Maternal and Child Health, Occupation Health - Host Site Description New Jersey Department of Health

Assignment Location: Trenton, US-NJ

New Jersey Department of Health

Division of Family Health Services, Maternal and Child Health

Primary Mentor: Genevieve Lalanne-Raymond, MPH, BSN, RN

MCH Epidemiologist (Research Scientist 1)

NJDOH

Secondary Mentor: Adwoa Nantwi, MPH

Research Scientist 2

NJDOH

Work Environment

Hybrid

Assignment Description

The Fellow will be incorporated as a member of the Maternal and Child Health (MCH) Epidemiology (Epi) team (approximately 4 people), which sits in the MCH unit (25 people), part of the Family Health Services Division, Public Health Services Branch of NJ Department of Health. They will have specific responsibilities but in a collaborative team atmosphere, while also getting exposure to program design and implementation, evaluation, and reporting. Daily activities will vary based on the dynamic needs of the MCH Epi team, but the Fellow will be expected to have independent work intervals, meet regularly with their mentors and other team members, attend unit and division meetings as they occur (roughly monthly), and drive their own independent research and networking activities as needed in order to succeed on their projects. As time and interest allows, they can also pursue related interests and network within the Department more broadly, to support their learning of state and local public health programs.

Describe Statistical and Data Analysis Support, Such as Databases, Software, and Surveillance Systems Available to the Fellow

NJDOH will provide SAS and Tableau licenses to the Fellow. In addition, other software programs will be made available upon request. The Fellow will also be added to the Institutional Review Board protocols for PRAMS and Fetal-Infant Mortality Reviews (through Rowan University) and gain direct access to the National Center for Fatality Review and Prevention (NCFRP) and PRAMS databases. Other software access may be available upon request.

Projects

Surveillance Activity Title: Utilizing Perinatal Periods of Risk (PPOR) to Enhance the Reporting and Analysis of New Jersey Fetal-Infant Mortality Reviews

Surveillance Activity Description:

The Fellow will support the Fetal-Infant Mortality Review Team to participate in the day-to-day activities and aid in the production of a state-level fetal-infant mortality report based on data provided from the Maternal and Child Health Consortia, who conduct regional-level fetal-infant mortality reviews. The Fellow will assist with surveillance of data submitted to the National Center for Fatality Review and Prevention and assist in the integration of the Perinatal Periods of Risk (PPOR) framework to identify appropriate sampling strategies across the regional-level case reviews.

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Surveillance Activity Objectives:

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- 1. Understanding how the inclusion of the Perinatal Periods of Risk (PPOR) framework serves as an analytic and community-based methodology for improving fetal-infant outcomes.
- 2. Understanding the benefits of regional-based fetal-infant mortality reviews and accompanying data produced through the reviews.
- 3. Analyze, evaluate, and report on state-level fetal-infant outcomes using data from a national database, the National Fatality Review Case Reporting System (NFR-CRS).

Surveillance Activity Deliverables:

- 1. Identifying new sampling strategies for each regional review team that is both representative of the demographics of New Jersey's birthing population demographics and inclusive of the four perinatal periods of risk (maternal health/prematurity, maternal care, newborn care, and infant health).
- 2. A full-length report identifying state-level data fetal-infant mortality outcomes, based on the PPOR framework, which includes causes of fetal-infant deaths, contributing factors leading to these deaths, racial/ethnic disparities in fetal-infant outcomes, and preventability of the deaths reviewed by each region.
- 3. Analyses on PPOR outcomes, such as excess mortality rates (based on a sample reference group) using vital statistics data from 2019-2022.

Surveillance Activity Impact:

Enhanced data sampling, analysis, and reporting at the state-level of fetal-infant outcomes.

Surveillance System Evaluation Title: Evaluation of Perinatal Periods of Risk (PPOR) Framework in New Jersey Fetal-Infant Mortality Reviews

Surveillance System Evaluation Description:

In August 2023, the Maternal and Child Health Consortia of New Jersey, which consists of three regional community-based organizations that conduct fetal-infant mortality reviews using a multidisciplinary team, transitioned to using the NCFRP's National Fatality Review Case Reporting System (NFR-CRS). Upon the integration of the new sampling strategy using the Perinatal Periods of Risk (PPOR) framework, the Fellow will assist the MCH Epi team in the review of data submitted in the NFR-CRS for accuracy and completion, produce data quality reports, and provide recommendations on ways to enhance data quality and collection. The Fellow will also work on evaluative measures on community-based initiatives to reduce racial/ethnic disparities in fetal-infant mortality.

Surveillance System Objectives:

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- 1. Reviewing data submitted in the NFR-CRS for fetal-infant mortality cases that have completed review using the PPOR framework.
- 2. Overseeing data quality in the NFR-CRS for each regional review board.
- 3. Identifying process and outcome measures that address racial/ethnic disparities in fetal-infant mortality through proposed initiatives by the MCH Consortia using the PPOR framework.

Surveillance Activity Deliverables:

- 1. Identifying areas for data collection and/or current gaps in data for consideration.
- 2. Producing state-level data quality reports for each regional fetal-infant mortality review board.
- 3. Identifying evaluation measures for community-/region-based strategies and initiatives focused on the four perinatal periods of risk (maternal health/prematurity, maternal care, newborn care, and infant health).

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Surveillance System Impact:

Enhancing the data capacity as well as identifying program/initiative-based evaluations that are informed by fetal-infant outcome data. Ultimately, these efforts will improve NJDOH's understanding of fetal and infant mortality, our ability to review data and cases, and our understanding and efforts to reduce fetal-infant mortality across the state.

Major Project Title: Establish "PRAMS for Partners" Survey in NJ

Major Project Description:

NJ has a longstanding Pregnancy Risk Assessment Monitoring System (PRAMS) for pregnant individuals, through a CDC grant. But there is no large-scale public health surveillance system to understand the health and behaviors of men or same-sex partners transitioning into parenthood. PRAMS for PARTNERS provides a randomized approach of a state-based surveillance system examining paternal behaviors before and after their infant's birth to better understand the health needs of men, partners, and their families during the transition to parenthood. The AEF will support the establishment of PRAMS for Partners in NJ through stakeholder engagement with experts in this program, existing PRAMS implementation partners, integration of new data into existing state data systems, and creation of Data to Action materials to inform public health intervention and policy. The MCH unit has already established a partnership with Dr. Craig Garfield, of University of Northwestern's Institute for Policy Research, who will be supporting NJDOH in establishing this innovative surveillance program.

Major Project Objectives:

Main Project Objectives:

- 1. Review existing literature on surveillance of pregnant individuals and their partners.
- 2. Develop or refine a plan to establish a PRAMS for Partners program in NJ, building on existing PRAMS surveillance activities.
- 3. Lead implementation of PRAMS for Partners, including survey questions, sampling procedures, IRB submission, Memorandum of Agreement (MOA) with established partners through state approval systems, and outreach plans.
- 4. Determine data monitoring activities through existing state data infrastructure, and produce "data to action" materials in the form of data briefs, data visualizations, or intervention proposals utilizing PRAMS for Partners data.

Main Project Deliverables:

- 1. PRAMS for Partners Implementation Plan.
- 2. PRAMS for Partners MOA and IRB approval.
- 3. Established PRAMS for Partners surveillance, and a first year report (if timing allows) or initial data brief.

Major Project Impact:

Establishment of a PRAMS for Partners program will allow NJDOH to monitor and understand the health, attitudes, and behaviors of dads and partners through the perinatal period, supporting the state's efforts to improve maternal and child health through broader family support structures. This new system will support public health intervention and policy related to partners in their parenthood journey, in turn improving outcomes for mothers and babies.

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Additional Project #1 Title: Maternal Health Resource Mapping

Project #1 Type: Surveillance Activity

Project #1 Description:

Combining multiple data sources, utilize GIS to create a maternal health resource mapping tool. NJ has a wealth of distinct maternal health data tools, including PRAMs, the Maternal Health Hospital Report Card, NJSHAD, and other resources, and there is a need to combine applicable data to map available resources with their metadata, including hospital and birth center locations, FQHCs, CenteringPregnancy sites, and more. The project can start as a pilot for certain counties and expand, or start as statewide, based on the capacity of the Fellow.

Project #1 Objectives and Expected Deliverables:

Main Project Objectives:

- 1. Review existing resource mapping examples from other states, as well as available data sources and GIS tools.
- 2. Develop a list of resources that require mapping.
- 3. Lead development of the resource mapping with a GIS tool, with the goal of it being available publicly, and sustainable.
- 4. Present progress and final work to NJ state agencies and stakeholders, including how the resource mapping can improve maternal health.

Main Project Deliverables:

- 1. List of maternal health resources to be mapped
- 2. Plan for resource mapping, including how to sustainably update
- 3. Maternal Health Resource Map, created through a GIS platform, and available publicly

Project #1 Impact:

A variety of resources and health care are available to pregnant and parenting people in NJ, but vary in their support of different levels of pregnancy risk, insurance coverage, and cultural fit. An easily accessible mapping tool is needed to show the available resources for people, so that they can better match their care with their needs, and improve knowledge on what resources exist locally, as well as gaps in resources and care. By making the maternal health landscape of care more visible, state agencies as well as the public can identify improved care and ultimately improve maternal health care outcomes.

Please Describe the Fellow's Anticipated Role in Preparedness and Response Efforts – Include Activities and Time Allocation (Required Competency of Fellowship)

The Fellow will have opportunities to review existing data from Pregnancy Risk Assessment Monitoring System (PRAMS) related to COVID behaviors and health among pregnant and new mothers in NJ. By examining and analyzing COVID-related measures, we hope to gain an understanding of planning and intervention for future emergency preparedness scenarios. The Fellow will also have the opportunity to participate in an evaluation activity related to preparedness and response efforts related to COVID-19 response. These activities will be approximately 10 percent of the Fellow's time, or as time allows.

Please Describe the Fellow's Anticipated Role in Cluster and Outbreak Investigations – Include Activities and Time Allocation (Required Competency of Fellowship)

The Fellow will have the opportunity to work with NJDOH's Division of Epidemiology, Environmental, Occupational Health (EEOH), in conjunction with local health departments, regarding cluster/outbreak investigations (e.g., infectious disease outbreaks, weather-event responses); depending on the Fellow's interest and time, the Fellow would be able to

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work on various activities including but not limited to characterizing descriptive epidemiology of the event, developing prevention recommendations, and developing engagement/health education plans. This activity might account up to 20% of the Fellow's time, depending on the event and/or other project commitments.

Please Describe the Fellow's Anticipated Role in the COVID-19 Response – Include Activities and Time Allocation

The Fellow will have the opportunity to collaborate with the Division of Epidemiology, Environmental, Occupational Health's (EEOH) evaluation/preparedness/planning activities surrounding COVID-19 experiences (e.g., long COVID analysis, evaluation of school health-associated activities). In addition, working with MCH to establish future emergency preparedness (look-ahead) efforts. This effort might account for up to 10% of the Fellow's time, depending on the activities and/or other project commitments.

Please Describe Opportunities for Fellows to Work in Health Equity as well as Incorporating Diversity, Equity, and Inclusion into their Work

New Jersey, which has disparate racial/ethnic outcomes in maternal and fetal-infant mortality (particularly among the Black, NH birthing population), is focused on identifying and implementing initiatives that are aimed at reducing the disparities and improving outcomes for Black birthing parents and their babies. All programs within the Maternal and Child Health Epidemiology unit at the NJDOH are focused on producing data and evaluation efforts that are focused on attaining equitable health outcomes for all. Through FIMR and PRAMS, the Fellow will be able to work on data projects that are aimed at achieving health equity, while also gaining experience in program partnerships and community building through regional- and community-based initiatives.