FFY 2019 Indicator B-17/C-11 Annual Performance Report (APR) Optional Template

# Section A: Data Analysis

**What is the State-identified Measurable Result (SiMR).** (Please limit your response to 785 characters)*.*

During the State Systemic Improvement Plan Phase I in 2015, Massachusetts Part C/Early Intervention identified improving positive social-emotional skills (including social relationships), as measured by Summary Statement 1, as its State-Identified Measurable Result (SiMR).

# Has the SiMR changed since the last SSIP submission?

No

**If “Yes”, provide an explanation for the change(s), including the role of stakeholders in decision- making.** (Please limit your response to 1600 characters without space)*.*

# Progress toward the SiMR

**Please provide the data for the specific FFY listed below** (expressed as actual number and percentages)*.*

# Baseline Data:

55.83% (2,983 /9,9

# Has the SiMR target changed since the last SSIP submission? No

**FFY 2018 Target**: 56.90%

# FFY 2019 Target:

56.90%

# FFY 2018 Data:

52.81% 2,718/9

# FFY 2019 Data:

47.15% 1,902 /9

# Was the State’s FFY 2019 Target Met? No

**Did slippage**[**1**](#_bookmark0) **occur?** Yes

**If applicable, describe the reasons for slippage.** (Please limit your response to 1600 characters without space).

Since last year’s submission, the Massachusetts SIMR declined by 5.7%. We attribute this slippage to the changes in data accuracy. Baseline data were collected prior to the workforce being trained to implement the BDI-2 with fidelity. We estimate that scores were inflated at entry and at exit. If more accurate, they would show less growth over the year because of the initial inaccurate measure. A limited pool of data are available for review as fidelity data have not been collected since March 2020 when the requirement to administer the BDI-2 was temporarily removed during the public health emergency.

1 The definition of slippage: *A worsening from the previous data AND a failure to meet the target.* The worsening also needs to meet certain thresholds to be considered slippage:

1. For a "large" percentage (10% or above), it is considered slippage if the worsening is more than 1.0 percentage point. For example:
	1. It is not slippage if the FFY 2019 data for Indicator X are 32% and the FFY 2018 data were 32.9%.
	2. It is slippage if the FFY 2019 data for Indicator X are 32% and the FFY 2018 data were 33.1%.
2. For a "small" percentage (less than 10%), it is considered slippage if the worsening is more than 0.1 percentage point. For example:
	1. It is not slippage if the FFY 2019 data for Indicator Y are 5.1% and the FFY 2018 data were 5%.
	2. It is slippage if the FFY 2019 data for Indicator Y are 5.1% and the FFY 2018 data were 4.9%.

**Optional: Has the State collected additional data *(i.e., benchmark, CQI, survey)* that demonstrates**

# progress toward the SiMR? Yes

**If “Yes”, describe any additional data collected by the State to assess progress toward the SiMR.**

(Please limit your response to 1600 characters without space)*.*

In addition to SiMR data, Massachusetts has collected data on several aspects of our implementation plan to evaluate the effectiveness of Professional Development to support the SSIP:

1. Evaluation of the impact of the PIWI Institute: The evaluation included use of four checklists originally developed by the ECTA Center administered to participants of cohorts 1 and 2 who completed the PIWI Institute. The evaluation included pre- and post-self-assessment checklists and review of demographic data of the participants. The preliminary data suggest that PIWI Institute provide valuable experience and opportunities to enhance professional knowledge, skills and competencies for an increasing number of early intervention practitioners with various backgrounds and experiences, while also enhancing their professional skills in a multidisciplinary training environment.
2. Fidelity of BDI-2 Administration: Prior to March 2020, the Lead Agency required all EIS programs to submit an audiovisual recording of a BDI-2 administration. Submissions were reviewed and coded using fidelity checklists. These data indicate that an additional round of fidelity evaluation needs to be completed for all local programs.
3. IFSP Outcomes Evaluation Inter-rater Reliability: The lead agency conducted an evaluation on IFSP outcomes developed by EIS programs using criteria developed by ECTA. There were 5 individuals who were engaged in the rating process and there were inconsistencies identified in the rating process. In FFY18, the lead agency began a process to establish inter-rater reliability in this process. This process extended into FFY19. Data was collected from all raters and suggests that more support to attain inter-rater reliability needs to be done before additional data collection can occur.

# Did the State identify any data quality concerns, unrelated to COVID-19, that affected progress

**toward the SiMR during the reporting period?**

Yes

**If “Yes”, describe any data quality issues specific to the SiMR data and include actions taken to address data quality concerns.** (Please limit your response to 3000 characters without space).

Massachusetts has a data quality work stream focused on increasing the accuracy of BDI-2 administration. Based on prior evaluation of fidelity data, variability exists in the administration of the BDI-2 tasks and may results in data quality issues. Massachusetts has a number of professional development opportunities to support this issue. These offerings allow for different learning styles and different levels of intensity for learning. Options include:

1. BDI-2 Institute: A four-day intensive professional development opportunity, which included best practices in the assessment of infants and toddlers, practice and reflection on the fidelity of administration of the BDI-2, and the use of the MA fidelity checklist to support overall accuracy of administration.
2. BDI-2 Online Modules: Three modules (General Overview, BDI-2 Standardized Interview Procedure, BDI-2 Standardized Structured Procedure) designed to allow for self-paced learning to improve the fidelity of administration of the BDI-2.
3. BDI-2 Fidelity Checklist Grab-and-Go: The Grab-and-Go is a self-paced professional development offering that offers the learner the materials to review and complete independently. These resources teach EI Specialists about the BDI-2 Fidelity Checklist through PowerPoint and video examples describing what the fidelity checklist is and how it can be used as a tool to identify observable errors in the administration of the BDI-2.
4. Beyond Bubbles and Blocks Newsletter: This bi-monthly newsletter offers assessments and evaluation tips for EI Specialists.
5. BDI-2 Data Results Report: A webinar was held to review the evaluation data and share program specific reports with EIS programs, including fidelity scores for video submissions and individualized feedback.

After completing FFY18's review of video submissions, it was discovered that reviewers were trained using an incorrect scoring instruction; this error had a significant impact on the overall scoring and resulted in artificially high fidelity scores. As a result, these data cannot be compared to prior years' data. EIS programs were notified of the error, received Individualized feedback, and were given the opportunity to review and meet with Lead Agency about their report.

Massachusetts has been using the quality of IFSP Outcomes as one of the measures in the effectiveness of professional development on best practices in Early Intervention service. In past FFY, there have been multiple lead agency staff involved in the data collection, which includes rating IFSP outcomes for quality based on a set of high-quality characteristics. During FFY18, inter-rater reliability was tested and determined that more work needed to be done to assure that all staff were rating consistently. Action steps have included:

1. Review of data collection and rating process to determine if consistent procedures were being used;
2. Professional development with staff around best practices in the IFSP process and defining the characteristics of high quality IFSP outcomes;
3. Inter-rater reliability data collection and analysis; and

# Did the State identify any data quality concerns directly related to the COVID-19 pandemic during the

**reporting period?**

Yes

# If data for this reporting period were impacted specifically by COVID-19, the State must include in the narrative for the indicator: (1) the impact on data completeness, validity and reliability for the indicator;

1. **an explanation of how COVID-19 specifically impacted the State’s ability to collect the data for the indicator; and (3) any steps the State took to mitigate the impact of COVID-19 on the data collection.** (Please limit your response to 3000 characters without space).

The COVID-19 pandemic has had direct impact on Massachusetts' data quality.

* 1. The no. of children reported on for SiMR is incomplete and not a valid measure of the no. of children receiving services. In-person services ceased in mid-March 2020. The Lead Agency does not permit virtual BDI-2 administrations in light of fidelity concerns. Because a minority of EIS programs have resumed

in-person evaluations and enrolled children have not yet had a second BDI-2, these number remain artificially low and incorrectly imply measurement of progress over a shorter time frame than the child's actual participation in EI services. These two factors have a direct impact on the cohort of children reported on and the possible measurement of progress while in the program. In consultation with subject matter experts, Massachusetts determined that the BDI-2 administration via telehealth would lead to inaccurate data for child outcome measurement. Rather than risk reduced data quality from inconsistent BDI-2 administrations conducted via telehealth, Massachusetts has temporarily extended eligibility without BDI-2 administration during the public health emergency.

* 1. Data collection on BDI-2 fidelity, PIWI, and IFSP outcomes are incomplete. Data collection activities were temporarily paused during the public health emergency. BDI-2 video submissions have not been collected as BDI-2 administration was suspended in March 2020. PIWI data was not collected during FFY19 based on stakeholder concerns. IFSP outcomes rating data were paused following the evaluation of the rater training. Massachusetts has tried to mitigate the impact by continuing to engage stakeholders virtually and focus its efforts on supporting EIS programs with the emergency transition to Telehealth.

# Section B: Phase III Implementation, Analysis and Evaluation

**Is the State’s theory of action new or revised since the previous submission?** No

# If “Yes”, please provide a description of the changes and updates to the theory of action

(Please limit your response to 1600 characters without space).

# Did the State implement any new (previously or newly identified) infrastructure improvement strategies

**during the reporting period?**

Yes

**If “Yes”, describe each new (previously or newly identified) infrastructure improvement strategy and the short-term or intermediate outcomes achieved*.*** (Please limit your response to 1600 characters without space)*.*

During FFY19, there were some infrastructure improvement strategies that were implemented in Massachusetts including:

1. Early Intervention Client System (EICS): the Lead Agency implemented a new data system in Nov 2019. The EICS allows for real time data entry at the local level and more comprehensive data collection on federal indicators. In the short-term, the EICS has achieved outcomes including, reduced data entry from paper forms at the local level, consolidated lead agency databases, and real time notification of non-compliance of federal indicators In the long-term, the EICS will achieve outcomes including improved data quality and increased reporting at the local level.
2. Child Development Institute: This 4-day training is designed to increase EI Specialists' knowledge of child development. In the short-term, 14 attendees have completed the training since it was launched. In the

long-term, we expect increased accuracy in BDI-2 scores leading to more accurate Child Outcome reporting.

1. Certification of Early Intervention Specialists (CEIS): This certification has been revised to align competencies with the MA EI Mission, Key Principles, and best practices in EI. In the short-term, this has produced robust stakeholder engagement and and updated certification process. In the long-term, this certification will increase the quality of EI services provided across Massachusetts.
2. PIWI /Reflective Supervision Institute Pilot: The purpose of this PIWI/Reflective Supervision Pilot (Jan-July 2020) was to determine the impact of Reflective Supervision has on the implementation of PIWI at early intervention programs. In the short-term, 31 participants completed the full curriculum who supervise at EIS programs. In the long-term, the lead agency will revisit the evaluation of the pilot or determine the need to run the pilot again in its entirety.

# Provide a summary of each infrastructure improvement strategy that the State continued to implement in the reporting period, including the short-term or intermediate outcomes achieved. (Please

limit your response to 3000 characters without space).

Massachusetts continued to implement several infrastructure improvement strategies.

1. Continuation of the Coordinator of General Supervision position. The role of the lead agency’s Regional Specialists have been further defined to better support programs in the implementation of best practices, the MA EI Mission and Key Principles, and BDI-2 fidelity of administration. Short-term outcomes include consistency in communication to EIS programs, opportunities for higher levels of support for targeted areas of need, streamlined communication, feedback opportunities, and ownership of responsibilities. Long-term outcomes expected include development and implementation of Standard Operating Procedures to ensure efficient and effective responses and action steps.
2. Tiers of Support and Tiers of Analysis. For SSIP feedback on evaluation activities, Lead Agency staff develop universal supports available for all EIS programs. In the short-term, this has achieved consistency in communication to EIS programs, opportunities for higher levels of support for targeted areas of need In the long-term, the outcomes expected include development and implementation of Standard Operating Procedures to ensure efficient and effective responses and action steps for all lead agency activities.
3. Continued Professional Development. Lead Agency supports EIS programs in ensuring staff have opportunities in different modalities to learn and understand core concepts in MA EI related to the SiMR. In the short-term, this has included 948 on-line trainings were completed and 3 full institutes were completed by 78 participants. Long-term outcomes anticipated include improved quality of EI services, workforce competence, and reduced turnover in EI staff.
4. Continued Emphasis on the fidelity of administration of the BDI-2, the MA EI Mission and Key Principles, . Lead Agency staff continue to build knowledge and skill in all key concepts related to the MA SSIP to ensure consistency in supports offered to programs. Short-term outcomes achieved include internal lead agency discussions and activities around the MA EI Mission and Key Principles and the best practices associated with thes priority areas. In the long-term, outcomes expected include having all lead agency staff able to support EIS programs, families, and each other in all of the priority areas to ensure positive social emotional skills and relationships.

# Provide a description of how the State evaluated outcomes for each improvement strategy and how the evaluation data supports the decision to continue implementing the strategy. (Please

limit your response to 3000 characters without space):

Early Intervention Client System (EICS) has been developed to support accurate data entry using a clinical workflow and validations to decrease human error in data entry. The EICS also has been developed to track non-compliance related to Federal Indicators. When non-compliance is entered into the EICS, it requires a reason to be entered. We are evaluating the system functioning through error reporting, help desk analysis, and stakeholder engagement. These data are used to identify professional development offerings for the field. Topics identified through help desk tickets led to on-line professional development to support local program staff in the use of the EICS in these areas.

The PIWI Institute was evaluated in partnership between the lead agency and the Curriculum and Instruction faculty at UMass Boston. The purpose of this evaluation was to assess the effectiveness of the PIWI Institute on its participants for the first cohort (N=16) and second cohort (N=16). The evaluation included use of

four-checklists originally developed by the ECTA Center. For the PIWI Institute, the scope of the evaluation included pre- and post-self-assessment checklists. Based on the pre-post mean scores participants reported higher scores for four post-tests in all areas: Family Capacity-Building Practices Checklist, Family Engagement Practices Checklist, Family-Centered Practices Checklist, and Informed Family

Decision-Making Practices Checklist” respectively. Results are based on 32 responses. Overall, the high means of the post-tests, as well as the positive trending outcomes may indicate that the PIWI Institute was effective and serves as a strong indicator of the PIWI Institute’s success. Although we were only able to collect data from a limited number of participants, and Cohort 2 participants completed the post-tests online due to COVID-19 pandemic, the preliminary data suggest that PIWI Institute provide valuable experience and opportunities to enhance professional knowledge, skills and competencies for an increasing number of early intervention practitioners with various backgrounds and experiences, while also enhancing their professional skills in a multidisciplinary training environment. Since ending the cohort, participants have remained in contact to provide support regarding PIWI implementation at individual programs.

**Provide a summary of the next steps for each infrastructure improvement strategy and the anticipated outcomes to be attained during the next reporting period.** (Please limit your response to 3000 characters without space)**:**

The next steps for each infrastructure improvement strategy and anticipated outcomes are as follows:

EI Client System (EICS): All local programs were expected to be in full compliance for data entry into the EICS by 1/1/21. There are still 6 local agencies that have not met this requirement. The lead agency has developed corrective action plans for these agencies to ensure proper support and monitoring is available to the agencies. In addition, the final step for implementation is a transition for claim submission. Once fully implemented, the EICS will required a decreased amount of data entry from paper forms, have fiscal and clinical data linked based on child and enrollments, more robust reporting, and visibility into

non-compliance toward federal indicators in real time.

Child Development Institute: This is currently on hold because it was developed to be an in person learning opportunity and has not yet been adapted to be held in a virtual space. The planned outcomes for this improvement strategy was to support the EI specialists in accurately interpreting clinical observations and applying it to the IFSP process. MA hopes to offer this Institute during the next reporting period.

PIWI/Reflective Supervision Pilot: The Reflective Supervision Institute has been developed to be a live virtual workshop, so this continues to be offered to local program staff. The expected outcome of this activity is that it will support the implementation of PIWI, especially with the current transition of service delivery via telehealth, rather than in-person. In addition, the PIWI Institute has also been developed to be a live virtual workshop. The lead agency will need to decide next steps in this activity.

Certification for Early Intervention Specialists (CEIS) revision: The next steps for this activity is to pilot the new process in the field. One local agency that has six local programs has agreed to pilot the process.

The pilot began in March 2021. The lead agency has partnered with UMASS Boston to conduct an evaluation on the pilot to determine if additional activities or changes to planned activities need to be implemented. The expected outcome of this improvement strategy is to improve the quality of EI services in MA.

Professional Development: The development of professional development opportunities will continue based on analysis of data collected from a variety of sources, including EICS help desk, error reporting, lead agency staff follow up on implementation activities, and the evaluation of workshops. The anticipated outcomes of these activities is to improve the quality of EI services in MA.

# Did the State implement any new (previously or newly identified) evidence-based practices?

No

**If “Yes”, describe the selection process for the new (previously or newly identified) evidence- based practices.** (Please limit your response to 1600 characters without space):

**Provide a summary of the continued evidence-based practices and how the evidence-based practices are intended to impact the SiMR.** (Please limit your response to 1600 characters without space):

Massachusetts continues to work to implement the Parent Interacting with Infants (PIWI) philosophy throughout the EI system. In addition, the MA EI Mission and Key Principles are based on Early Childhood best practices, are also an active focus of our SSIP.

The MA EI Mission and Key Principles focus on engaging families in the IFSP process through functional or authentic assessment in order to develop high quality IFSP outcomes which drive the EI services for the family. Through this process, EI specialists learn about the child and family’s daily routines and activities and get an understanding of what is going well and what is challenging throughout the day and EI specialists support families in making challenging routines easier and enjoyable routines offer opportunities for practicing developing skills. This focus is intended to ensure that the IFSP process includes best practices identified through early childhood research to support the learning and development of infants and toddlers. These best practices embed culturally appropriate practices, collaboration, participation, and activity-based outcomes that support the overarching goal of Early Intervention which supports the MA SiMR.

Massachusetts EI’s selected evidence-based practice, Parents Interacting With Infants (PIWI), is targeted at promoting social-emotional development, and it is directly applicable to the SIMR. The PIWI is a philosophy that focuses on the role of the home visitor to support the parent/caregiver-infant dyad to promote and reinforce confidence, competence, and mutual enjoyment.

**Describe the data collected to evaluate and monitor fidelity of implementation and to assess practice change.** (Please limit your response to 1600 characters without space)***:***

Evaluation of the impact of the PIWI Institute: Through the lead agency partnership with University of Massachusetts Boston (UMASS Boston), The evaluation included use of four-checklists originally developed by the ECTA Center administered to participants of cohort 1 and 2 who completed the PIWI Institute. The evaluation included pre- and post self-assessment checklists and review of demographic data of the participants.

Evaluation of the fidelity of implementation of the BDI-2 has been interrupted during COVID-19. Looking toward the future, Massachusetts may need to alter its plans to monitor and increase fidelity over time.

**Describe the components (professional development activities, policies/procedures revisions, and/or practices, etc.) implemented during the reporting period to support the knowledge and use of selected evidence-based practices.** (Please limit your response to 1600 characters without space):

The lead agency has not revised policies or procedures during the reporting period to support the knowledge and use of selected evidence-based best practices. Much of the lead agency focus has been on professional development supports to local programs and EI specialists.

MA EI Orientation: Foundations of MA EI, Part I and II (required for all new hires in the MA EI system)

Part I: IFSP Process: The training is intended to ensure that the IFSP process includes best practices identified through Early Childhood research to support infants’ and toddlers’ learning and development. These best practices embed culturally appropriate practices, collaboration, participation, and activity-based outcomes.

Part II: PIWI: The PIWI fosters practitioners’ skills in providing targeted strategies to help caregivers and children feel confident, competent, and mutual enjoyment in their relationship with one another, further enhancing opportunities for children to develop and learn.

MA EI Institutes: These institutes are focused on supporting participants in taking a deeper dive into the content to understand the information and be able to support others in understanding.

* PIWI Institute
* Child Development Institute
* Reflective Supervision Institute

# Section C: Stakeholder Engagement

**Describe the specific strategies implemented to engage stakeholders in key improvement efforts.**

(Please limit your response to 3000 characters without space):

The Early Childhood Outcomes/SSIP stakeholder group planned to convene in the fall of 2019. The meeting agenda was to review PIWI evaluation data and discuss the on-going evaluation of the SSIP activities moving forward. A survey was also shared with those unable to attend.

Stakeholders were engaged via webinars and small-group meetings to identify the impact of COVID-19 on existing policies and procedures impacting the SSIP implementation and evaluation activities. Based on stakeholder feedback, the Lead Agency made decisions to modify some policies and procedures during the public health emergency, including:

* BDI-2 not required to be administered
* Cancellation of PIWI observations and data collection in the field
* Delay in the revised CEIS pilot
* Cancellation of BDI-2 fidelity video submission
* Postponement in IFSP Outcome inter-rater reliability activities
* Transition to Telehealth services

The EI Client System (EICS) stakeholder activities included lead agency hosted meetings with EIS programs to discuss the implementation and change to the EICS between September 2019-November 2019. In addition, a series of EICS stakeholder meetings were held between January 2020 and March 2020 following the transition to the EICS to support use and understanding of the system, identify defects, and prioritize possible enhancements.

The Certification for Early Intervention Specialist revision stakeholder advisory committee (CEIS SAC) met April 2019-December 2019 in order to provide input on the development of a new certification process that is aligned by the MA EI Mission and Key Principles. This group had significant input and influence on the creation of updated competencies for the process.

Inter-agency Coordinating Council (ICC):

November 2019 Presentation to ICC: Project lead provided an overview of the findings from the evaluation of the current process, highlighted the major revisions, focus on supervision and program driven process.

Requests for Stakeholder involvement were made.

January 2020 Presentation to ICC: Presentation of Child Outcomes data and discussion regarding data collection and changing our targets. Feedback was provided by parents, providers, and other agency representatives to not lower the current targets for the SIMR and strive for improved outcomes. PIWI implementation and strategies that work well with EI families

# Were there any concerns expressed by stakeholders during engagement activities?

Yes

# If “Yes”, describe how the State addressed the concerns expressed by stakeholders.

(Please limit your response to 1600 characters without space)*:*

In prior FFY stakeholder meetings, ECO/SSIP stakeholders reviewed evaluation data and gave feedback on implementation and evaluation activities done by the lead agency. A main concern was regarding the PIWI data collection process and overall evaluation of the implementation. Stakeholders had identified roles and professional development needs for supervisors. The lead agency developed a pilot during this reporting period that combined the Reflective Supervision Institute offering with an expectation of data collection for the implementation of PIWI in supervisees who’s supervisor attended the Institute. The purpose of this PIWI/Reflective Supervision Pilot was to determine the impact of Reflective Supervision has on the implementation of PIWI at early intervention programs.

Stakeholders for the EI Client System (EICS) expressed a number of concerns about the implementation of the EICS. In response to this, the lead agency asked the local provider trade group, the MA EI Consortium (MEIC) to identify a representative group of stakeholders that could serve as the advisory group to the lead agency for EICS issues. This group began meeting in the Spring of 2020. This group met three times to identify challenges, review status of their issues, and identify priorities.

**If applicable, describe the action(s) that the State implemented to address any FFY 2018 SPP/APR required OSEP response.** (Please limit your response to 3000 characters without space):

N/A