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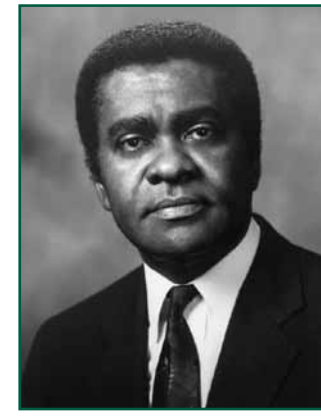
National Fetal and Infant Mortality Review Program

From Presidential Initiative to Successful Long-Term Collaboration

Ezra C. Davidson Jr, MD, FACOG



Introduction

Twenty years ago, the American College of Obstetricians and Gynecologists (the College) embarked on a public health collaboration to promote a community-based process, the Fetal and Infant Mortality Review (FIMR), which has proved to be effective in helping communities improve the services and resources available to women and families. Fetal and Infant Mortality Review, a local continuous quality improvement model, was first developed in 1984 by the federal Maternal and Child Health Bureau. Beginning as my Presidential initiative in 1990, the National FIMR Resource Center (NFIMR) has continued as an ongoing collaborative effort between the College and the Maternal and Child Health Bureau. During these past two decades, the use of FIMR has grown from the first six pilot communities to more than 200 FIMR programs in 40 states. Throughout this time, NFIMR has been the designated national resource to assist communities in the development and operation of the FIMR process. A national evaluation confirmed the value of FIMR and demonstrated that it is a successful perinatal initiative in local communities. Fellows today can be encouraged by the success of this presidential initiative and will hopefully take advantage of opportunities to continue and expand partnerships with public health agencies to improve services and resources for their patients.

The Beginning

Early in 1990, as the president-elect of the College, I met with the Maternal and Child Health Bureau director to solidify plans for collaboration and support to expand the use of the promising FIMR methodology that the Maternal and Child Health Bureau had developed and tested in six communities (1). In my 1990 College presidential address, I was able to champion FIMR and announce the joint College–Maternal and Child Health Bureau creation of NFIMR as my presidential initiative, "I propose a system which will encourage states and communities … to develop fetal and infant mortality reviews to examine seriously and comprehensively the reasons for each death …" (2).

In addition to the Maternal and Child Health Bureau there have been other important sources of support for developing NFIMR. The March of Dimes Birth Defects

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Foundation, the Centers for Disease Control and Prevention, and Carnation Nutritional Products of California provided substantial financial support for ten demonstration projects from 1991 to 1993. The Robert Wood Johnson Foundation and District IV funded an additional five new projects in 1993. These projects moved the methodology from theory to practice and placed it on firm footing for sustainability (3, 4).

Representatives from many national organizations added support by participating in the NFIMR Steering Committee, working tirelessly to refine and champion the FIMR methodology among their members. Participating organizations included the American Academy of Family Physicians, the American Academy of Pediatrics, the American Anthropological Society, the American College of Nurse–Midwives, the American Hospital Association, the Association of Maternal and Child Health Programs, the Association of State and Territorial Health Officials, the College of American Pathologists, the March of Dimes Birth Defects Foundation, the National Association for Obstetric, Gynecologic, and Neonatal Nurses, and the Society of Perinatal Obstetricians. Many of these organizations continue to contribute to our work through the NFIMR Consortium (5).

Over the past 20 years, the FIMR methodology has also been tested by hundreds of communities and refined, standardized, and improved. Today, more than 200 projects in 40 states, the District of Columbia, the Commonwealth of Puerto Rico, and the U.S. Virgin Islands are implementing FIMR.

The Fetal and Infant Mortality Review Methodology

Key concepts of the FIMR methodology are listed in Box 1. The process begins when a fetal or infant death is identified. Fetal and Infant Mortality Review staff collect data about the death and the services the woman and her family received from a variety of sources, such as the death certificate, physician and hospital records, home visit records, and records for the Special Supplemental Nutrition Program for Women, Infants, and Children and additional social services. Fetal and Infant Mortality Review is the only fetal and infant death review process that incorporates significant amounts of obstetric information about the woman's health, the preconception period, pregnancy, and labor and delivery, as well as information about infant care. Fetal and Infant Mortality Review imposes strict rules of confidentiality and anonymity. Trained professionals, usually experienced public health nurses, interview the mother to record her experience of the support services available to her and the care received during the prenatal, labor and delivery, and postnatal periods. The interviewer also refers the family to appropriate support and community resources when necessary. The case is then de-identified and summarized to ensure the confidentiality of patients, health care providers, and health care facilities, and the case summary is presented to a case review team. This team represents a broad range of professionals as well as public and private agencies that provide services and resources for women, infants, and families. In its review of cases, the case review team identifies health system and community factors that may have contributed to the death and makes recommendations for community change. The findings and recommendations from the case review team are then presented to a community action team. The community action team consists of members who are in a position to direct change at the community level. The community action team implements interventions designed to address the problems identified by the case review team (6, 7).

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Box 1. Key FIMR Concepts

- *Systematic evaluation of individual cases* (case reviews).
- *Identification of a broad range of factors* contributing to adverse outcomes, not just medical factors (e.g., socioeconomic, administrative, environmental, system).
- *Inclusion of information not available through routine quantitative methods* (e.g., family interview). Recognition of the importance of the family interview has grown over time.
- *Cases viewed as sentinel events* illustrating system and resource issues. Infant and/or fetal deaths are viewed as frequently occurring events that can illuminate community-level system and resource issues throughout the continuum extending from the preconception period through infancy.
- *Avoidance of preventable/nonpreventable classifications of deaths* due to the ambiguity of these categories and because the intent of the case review is to identify opportunities for change ("correctable factors") in policies and programs.
- *Avoidance of blame* (anonymous cases and confidential process, explicitly not a medical audit, examination of associated factors rather than causes).
- *Population oriented* with a defined sub-state geographic area as the focus (as opposed to a hospital-based review, in which cases are representative only of the hospital's patient base), and the use of population-based data as a complement to the case-specific data.
- *Two-tiered process* that promotes separate teams being responsible for the analytic function (review cases; draft preliminary recommendations) and the action function (disseminate findings; facilitate implementation of recommended policies and interventions).
- *Multidisciplinary involvement.* While the initial manual guidance focused primarily on physicians and other health professionals, subsequent editions promoted participation of a broader range of community partners, recognizing the value of diverse community perspectives.
- *Promotion of joint sponsorship by medical society and health department* to bolster physician and community buy-in while maintaining a public health perspective. Over time, the involvement of these two sectors has become so commonplace that current FIMR guidance no longer specifies that they should be FIMR sponsors (though they both are still suggested participants); experience shows that a variety of sponsors can be successful.
- *Adaptability to varying local conditions and resources.*
- *Complementary method to other maternal/infant health improvement efforts.*
- *Integral component of an ongoing needs assessment, program planning, implementation, and evaluation cycle*—essential functions in public health practice.

With kind permission from Springer Science+Business Media: Matern Child Health J, The Evolution of Fetal and Infant Mortality Review as a Public Health Strategy, 8(4), 2004, 198, Koontz AM, Buckley KA, Ruderman M, Table III. [PubMed] ⇦

The Fetal and Infant Mortality Review Process: Continuous Quality Improvement

National organizations and programs concerned about quality health care (eg, the Institute of Medicine, the Joint Commission on Accreditation of Healthcare Organizations, the Agency for Healthcare Research and Quality, and the Maternal and Child Health Bureau) now emphasize adoption of quality improvement strategies and use of performance measures. Continuous quality improvement methods are being used increasingly in health care to identify problems, analyze underlying factors that contribute to the problem, redesign system approaches or resource allocation to resolve the problems, and subsequently determine if change in the process is successful (8–10).

For two decades, FIMR has used these essential steps in its process to develop creative and innovative service systems practices and solutions for local communities. Fetal and Infant Mortality Review case reviews do not seek to analyze traditional medical management factors but focus on the identification of the social, psychologic, economic, cultural, safety and education systems issues unique to each community that have an effect on infant morbidity and mortality (11). The FIMR continuous quality improvement cycle is shown in Figure 1.

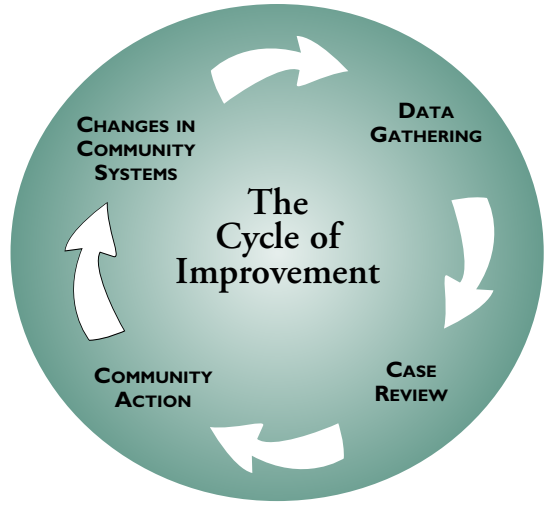

Fig. 1. The fetal and infant mortality review continuous quality improvement cycle.

The National Evaluation of Fetal and Infant Mortality Review

In 2004, my conviction about the utility of the methodology was further validated when the results of the national evaluation of FIMR were published. The study, conducted by the Johns Hopkins University Bloomberg School of Public Health, Women's and Children's Health Policy Center, demonstrated that FIMR is an effective perinatal systems intervention (12). The evaluation also has systematically documented that FIMR significantly enhances the performance of core public health functions. In particular, national evaluation findings reveal that

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communities with FIMR, compared with those without, are significantly more likely to be engaged in activities related to these core public health functions (13–15):

- Data assessment and analysis (eg, analyze data about pregnant women and infants)
- Client services and access (eg, promote access to appropriate pregnancy care through use of a common risk assessment instrument)
- Quality assurance and improvement (eg, develop population-based standards of care for pregnant women and infants and initiate changes in local or state regulations)
- Community partnerships and mobilization (eg, collaborate with or provide expertise to community initiatives about pregnant women and infants)
- Policy development (eg, produce a plan about health needs of pregnant women)
- Enhancing workforce capacity (eg, educate providers and convene meetings about high-risk pregnant women and infants)

As an additional part of the national evaluation, FIMR programs reported on the progress of four actions implemented by their program that they previously considered the most important actions. Respondents stated that the vast majority (75%) of the four priorities were fully implemented and another 22% were in the process of implementation. Only a small percentage (approximately 3%) were not implemented. Fetal and Infant Mortality Review programs were likely to use positive, collaborative strategies such as advocacy and education to achieve their action interventions, which is consistent with a continuous quality improvement approach to problem solving. Fetal and Infant Mortality Review programs described some of the most important case review issues that led to community action as follows: prenatal care (82.5%), substance abuse (81.5%), sudden infant death syndrome risk reduction (86%), smoking cessation (72%), and domestic violence (75.5%) (16).

Conclusion

For more than 20 years, the College has continued to partner with the Maternal and Child Health Bureau in support of the NFIMR Resource Center. This public–private partnership has been a successful strategy and a national model of collaboration. Through NFIMR, the FIMR methodology has been refined and promoted at the national, state, and local levels. This long-term partnership has garnered respect for both partners. I hope that Fellows today will be encouraged by my presidential initiative to take advantage of opportunities to continue and expand partnerships with public health agencies to improve services and resources for their patients.

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