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Practice Summary & Implementation Guidance

Recommendation Tools to Align Fatality Review Programs to Improve Maternal and Infant Health

The Michigan Fetal Infant Mortality Review Program (FIMR) created tools to improve the process of how local FIMR recommendations were written, collected, and elevated to the state for analysis and to align with Michigan Maternal Mortality Surveillance recommendations to identify common themes/trends. Additionally, the tools assist with tracking and implementation of recommendations at the local level.

Cutting-Edge → Emerging → Promising → Best

Location	Topic Area	Setting
Michigan	Preconception/Reproductive Health	Community

Population Focus	NPM	Date Added
Perinatal/Infant Health	NPM 3: Risk-Appropriate Perinatal Care	April 2020

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Section 1: Practice Summary

PRACTICE DESCRIPTION

FIMR is defined by the National Center for Fatality Review and Prevention as "a community-based, action-oriented process to review fetal and infant deaths and make recommendations to spark systemic changes to prevent future similar deaths. All FIMR teams operate at the local level (usually the county) to examine medical, non-medical, and systems-related factors and circumstances contributing to fetal and infant deaths." FIMR teams are made up of a variety of local professionals and lay people. For example, teams may include professionals and lay people from: health care, child welfare, home visiting, mental health, community and faith-based organizations, Emergency Medical Services, academic institutions, activists, bereavement specialists, family planning, law enforcement, among others. FIMR uses a two-tiered system that engages a multi-discipline case review team (CRT) and a community action team (CAT) to implement a continuous quality improvement process. The CRT reviews the case summaries from de-identified infant and fetal deaths abstracted from available records and from a maternal/family interview. Based on these reviews, the team makes recommendations for system change. The CAT acts to implement the recommendations from the CRT. Findings from the FIMR process are used to assess, plan, improve, and monitor the service systems and community resources that support maternal and infant health. The FIMR process complements population-based data while providing unique information not readily available from broad estimates and statistics.

The goal of this practice is to improve how local Fetal and Infant Mortality Review (FIMR) recommendations are written, collected, sorted, and elevated to local and state Maternal and Child Health (MCH) leaders in order to increase the likelihood that actions can be taken to improve systems for women, infants, and families. As a result of completing an improvement process called "lean" or lean process improvement (LPI), the Michigan FIMR network developed the following tools and resources: 1) FIMR Health Equity Toolkit; 2) FIMR Interview Guide; 3) FIMR Case Review Team Recommendation Form; 4) Log of Local FIMR Recommendations; 5) Local and State Data Sources for FIMR Case Abstraction; and 6) FIMR Community Action Team Roles & Responsibilities document.

CORE COMPONENTS & PRACTICE ACTIVITES

A process improvement methodology called "lean" or lean process improvement (LPI) was used to create a standardized process for creating and reporting FIMR recommendations that would rank recommendations from most important to least. The LPI methodology consisted of four workshops. Eleven local FIMR network members participated in the workshops. Each workshop lasted a full day. Participants were asked to outline the current FIMR process, identify gaps in the process, and create a future ideal FIMR process to fill the identified gaps. Five specific process improvement

recommendations were created: 1) develop a new FIMR recommendation process; 2) improve and facilitate access to a suite of State level data systems; 3) embed equity training within the recommendation process; 4) develop a state database of FIMR recommendations; and 5) develop best practices and roles and responsibilities to promote FIMR team Community Action Team partnerships. Implementation teams were formed around each of the process improvement recommendations and the following resources/tools were developed: 1) FIMR Health Equity Toolkit; 2) FIMR Interview Guide; 3) FIMR Case Review Team Recommendation Form; 4) Log of Local FIMR Recommendations; 5) Local and State Data Sources for FIMR Case Abstraction; and 6) FIMR Community Action Team Roles

The goal is to improve how local FIMR recommendations are written, collected, sorted, and elevated to local and state MCH leaders; in order to increase the likelihood that actions can be taken to improve systems for women, infants, and families. Local tools were developed to improve the FIMR process and ultimately the FIMR recommendations. Four process improvement workshops were held to analyze the current FIMR process, identify areas of improvement, and develop an improved process. As a result, the following resources/tools were developed and piloted with local FIMR network teams: FIMR Recommendation Tool, FIMR Recommendation Log, Health Equity Toolkit, Maternal/Family Interview Guide, Community Action Team Roles & Responsibility document, and Data Sources Reference Guide for Case Abstraction.

Core Components & Practice Activities

Core Component	Activities	Operational Details
Proposal to Department Leadership	Identified need for improved recommendation process	Local FIMR network members and state MCH leadership identified a need to improve the FIMR recommendation process. The process improvement, "lean" (lean process improvement (LPI)), was reviewed and proposed to state MCH leadership.
Approval & Scoping	LPI was approved by state MCH leadership and lean scoping meetings were held.	An internal LPI application was submitted and approved. An internal scoping meeting was held to determine the goal(s) of the LPI workshop session.
Workshops	Four LPI workshops were held.	An introduction and invitation to volunteer to participate in the LPI workshops were sent to the local FIMR network members. The workshop consisted of four, eight-hour days. During the LPI workshops the participants mapped out the current FIMR process, identified gaps in the

		current process, redesigned the process, and created an implementation plan.
Creation of Resources/Tools	Implementation teams were developed and created resources/tools.	After the LPI workshops, implementation teams were organized to work on creating resources/tools. The teams consisted of state infant health staff and local FIMR network members.
Piloting Resources/Tools	Local FIMR network members piloted resources/tools with their local case review teams (CRTs).	After the resources/tools were developed, feedback was received, and the resources/tools were revised. The resources/tools were then piloted with the local FIMR network members and CRTs.
Finalizing Resources/Tools	Based of feedback received during piloting, resources/tools were or will be finalized.	After the piloting period, resources/tools have been or will be finalized. Local FIMR recommendation will be collected utilizing the new tool and log starting in October 2020.

HEALTH EQUITY

A strong interest to better understand how inequity leads to disparities in infant mortality was identified during the workshops. To create equitable recommendations, FIMR teams identified a need for access to resources and trainings. As a result, a health equity toolkit was developed by the FIMR Network. The toolkit provides resources and trainings which FIMR teams may use to gain a deeper understanding of health equity, to incorporate health equity into the case review process, and to inform local systems recommendations at the community level. Additionally, the recommendation tool used during the local Case Review Team meetings, encourages teams to create actionable recommendations that address social determinants of health and root causes of infant mortality.

EVIDENCE OF EFFECTIVENESS

While this program has not been formally evaluated yet, some initial signs of success are the newly developed tools created by using improvement feedback. In September 2019, the FIMR network members reviewed materials developed by the implementation teams and provided improvement feedback. In December 2019, FIMR network members practiced using the recommendation tools by going through a mock case review. This allowed time to gather additional feedback and for the members to experience using the tools in a review meeting. Between January 2020 and August 2020,

the FIMR network members piloted the materials with their local teams. Feedback from members is provided during monthly calls with the network members and through email.

The newly developed tools will allow for the analysis of recommendations across the Michigan FIMR network and to implement actions based on findings locally and statewide. Additionally, these tools will allow for the alignment with the Michigan Maternal Mortality Surveillance recommendations to improve the outcomes for mothers, infants, and families. By developing these tools and resources, Maternal and Child Health improvement recommendations gleaned from the FIMR case abstraction and maternal interview processes can now be better prioritized, shared with key decision makers, implemented, and aligned with Maternal Mortality Review. The new recommendation tools allow teams to create more specific, measurable, actionable, realistic, and timely (SMART) recommendations.

Section 2: Implementation Guidance

STAKEHOLDER EMPOWERMENT & COLLABORATION

For this initiative, members of the Michigan FIMR network volunteered to participate in the four LPI workshops and then members created implementation teams to work on the projects identified through the workshop. During implementation, the Michigan FIMR network members participated in calls, meetings, and spent time creating and reviewing the resources/tools. For those who were unable to participate in the workshops and/or the implementation teams, their feedback on the tools/resources were gathered through email communication and phone calls. Additionally, internal meetings with Maternal Mortality Surveillance program staff were held to discuss alignment between recommendation tools.

In September 2019, the FIMR network members had a meeting to review all the materials developed by the implementation teams and were able to provide feedback for improving the materials. In December 2019, the FIMR network members had a meeting to practice using the recommendation tools by going through a mock case review. This allowed time to get additional feedback and for the members to see what it will be like to use the tools in a CRT meeting. Between January 2020 and August 2020, the FIMR Network members are piloting the documents with their multi-disciplinary CRTs. Feedback from the members is provided during monthly calls with the network members and/or through email. Additionally, internal meetings with Maternal Mortality Surveillance program staff were held to discuss recommendation alignment.

REPLICATION

This practice has not yet been replicated.

INTERNAL CAPACITY

The following personnel are needed to support this practice:

1. **State FIMR Coordinator:** One position; skilled in project coordination, FIMR process, FIMR methodology, and FIMR implementation; varied FTE
2. **State Infant Health Manager:** One position; skilled in management, leadership, and project management; varied FTE
3. **Lean Process Improvement Facilitators:** Two positions; skilled in group facilitation and lean process improvement methodology; facilitated scoping meetings, four-day workshop, and follow-up meetings with state staff on implementation.
4. **Local FIMR Coordinators:** Eleven local FIMR Coordinators; skilled in FIMR process (case abstraction, maternal/family interviews, meeting facilitation), methodology, and implementation; FTE varied by local health departments.
5. **Local FIMR Case Review Teams (CRTs):** Thirteen local FIMR CRTs; multidisciplinary teams (maternal and infant health medical professionals, public health, law enforcement, bereavement specialists, etc.) – representation based on needs of the community; skilled in maternal and infant health, social, and environmental factors; CRTs meet monthly to quarterly based on the number of cases ready for review. Each CRT meeting lasts two to three hours.

PRACTICE TIMELINE

Phase: Planning/Pre-Implementation		
Activity Description	**Time Needed**	**Responsible Party**
Proposal to Department Leadership	January 2019 ≈ 2 hours	State FIMR Coordinator; State Infant Health Manager
LPI Application/Approval	January 2019 ≈ 2 hours	State FIMR Coordinator; State Infant Health Manager; State MCH Leadership

LPI Scoping	February 2019 2 hours	State FIMR Coordinator; State Infant Health Manager; State MCH Leadership; LPI Facilitator
LPI Introduction/Invitation to Local FIMR	March – May 2019 ≈ 2 hours	State FIMR Coordinator
LPI Workshops	January 2019 32 hours	LPI Facilitators; State FIMR Coordinator; State Infant Health Manager; Local FIMR network members
Department Approval of Proposed Activities	January 2019 1 hour	State MCH Leadership

Phase: Implementation

Activity Description	Time Needed	Responsible Party
Meetings with Implementation Teams	June – August 2019 ≈ 4 hours	State FIMR Coordinator; State Infant Health Manager; Local FIMR Network Members
Develop Resources/Tools	June – August 2019 ≈ 8 hours	State FIMR Coordinator; State Infant Health Manager; Local FIMR Network Members
Feedback on Resources/Tools	September – December 2019 ≈ 5 hours	State FIMR Coordinator; State Infant Health Manager; Local FIMR Network Members
Piloting Resources/Tools	January – August 2020 ≈ 7 hours/FIMR CRTs	Local FIMR Network Members; Local FIMR CRTs

Finalizing/Approval of Tools	March 2020 – Present ≈ 4 hours	State FIMR Coordinator; State Infant Health Manager; State MCH Leadership

Phase: Sustainability		
Activity Description	**Time Needed**	**Responsible Party**
FIMR Teams Using Resources/Tools	October 2020	Local FIMR Network Members; Local FIMR CRTs
Collect Recommendations	October 2020	State FIMR Coordinator; Local FIMR Network Members

PRACTICE COST

Budget			
Activity/Item	**Brief Description**	**Quantity**	**Total**
State FIMR Coordinator			
State Infant Health Manager	Participated in internal and external meetings, LPI workshop, assisted in resource creation, and project oversight	.1 FTE	In-kind
Lean Process Improvement Facilitators (Lean	LPI facilitators led the FIMR network through the workshops.	2 facilitators	In-kind

Process Improvement Unit)			
Local FIMR Coordinators	Local team members volunteered to participate in LPI activities	11 participants	In-kind
Local FIMR Functions			
Local County Case Abstraction	Local teams reimbursed for completed case abstractions ($270/completed case)	≈ 202 cases/year	Local teams reimbursed for completed case abstractions ($270/completed case)
Local County Maternal/Family Interviews	Local teams reimbursed for completed interviews ($125/completed interview)	≈ 169 interviews/year	≈ $21,125
		Total Amount:	**≈ $65,665**

LESSONS LEARNED

Through this initiative, we learned that it was important to use a process improvement methodology such as lean. It was also critical to include local Michigan FIMR network members, internal and external partners in the process improvement work. For example, many local FIMR network members shared resources they created and used with their teams. Because this work seeks to align fatality review program recommendations, it was important to work closely with the Michigan Maternal Mortality Surveillance (MMMS) coordinator and utilize the MMMS program recommendation tools/resources to inform the FIMR tools/resources. Lastly, another important resource used was the National Center for Fatality Review and Prevention (NCFRP), which provided resources and examples when creating the Michigan resources/tools.

Collecting and ensuring feedback was another important component to creating and implementing a successful new process. To ensure sufficient feedback from FIMR network members was captured, we held monthly network phone calls, in-person quarterly meetings, and communicated through emails. Prior to piloting the new tools and resources, the FIMR network members participated in a mock case review meeting. This allowed FIMR network members to practice using the tools before using them

with their respective case review teams. In addition, we found that allowing adequate time for piloting the tools was essential before moving to implementation. Finally, it was important to conduct monthly calls and in-person quarterly meetings with network members, which allowed the FIMR network members to share their experiences using the tools with their local case review teams.

NEXT STEPS

Next steps include:

- Implementation of the FIMR recommendation tools with local CRTs starting in October 2020.
- Statewide recommendation collection utilizing the local recommendation log in October 2020.
- FIMR and MMMS will be going through an LPI workshop in the fall 2020 to continue the work of aligning recommendations and disseminating joint findings.

RESOURCES PROVIDED

The following resources are relevant and useful in the implementation of this practice:

- www.michigan.gov/FIMR
- FIMR Health Equity Toolkit
- FIMR Maternal/Family Interview Guide
- FIMR CRT Recommendation Tool *(Being finalized)*
- Log of Local FIMR Recommendations *(Being finalized)*
- Community Action Team Roles & Responsibilities
- Michigan Mother Infant Health & Equity Improvement Plan

APPENDIX

- *N/A.*