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Practice Summary & Implementation Guidance

Missouri Milestones Matter

The Missouri Milestones Matter (MMM) Program leverages the Centers for Disease Control and Prevention (CDC) Learn the Signs. Act Early. (LTSAE) health campaign materials to embed developmental monitoring into early childhood services across Missouri.

Cutting-Edge → **Emerging** → **Promising** → **Best**

Location	Topic Area	Setting
Missouri	Health Screening/Promotion	Day care/Pre-school

Population Focus	NPM	Date Added
Child Health	NPM 6: Developmental Screening	July 2020

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PRACTICE DESCRIPTION

The Missouri Milestones Matter (MMM) Program utilizes the Centers for Disease Control and Prevention (CDC) *Learn the Signs. Act Early.* (LTSAE) health campaign materials in child-care facilities to monitor children's development and increase formal developmental screening in partnership with parents. This initiative is an extension of the nationally recognized Missouri DHSS, Women, Infants, and Children (WIC) Developmental Milestones Program. The goal of this program is to increase the knowledge and confidence, among families and child-care providers, to implement developmental monitoring for children birth to five years old, which may empower parents to seek intervention earlier.

MMM increases formal developmental screening for children birth to 5 years old by bolstering family and provider knowledge about appropriate developmental milestones and when to be concerned, Child-care providers, in partnership with parents, use the LTSAE checklists to monitor development of children, age 2 months to 5 years. Additionally, providers encourage all families to seek a full developmental screening, using a validated tool, as defined in the American Academy of Pediatrics guidelines. Evidence has shown that developmental monitoring and screening are complementary and yield the greatest increase in the number of children who receive early intervention. Children missing more than 3 milestones are automatically referred for a full developmental screening to be administered by a pediatrician, a home visiting program, or a Missouri-specific online screening resource. MMM pilot sites are integrating a variety of LTSAE materials into the culture of their program, while developing a standardized process to complete developmental monitoring checklists on all the children they serve.

The MMM program increases parent/caregiver knowledge about parenting and child development. Knowledge of parenting and child development is one of the five key Strengthening Families Protective Factors. All families, and those who work with children, can benefit from increasing their knowledge and understanding of child development, including:

- physical, cognitive, language, social, and emotional development;
- signs indicating a child may have a developmental delay and needs special help;
- cultural factors that influence parenting practices and the perception of children;
- factors that promote or inhibit healthy child outcomes; and
- discipline and how to positively impact child behavior.

CORE COMPONENTS & PRACTICE ACTIVITES

MMM starts with training the administration and staff within the child-care facility on all the materials and embedding LTSAE into the culture of the program. Key components are listed below:

- monitoring each child's development through checklists;
- sharing the checklists with families;
- ensuring an appropriate referral for a full developmental screening;
- making/creating programming adjustments to meet the needs of the child; and
- following up with families to ensure a full developmental screening was completed.

Core Components & Practice Activities		
Core Component	**Activities**	**Operational Details**
Developmental Monitoring	Complete age appropriate checklists on children & review/update regularly	Checklists are completed at 2, 4, 6, 9, 12, and 18 months and 2, 3, 4, and 5 years. Review checklists regularly in between new checklists to keep up with milestones achieved.
Communication with Families	Encourage families to complete checklists and compare information. Celebrate when milestones are met and follow up with families when concerns are identified and a referral for a formal screening is made	Family Professional Partnerships are an essential component to this program. Asking families to complete checklists and compare the data collected in the child-care setting is essential to capture the best picture of a child's development. Additionally, it provides a framework to discuss how families and providers can work together to ensure best outcomes. To foster total communication, families should be encouraged to share results when a referral is made.
Developmental Screening	Refer for a full developmental screening	When a child is missing 3 or more milestones they will be referred for a full developmental screening. If any items are checked in the purple concerns box, families are encouraged to contact their physician and early intervention. All children are referred for a full developmental screening according to the American Academy of Pediatrics guidelines.

Programming Adjustments	Curriculum/program practices should be adjusted to meet the needs of the child	Developmental monitoring can be used to guide curriculum and to make specific adjustments for children when milestones are missing or a concern is identified.

HEALTH EQUITY

Pilot sites were chosen strategically to represent all geographic regions of the state and all types of facilities, including licensed and license-exempt centers and family homes. Since the pilot virtual free training is ongoing and has been offered to home visiting and child care programs. Targeted outreach was to the 30 least populated counties in the state in an attempt to engage more rural areas to address a lack of resources in those areas. To date, over 800 individuals have been trained. *Learn the Signs. Act Early* materials including the Milestone Tracker app have been published on the new Missouri Early Connections website (www.earlyconnections.mo.gov) and are being marketed to families across the state.

EVIDENCE OF EFFECTIVENESS

While this program has not been formally evaluated yet, some initial signs of success are the large number of individuals interested in training. In addition many individuals who attend training go back to their program and send the rest of their staff to the training. Initial feedback from those implementing is that it helps have tough conversations with families and families are getting faster responses from physicians because they are better prepared.

Section 2: Implementation Guidance

STAKEHOLDER EMPOWERMENT & COLLABORATION

Assembling an interdisciplinary core leadership team was essential to establish the overarching aim and define objectives for the MMM program. However, to ensure a framework was designed that was feasible to implement,   a wide variety of early childhood professionals were engaged and developed the MMM State Team *(see list of collaborators in appendix table 1)*. Activating a larger group also allowed MMM to gain buy-in across the state early childhood system.

The core leadership and state teams met together monthly for 2 hours, virtually, during the development phase to present progress and receive feedback from the state team. Several tools were utilized during this phase to help us strategically design a meaningful framework and ensure our efforts tied back to the goals and objectives of the MMM program *(see list of tools in appendix table 2).*

REPLICATION

This practice is now being expanded to other early childhood providers including home visiting agencies, early intervention staff, and physical therapists, etc. This is just beginning in 2021 and more information on how these new areas of early childhood are implementing will be gathered later in the year.

INTERNAL CAPACITY

The MMM Program began with two key early childhood leaders who dedicated their time in-kind to co-lead the project. The co-leads include the Act Early Ambassador, and the Early Childhood Comprehensive Systems lead in Missouri. In year 1, the development phase, the co-leads dedicated approximately 20-30% effort to the project. Early on, the co-leads expanded their core leadership team to include three early childhood professionals from the Section for Child-care Regulation, Department of Social Services, and United4Children which is an inclusion agency for child-care programs. Although the amount of effort was significantly less for the additional team members, the interdisciplinary leadership team met virtually and in person 2-4 times, monthly.

Implementing the MMM Program will require approximately the equivalent of 75% of a full-time person at the state level who will provide up-to-date, high-quality training to child-care facilities, ensure that facilities are equipped with program materials, manage data collection and be available for technical assistance. An interdisciplinary lead team is recommended to ensure a variety of perspectives on implementation.

The time dedicated to implement the MMM program in a child-care facility varies depending on how they choose to execute the program. It is recommended that the MMM program be embedded into current processes that are successful.

PRACTICE TIMELINE

Phase: Planning/Pre-Implementation		
Activity Description	**Time Needed**	**Responsible Party**
Identify program lead/co-leads & other leadership team members, if necessary	Initial activity 2-4 hours	Title V Lead
Assemble a Statewide team with key early childhood stakeholders & host regular meetings	Ongoing 2-hour monthly meetings	Lead Team
Develop framework for project and track progress	Ongoing 6 months	Lead and State Teams
Conduct focus groups with child-care providers and families	Early in the process 6 hours (4 1.5-hour sessions)	Lead Team
Develop Implementation Guide	Prior to pilot implementation 18 hours over 6 months	Lead and State Teams
Develop data collection mechanisms	After implementation process is defined 18 hours over 6 months	Lead and State Teams
Finalize program materials	Before the start of recruitment 18 hours over 6 months	Lead and State Teams

Phase: Implementation

Activity Description	Time Needed	Responsible Party
Strategically recruit & select pilot sites	When all pre-planning activities are complete 5 hours	Lead Team
Provide training for pilot sites	After sites are selected 2 5-hour training sessions	Lead Team
Provide technical assistance through monthly coaching calls	Ongoing 1 hour per month	Lead Team
Collect & monitor pilot site program data	Ongoing 1-2 hours per month	Lead Team
Analyze pilot site data	After pilot has ended 20-30 hours	Lead Team
Make state level program adjustments	After data analysis 6-10 hours	Lead and State Teams
Update trainings/implementation guides/resources	After program adjustments are made 5-15 hours	Lead and State Teams
Launch statewide expansion and develop database	When funding is secure and implementation materials are finalized See other implementation activities above	Lead Team

Phase: Sustainability		
Activity Description	**Time Needed**	**Responsible Party**
Developmental Monitoring	Ongoing 15-30 minutes/checklist	Teachers and Parents
Communication with Families	Ongoing Dependent on the child/family	Teachers and Parents
Programming Adjustments	Ongoing Dependent on the child	Teachers and Child-care Program Staff/Administrators
Maintaining/Updating State Database & Training Materials	Ongoing As Needed	State Level Staff

PRACTICE COST

Costs to implement the MMM program vary depending on how many child-care facilities participate. In Missouri, we supported 18 pilot sites who participated voluntarily. The dollar amounts listed below are based upon printing start-up kits for programs that include developmental checklists and posters for approximately 70,000 children. After the start-up materials are gone, electronic checklists are available for programs to print. In the future, we hope to design a web-based platform where checklists can be completed online and eliminate paper checklists.

Budget			
Activity/Item	**Brief Description**	**Quantity**	**Total**
Personnel	Staff Time & Fringe	1560 hours	$60,000

Print Materials	Checklists, Parent Flyers, and Posters	~70,000 children in child-care	$30,000
Incentives	To incentivize programs to implement MMM, assuming 200 new programs in a year	200	$10,000
		Total Amount:	**$100,000**

LESSONS LEARNED

A key component of the MMM program is strengthening family-professional partnerships between families and child- care providers. Sites reported that the checklists were useful to initiate conversations with families about development and the majority of families felt discussing the results enhanced the partnership with their child-care provider. Additionally, the checklists helped families and child-care staff gain knowledge about developmental milestones. Some participating sites reported using milestones and the tips that help foster development to guide their classroom curriculum and to make individual plans for children when a concern was identified. The majority of sites reported that the MMM program had a positive impact on the children and families they serve, as well as their facility, and will continue to implement the MMM program.

Although the team was able to access some funding to support printing and in person meetings through the Missouri Title V Block Grant and Act Early Ambassador stipend, funding was not adequate to cover the efforts of the leadership team properly. The program initiative aligned with the team's primary job duties, so work was performed in-kind.

In reflecting on the journey to develop and implement a pilot of the MMM program, it is recommended that appropriate funding be in place to support a leadership team and a program coordinator. Additionally, it is crucial to reiterate the difference between developmental monitoring/surveillance and developmental screening to child-care staff who are implementing the program and coach child-care teams to emphasize the importance of following the guidelines put out by the American Academy of Pediatrics that every child should receive developmental screenings.

NEXT STEPS

MMM is being embedded into the early childhood system in Missouri funded by the Preschool Development Grant: Birth to Five (PDG). The MMM program will serve as the universal developmental monitoring program for the entire Missouri early childhood system. This system will be

starting in regional hubs across the state and MMM will be piloted within child-care programs within the regional hubs. There will also be implementation pilots within home visiting programs through the PDG. It has been a goal of the state team to eventually have this program embedded into these programs and others within early childhood so eventually all children and parents will have access to developmental monitoring and there will be an increase in the number of children who receive regular developmental screening.

RESOURCES PROVIDED

- Training includes access to an implementation guide which includes a section to help families navigate appropriate next steps. Parents are encouraged to share the developmental information with their child's physician during their next appointment, as well as with others who contribute to the care of the child. When 3 or more milestones are missing, a validated screening is recommended, and parents are provided with a menu of no cost options to access a formal screening. Some referral options for formal screenings can be conducted over the phone or online to remove transportation barriers. If there are any concerns identified, families are encouraged to reach out to their physician immediately.

- For parent empowerment, the back side of the checklist contains "Help Your Baby Learn and Grow" which was also developed by the CDC to teach parents how they can contribute to their child's ongoing growth. This can also facilitate parent/teacher interactions while they discuss ways to help establish personal developmental goals for the child.

APPENDIX

- *Appendix Table 1.*

Table 1. Additional Partner Agencies	
Variety of Title V Staff	Vision for Children at Risk
MO Head Start State Collaboration Office	Child-care Aware of Missouri
Women, Infants, and Children (WIC)	Child-care Providers
ParentLink (Help Me Grow)	Families

Department of Elementary & Secondary Education (Part C)	Physicians

- *Appendix Table 2.*

Table 2. Program Developmental Tools	
Logic Model	A logic model is a graphic depiction (road map) that presents the shared relationships among the resources, activities, outputs, outcomes, and impact for your program. It depicts the relationship between your program's activities and its intended effects. https://www.cdc.gov/eval/logicmodels/index.htm
Action Plan	A framework to ensure you complete a project efficiently and in a timely manner.
System Support Mapping	An interactive system thinking tool that guides teams through a structured assessment to identify their distinct responsibilities, needs, and specific resources required to fulfil their individual role.
Causal Loop Diagram	A diagram that aids in building an understanding of what variables are part of a system and define variable relationships and pathways of influence.
Hexagon Tool	A tool that assesses fit and feasibility of new or existing programs and practices.