 Results by Age of Child at Referral

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Birth to 1 year (n=1,551)	97.2%	97.6%	98.0%
1-2 years (n=1,619)	97.7%	98.0%	97.9%
2-3 years (n=947)	97.7%	98.2%	98.6%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Gender of Child: There were no discernable differences in agreement levels (less than 1 percentage point) between families of male children and families of female children receiving early intervention services.
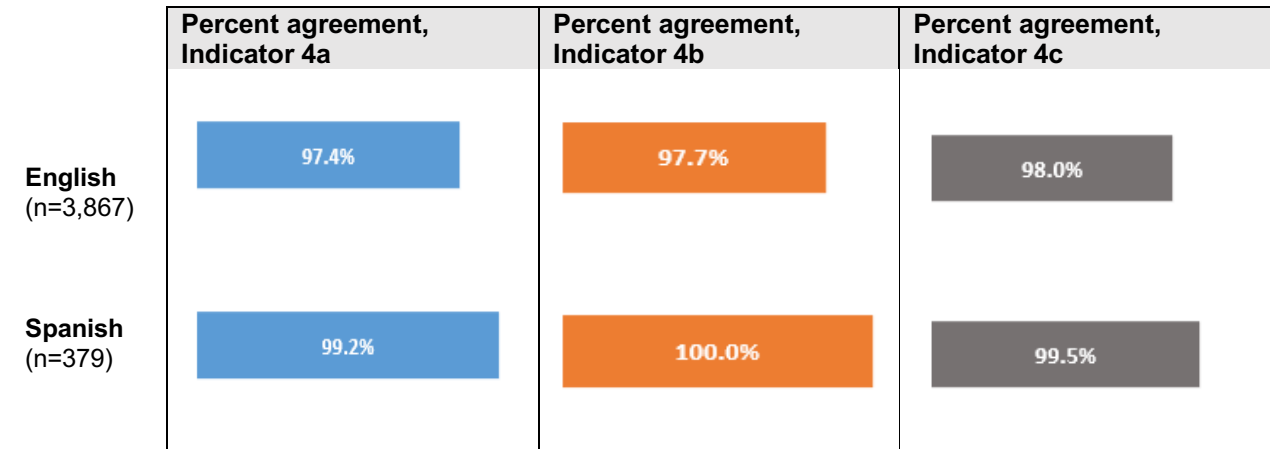
Exhibit 4.3: FFY 2018 Indicator 4 Results by Gender of Child

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Male (n=2,730)	97.6%	97.9%	98.1%
Female (n=1,507)	97.5%	98.1%	98.3%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Survey Language: Families who responded to the survey in Spanish had a higher percentage of agreement over all three indicators. The greatest difference between English and Spanish homes was related to Indicator 4b (2.3 percentage points).
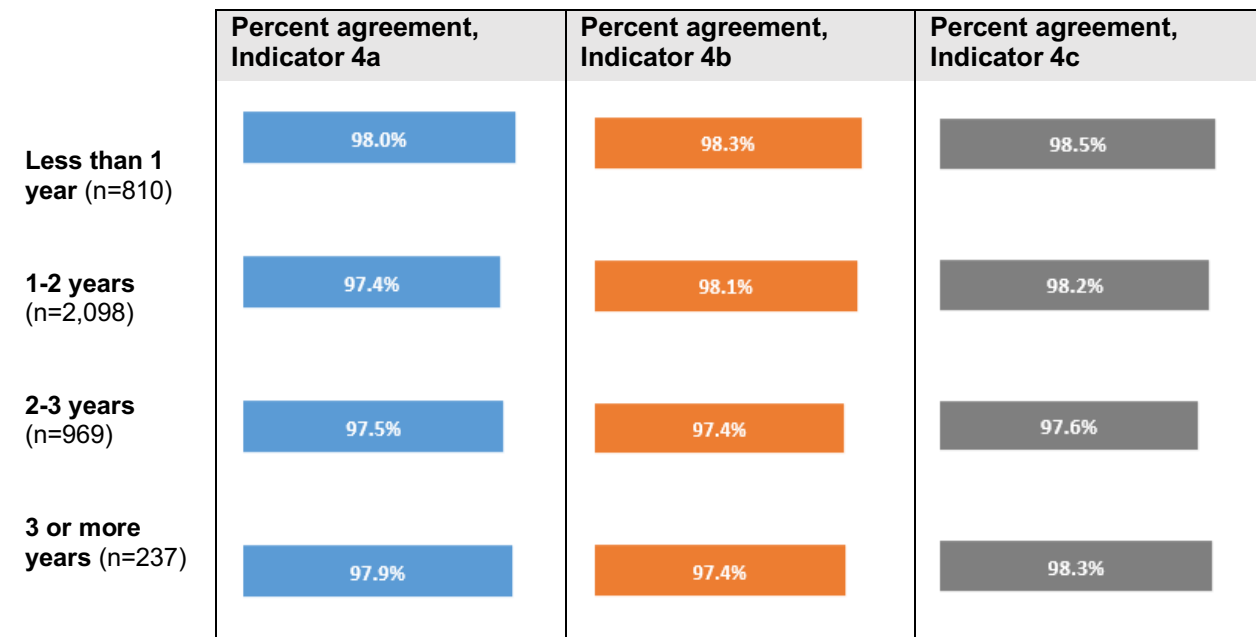
Exhibit 4.4: FFY 2018 Indicator 4 Results by Survey Language

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
English (n=3,867)	97.4%	97.7%	98.0%
Spanish (n=379)	99.2%	100.0%	99.5%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Length of Time in Part C. There were no discernable differences in agreement levels (less than 1 percentage point) between families regardless of the time in the program.
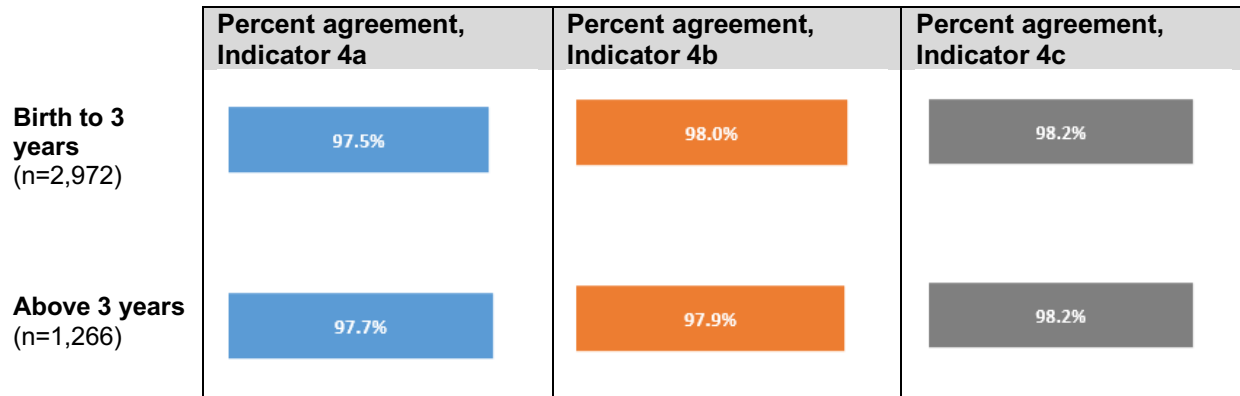
Exhibit 4.5: FFY 2018 Indicator 4 Results by Length of Time in Part C

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Less than 1 year (n=810)	98.0%	98.3%	98.5%
1-2 years (n=2,098)	97.4%	98.1%	98.2%
2-3 years (n=969)	97.5%	97.4%	97.6%
3 or more years (n=237)	97.9%	97.4%	98.3%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Extended IFSP Option: The following exhibit presents differences in Indicator 4 results for families of children currently up to three years of age, compared to families of children above 3 years old. Families with children ages three and four years are eligible to receive services through the Extended IFSP option. There were no discernable differences in agreement levels (less than 1 percentage point) between families with children birth to 3 years and those above 3 years old.
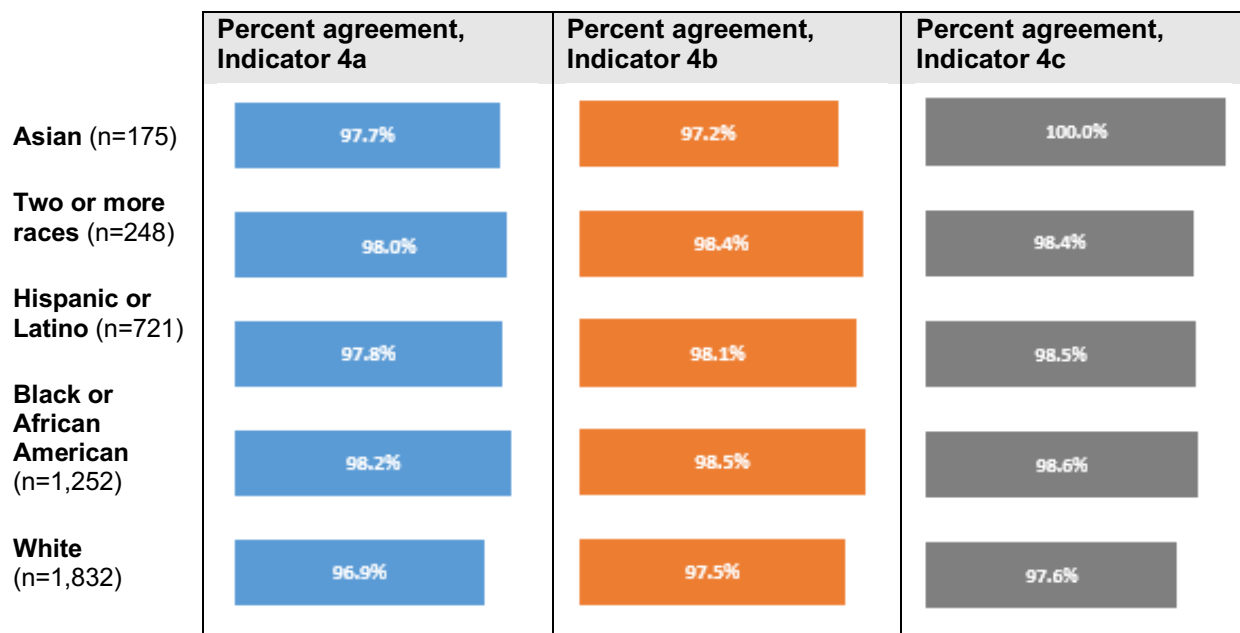
Exhibit 4.6: FFY 2018 Indicator 4 Results by Extended IFSP Option

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Birth to 3 years (n=2,972)	97.5%	98.0%	98.2%
Above 3 years (n=1,266)	97.7%	97.9%	98.2%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Race/Ethnicity of Families Responding: There were differing patterns of agreement to the indicators related to race/ethnicity, depending on the indicator. Indicator 4c showed the highest levels of agreement by Asian families (100%) and the lowest levels of agreement for White families (97.6%).It also should be noted that the Asian group was relatively small (n=175). There were very small differences in levels of agreement (1 to 1.3 percentage points) for all three indicators between the two largest groups: Blacks and Whites. Aside from the Asian responses, participants of two or more races and of Hispanic or Latino families tended to be in agreement across all Indicators, with less than a .4 percentage difference.
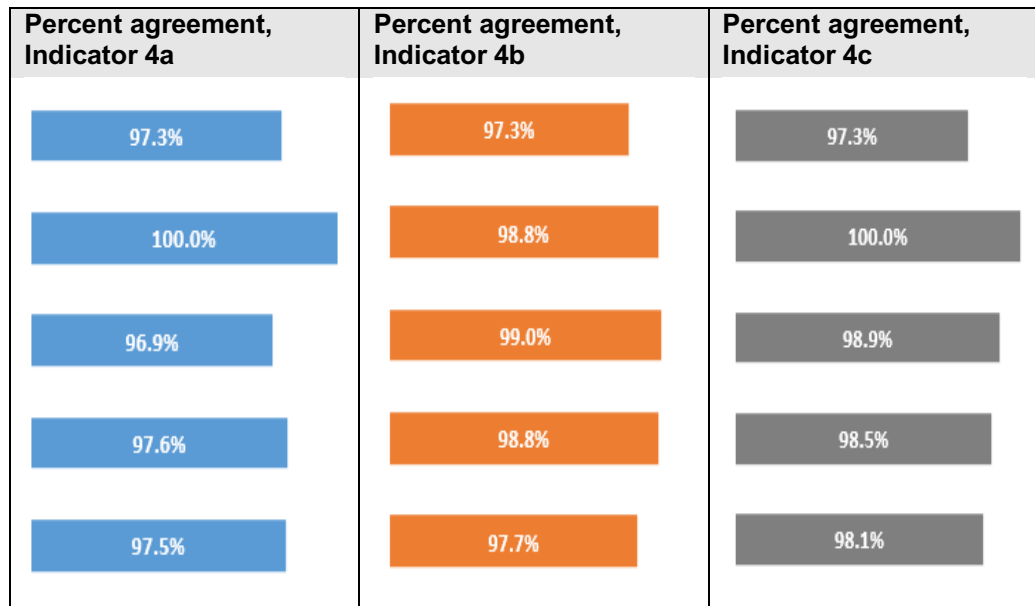
Exhibit 4.7: FFY 2018 Indicator 4 Results by Race/Ethnicity of Families Responding

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Asian (n=175)	97.7%	97.2%	100.0%
Two or more races (n=248)	98.0%	98.4%	98.4%
Hispanic or Latino (n=721)	97.8%	98.1%	98.5%
Black or African American (n=1,252)	98.2%	98.5%	98.6%
White (n=1,832)	96.9%	97.5%	97.6%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Relationship of Respondent to the Child: Foster parents had the highest level of agreement with Indicators 4a and 4c (100%). Grandparents had the highest level of agreement with Indicator 4b (99%) and the lowest for Indicator 4a (96.9%). Overall, "other" respondents had among the lowest levels of agreement across all indicators, but they were the smallest group (n=37). Among the largest groups of respondents (fathers and mothers), there was only a slight difference in level of agreement (less than 1 percentage point) for Indicators 4a and 4c and a difference of 1.1 percentage points on Indicator 4b.
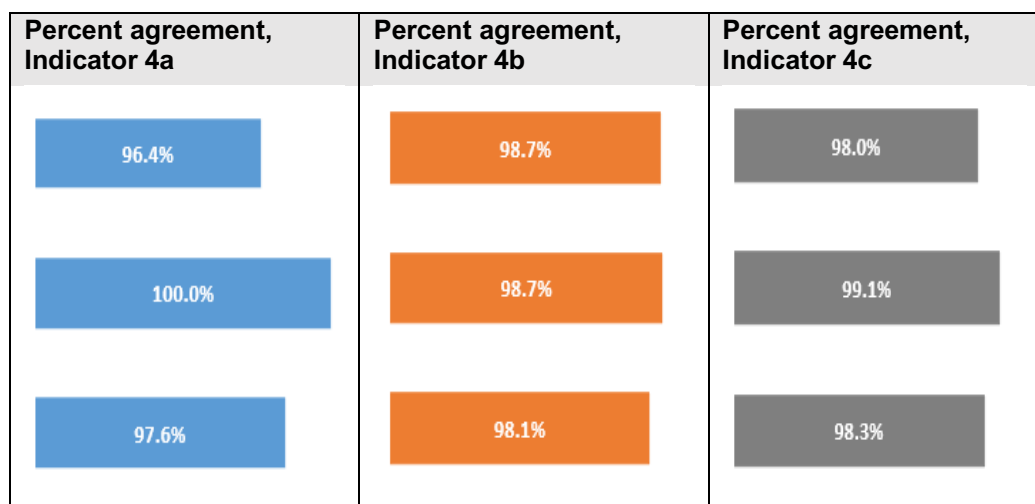
Exhibit 4.8: FFY 2018 Indicator 4 Results by Relationship of Respondent to the Child

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Other (n=37)	97.3%	97.3%	97.3%
Foster parent (n=82)	100.0%	98.8%	100.0%
Grandparent (n=95)	96.9%	99.0%	98.9%
Father (n=411)	97.6%	98.8%	98.5%
Mother (n=3,587)	97.5%	97.7%	98.1%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

Eligibility Category: When comparing the different eligibility determinations, parents of students diagnosed with a physical or mental condition tended to rate all three Indicators the highest. Parents of students with Atypical Development or Behavior also rated Indicator 4b the highest, and Indicators 4a and 4c the lowest out of all three groups. The greatest difference (between 2.4 and 3.6 percentage points) was between the different eligibility determinations for Indicator 4a.

Exhibit 4.9: FFY 2018 Indicator 4 Results by Eligibility Determination

	Percent agreement, Indicator 4a	Percent agreement, Indicator 4b	Percent agreement, Indicator 4c
Atypical Development or Behavior (n=299)	96.4%	98.7%	98.0%
Diagnosed physical or mental condition with High Probability of DD (n=1,111)	100.0%	98.7%	99.1%
At least a 25% developmental delay (n=2,783)	97.6%	98.1%	98.3%

Note: Bar charts display the % of families who agreed, strongly agreed, or very strongly agreed with items 19, 17, and 21, respectively. The "n" represents the average number of respondents across each category.

5.   Summary of Responses to All Survey Items

The survey asked respondents to state the extent to which they agreed or disagreed with 24 statements about the early intervention services their child/children receive. Exhibit 5.1 shows that families are generally satisfied with the services they received from their LITPs. The majority of parents agreed with each item on the survey, including 21 items where at least 95% of respondents agreed. The statement with the highest percentage of agreement (99%) was item 20: *"Over the past year, early intervention services have helped me and/or my family do things with and for my child that are good for my child's development."*

Statements with the lowest percentage of agreement were less specific and related to activities, services, and family needs. The statement with the lowest percentage of agreement (94.1%) was item 3: *"Over the past year, early intervention services have helped me and/or my family participate in typical activities for children and families in my community."*

Exhibit 5.1: Summary of Responses to Survey Items

Over the past year, early intervention services have helped me and/or my family:	n	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree	TOTAL AGREE
3. participate in typical activities for children and families in my community.	4,213	0.9%	0.5%	4.5%	30.9%	20.0%	43.2%	94.1%
4. know about services in the community.	4,250	0.5%	0.6%	4.4%	28.8%	22.5%	43.2%	94.5%
5. know where to go for support to meet my child's needs.	4,277	0.5%	0.3%	2.8%	26.0%	23.5%	46.9%	96.4%
6. know where to go for support to meet my family's needs.	4,222	0.5%	0.4%	4.9%	29.6%	22.3%	42.2%	94.2%
7. get the services that my child and family need.	4,280	0.5%	0.4%	1.9%	24.2%	21.8%	51.2%	97.2%
8. feel more confident in my skills as a parent.	4,294	0.4%	0.4%	1.7%	23.1%	23.8%	50.6%	97.5%
9. make changes in family routines that will benefit my child with special needs.	4,195	0.3%	0.5%	2.1%	24.7%	23.4%	49.1%	97.2%
10. be more effective in managing my child's behavior.	4,190	0.5%	0.3%	2.8%	28.4%	24.2%	43.8%	96.4%
11. do activities that are good for my child even in times of stress.	4,214	0.4%	0.3%	2.7%	27.3%	24.6%	44.8%	96.6%
12. feel that I can get the services and supports that my child and family need.	4,284	0.5%	0.4%	1.8%	23.6%	23.4%	50.4%	97.4%
13. understand how the early intervention system works.	4,304	0.4%	0.4%	1.5%	23.7%	23.3%	50.7%	97.7%
14. be able to evaluate how much progress my child is making.	4,298	0.4%	0.2%	1.3%	21.9%	23.2%	53.0%	98.1%
15. feel that my child will be accepted and welcomed in the community.	4,198	0.3%	0.3%	1.4%	24.4%	21.7%	52.0%	98.1%
16. feel that my family will be accepted and welcomed in the community.	4,182	0.3%	0.4%	1.5%	25.2%	21.3%	51.4%	97.9%

Over the past year, early intervention services have helped me and/or my family:	n	Very Strongly Disagree	Strongly Disagree	Disagree	Agree	Strongly Agree	Very Strongly Agree	TOTAL AGREE
17. communicate more effectively with the people who work with my child and family. (4b)	**4,255**	**0.3%**	**0.3%**	**1.5%**	**22.8%**	**23.7%**	**51.4%**	**97.9%**
18. understand the roles of the people who work with my child and family.	4,265	0.2%	0.2%	1.3%	23.3%	23.1%	51.9%	98.3%
19. know about my child's and family's rights concerning early intervention services. (4a)	**4,278**	**0.4%**	**0.4%**	**1.7%**	**23.7%**	**22.4%**	**51.4%**	**97.5%**
20. do things with and for my child that are good for my child's development.	4,300	0.4%	0.1%	0.4%	18.8%	21.6%	58.7%	99.0%
21. understand my child's special needs. (4c)	**4,205**	**0.4%**	**0.2%**	**1.3%**	**22.6%**	**22.1%**	**53.5%**	**98.1%**
22. feel that my efforts are helping my child.	4,298	0.4%	0.2%	0.8%	20.1%	22.4%	56.2%	98.7%
23. figure out solutions to problems as they come up.	4,269	0.4%	0.2%	1.2%	23.4%	24.6%	50.2%	98.2%
24. feel that I can handle the challenges of parenting a child with special needs.	4,115	0.5%	0.3%	1.3%	24.6%	23.5%	48.8%	97.0%
Parents completed the following questions if their child turned 3 years old before July 1, 2019 and their family continued to receive early intervention services through an Extended Individualized Family Service Plan (IFSP).								
25. understand my options in order to make the best choice for my child and family to continue services through an extended IFSP or move to services through an IEP*	1,567	0.1%	0.1%	2.0%	21.8%	22.3%	53.7%	97.8%
26. support my child to be ready for school by assisting me to teach my child pre-reading activities (such as naming pictures) and pre-math activities (such as sorting household items).*	1,489	0.1%	0.4%	2.1%	25.1%	21.6%	50.8%	97.4%

*Note: State-provided demographic data were used to exclude inappropriate respondents (families whose child was not age three by the July 1st, 2018 cut-off date).

6.   Historical Trends

The following section presents data comparing overall survey response rates and OSEP Indicator 4 results from FFY 2005 to FFY 2018.

Response Rate

Between FFY 2005-08, an average 6,699 surveys were distributed annually. During the subsequent four years, the average number of surveys increased to 8,598. From FFY 2013-15, the average number of surveys distributed increased to 9,457. One reason for the observed growth in survey distribution is Maryland's implementation of the Extended IFSP Option in FFY 2009; a programmatic change that increased the overall population of eligible children in the state.

From 2005-08, the average response rate was 23.6%. In the following four years, 2009-12, the response rate grew to 43.3%. From 2013 to the present, the average response rate increased more gradually to 46.0% in 2016-17. While we saw a 9.8% decline in responses last year from the previous year, for the 2018-19 year we have an increase of 3.9 percentage points.

Exhibit 6.1: Survey Response Rate by Federal Fiscal Year

Federal Fiscal Year	Surveys Sent	Surveys Completed	Adjusted Response Rate*
2005	6,508	1,275	19.6%
2006	6,395	1,476	23.1%
2007	7,078	1,570	22.2%
2008	6,813	2,017	29.6%
2009	8,109	3,384	41.7%
2010	9,036	3,589	39.7%
2011	8,650	4,042	46.7%
2012	8,862	3,989	45.0%
2013	9,330	4,029	43.2%
2014	9,444	4,443	47.0%
2015	9,599	4,284	46.0%
2016	10,455	4,698	46.0%
2017	10,625	3,803	36.2%
2018	11,029	4,339	40.1%

* Adjusted Response Rate = Number of Surveys Completed / (Number of Surveys Mailed – Number of Surveys Returned Undeliverable)

OSEP Indicator 4

The figures below show the target and actual percentage agreement with Indicators 4a, 4b, and 4c. From 2010-18, the actual percentage agreement for all three indicators have remained well above the annual targets established in Maryland's SPP. For Indicators 4a the value of the indicator is 6.5 percentage points above the state target, for Indicator 4b it is 7.9 percentage points above the state target, while for 4c, the actual percentage agreement value is 6.7 percentage points higher than the target.

Indicator 4a

Indicator 4b

Indicator 4c