## MATERNAL INFLUENZA REVIEW PROGRAM

 $A\ Tool\ Kit\ for\ State\ and\ Local\ Health\ Departments$ 

American College of Obstetricians and Gynecologists 2016



# MATERNAL INFLUENZA REVIEW PROGRAM

#### A Tool Kit for State and Local Health Departments

From 2013-2016 the American College of Obstetricians and Gynecologists (ACOG) executed a pilot program to review maternal hospitalizations due to influenza. The purpose of the program was to identify potential barriers and system failures resulting in such hospitalizations and provide recommendations to reduce or eliminate these barriers. Once recommendations are formed, the goal is to implement all or as many as possible to promote systems change and improve the health of pregnant women and their unborn children. With assistance from the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Health Officials (ASTHO), ACOG worked with four state health departments in Colorado, Minnesota, New York, and Rhode Island to identify these barriers and make recommendations for system improvements to prevent future hospitalizations.

This tool kit is designed to help State and Local Health Departments execute a Maternal Influenza Review Program (MIRP) to identify barriers to maternal influenza immunization and potential systems failures resulting in the hospitalization of pregnant women due to influenza, as well as address barriers and implement system changes to improve women's healthcare. If your state or local health department is interested in implementing such a program and have questions, please contact immunization@acog.org.

This project is made possible by cooperative agreement number 5U38OT000161-03 from the Centers for Disease Control and Prevention (CDC) and the Association of State and Territorial Health Officials (ASTHO). Its contents are solely the responsibility of ACOG and do not necessarily represent the official views of CDC or ASTHO.

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### MATERNAL INFLUENZA REVIEW PROGRAM

Overview of Pilot Project

American College of Obstetricians and Gynecologists

#### **Introduction and Overview of Original Pilot Project\***

The American College of Obstetricians and Gynecologists Immunization Department conducted a pilot project entitled Maternal Influenza Review Program (MIRP) in four states (Colorado, Minnesota, New York, and Rhode Island) that reviewed cases of pregnant women who were hospitalized with influenza in the 2012–2013 influenza season (October 2012–May 2013) using the fetal and infant mortality review (FIMR) methodology. This methodology was developed by the National Fetal and Infant Mortality Review (NFIMR) program, a partnership between the American College of Obstetricians and Gynecologists (ACOG) and the Maternal and Child Health Bureau (MCHB). The goal of the project was to discover potentially preventable issues and barriers (e.g., system failures, vaccine hesitancy, patient concerns around vaccine safety) that contribute to morbidity and mortality caused by seasonal influenza in pregnant women and make recommendations (e.g., systems changes) to prevent this morbidity and mortality. This ACOG project was funded by the Centers for Disease Control and Prevention (CDC) through the Association of State and Territorial Health Officials (ASTHO).

This program followed the same model states have used to apply the FIMR methodology on the state level to review de-identified maternal mortality cases by conducting a retrospective review of quantitative and qualitative data via medical chart abstraction and home interview. The FIMR methodology had previously been adapted by ACOG in a joint CDC project to investigate mother-to-child human immunodeficiency virus (HIV) transmission. The project successfully identified systems issues such as lack of family planning and reproductive health care for HIV-infected women and the need for better integration between MCHB and HIV state and local agencies. This FIMR/HIV methodology is now a standard approach in state perinatal grants (visit the FIMR/HIV website at <a href="http://www.fimrhiv.org/">http://www.fimrhiv.org/</a> for more information). In addition, in 2013 CDC expanded this review process to include review of cases of congenital syphilis.

The NFIMR program promotes the use of a two-tiered process using two teams to separate the functions of review of cases and drafting recommendations from that of determining and implementing actions that address identified systems and resource issues. The Case Review Team (CRT) reviewed cases and drafted recommendations as Phase 1 of this pilot project. Phase 2 of the pilot project, which focused on the latter functions, was carried out by the Community Action Team (CAT).

Qualified state health department staff carried out the protocol of the pilot project. The staff of ACOG, NFIMR, CDC, and ASTHO worked together to communicate the project to the targeted states through a joint letter at the beginning of the project. Upon agreement by the states, ACOG and NFIMR provided training to the state health department leads via conference call to educate them on the purpose of the project, FIMR methodology, and expectations. This included a one-hour training call by ACOG on how to conduct the maternal home interview. Following this training, ACOG and NFIMR staff were in contact as-needed with state staff leads to answer questions and provide guidance and technical assistance.

Through this pilot project, successful maternal influenza review programs had the potential of developing broader public health benefits to the community, such as:

- Identifying systems failures which may not only impact pregnant women but also other members of the community at high risk for complications from influenza
- Identifying system improvements which may lead to fewer hospitalizations of pregnant women and ultimately decreasing the burden of influenza visits to the emergency room
- Improving health outcomes in pregnant women which may positively impact health outcomes in infants.

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#### **Background and Description of the Maternal Influenza Review Pilot Project**

The Maternal Influenza Review process is modeled after the Fetal and Infant Mortality Review (FIMR) methodology, developed by the National Fetal and Infant Mortality Review (NFIMR) program, a partnership since 1990 between the American College of Obstetricians and Gynecologists and the federal Maternal and Child Health Bureau. In 2002, the FIMR model was shown to be an effective public health intervention in a rigorous national evaluation conducted by Johns Hopkins School of Public Health (1)

#### **Protocol Used for the Pilot Project**

The protocol for the project is based on the following five pillars:

- 1. Case Identification (State Health Department)
  Each participating state will identify through medical records pregnant women who were hospitalized with influenza in that state during the most recent influenza season. Being hospitalized for influenza must be documented in the woman's medical record and may have occurred during any point in her recent pregnancy.
  - O An "influenza case" is defined as a pregnant woman, immunized or non-immunized, hospitalized for influenza at any stage of gestation with a hospital medical chart-documented diagnoses of influenza (any type) during the most recent influenza season.
  - o State health department or FIMR sites are responsible for reviewing deidentified cases to recognize systemic issues within their state.
  - o All information collected is to be de-identified to protect privacy and uphold Health Insurance Portability and Accountability Act (HIPAA) regulations prior to the case review team meeting.

#### References

1. Misra, D, Grason, H, Liao, M, Strobino, D, McDonnell, K, and Allston, A. The Nationwide Evaluation of Fetal and Infant Mortality Review (FIMR) Programs: Development and Implementation of Recommendations and Conduct of Essential Maternal and Child Health Services by FIMR Programs. *Maternal and Child Health Journal* 2004: 8:4 217-229.

#### 2. Data Abstraction (State Health Department)

Once the cases have been selected, states will use the data abstraction form developed by ACOG to summarize relevant medical information. The data abstraction form should be filled out as completely as possible and include both prenatal, hospitalization, labor/delivery, and postpartum information. These data are essential for the case review team. Since one of the goals of the case review is to find out what systems issues may have contributed to the woman's contracting influenza during pregnancy, all related medical and psychosocial information about the hospitalization for influenza can be important to the review. The abstractor will not include any identifying information on the data abstraction forms.

- o Sites will collect information on maternal influenza care, prenatal care, labor and delivery care, newborn care, and postpartum/reproductive health care.
- O Data abstraction forms have been developed to provide an in-depth holistic look at the care each de-identified case received. An optional online tool is available for data entry during or after the data abstraction to electronically capture information and allow for future analysis.
- The anonymous, de-identified summaries and de-identified summary of the maternal interview are presented to the interdisciplinary Case Review Team for interpretation and recommendations.

### 3. In-Person Maternal Home Interview (State Health Department/FIMR staff when applicable)

The purpose of the in-person maternal home interview is to learn more about the woman's experiences before and during her pregnancy in her own words. The maternal interview can provide important information about the woman's pregnancy and hospitalization for influenza that cannot be obtained from medical records. The interview also provides information about the woman's living situation and family. For many years, local FIMR programs have reported that home interviews elicit important information when they focus on what resources are needed in the community and actions that need improvement.

o Each site will interview the mother in-person using the Maternal Interview Form.

#### 4. Case Review (State Health Department)

Each state must convene a Case Review Team (CRT) that includes representatives from a broad range of professional organizations, institutions, and public and private agencies. The CRT may include but is not limited to the Title V director, clinical care providers, immunization program managers, infectious disease experts, the assigned abstractor, and the assigned maternal interviewer. The CRT should represent ethnic and cultural groups in the state and include representatives with clinical expertise in infectious diseases and prevention.

States should identify what other review programs (infant/child/maternal death) already exist in the state and utilize those resources. The coordinators of other existing state reviews may be valuable resources and include possible review committee members.

Although the type of public health event may vary among committees, the focus is similar: To identify action steps for system improvement.

- The CRT can start from an existing group of people and be expanded to fit the needs of this project. For example, if a state does not have an existing FIMR, then a maternal mortality team or infant mortality review team can be enlisted. Carefully selecting the members of the case review committee is very important to get the results needed. The membership should include both content experts, such as the state maternal and child health director (Title V) or someone from their office, clinical staff with training in perinatal health, ob-gyn, immunizations and infectious disease, data and/or epidemiology, and FIMR as well as staff who have expertise on policy and program issues who can help draft recommendations for change. Each CRT will look at each de-identified case by first reviewing the 4-5 page case review summary which will be prepared in advance and which synthesizes key findings from the data abstraction form and home interview. Case review discussion will then generally try to determine:
  - Did the pregnant woman receive the support and resources that she needed to access the needed vaccination?
  - Were the health education messages about immunization vaccination culturally and linguistically appropriate?
  - Did various public and private sector systems consistently reinforce messages about vaccination?
  - What can this case review process tell us about what local women understand about the importance of influenza vaccination as well as barriers to that care?
  - Does the sentinel event review process uncover other gaps in vaccination messaging and service systems for pregnant women?
  - Based on case reviews, what improvements in current pregnancy influenza vaccination services and resources need to be made?
- 5. Summary of Findings & Recommendations for Systems Improvement
  - o Each state will develop a summary of findings and recommendations
  - o Based on the CRT findings and recommendations, a Community Action Team (CAT) may be formed to address and implement these recommendations.

It is expected that the outcome of the reviews will be improved general health for childbearing women and their infants and development of national policies and program service systems to increase influenza vaccination coverage among pregnant women. This ACOG pilot project will provide a tested model and a strategy that NFIMR can offer to any state that wishes to review maternal hospitalizations for influenza and potential strategies to increase influenza vaccination coverage for pregnant women.

#### **Pilot Project Summary of Findings**

Through its Maternal Influenza Review Program, ACOG has summarized key findings and recommendations from the four states' reviews that resonated among the state reports. ACOG also collected from the states the number of cases of pregnant women hospitalized with influenza illness who were vaccinated and who were not. Most hospitalized pregnant women were vaccinated against influenza prior to hospitalization as identified by self-report, maternal interviews and record abstraction.

	CRT Cases Reviewed	Vaccinated*	Unvaccinated	Unknown
4	58	41	16	1

#### **Common findings:**

Systems Level

- Inconsistent documentation of immunization recommendations
- Lack of consistency among providers with regard to infection control regulations in labor and delivery units
- Many ob-gyns do not offer influenza vaccine in their offices, instead referring patients elsewhere which increases the risk of women going unvaccinated. Patients trust their obgyn, and ob-gyns need to start recommending and offering influenza vaccine
- Inability of family members to get vaccinated due to insurance coverage issues or provider's inability to vaccinate family (i.e., ob-gyn not being able to vaccinate a father, or a pediatrician not being able to vaccinate a parent)
- Immunizations need to be further integrated into electronic medical records and tailored for ob-gyn providers
- Adult immunization registries are underused but may be a good way to document and track immunization records

#### Educational

- Reasons why patients are not vaccinated need to be explored
- Concerns over vaccine safety among patients need to be addressed
- Misconceptions about influenza vaccine need to be debunked. i.e., "the flu vaccine isn't effective" or "the flu vaccine will make me sick"

\*Note: Some of the cases are self-reported, are based on chart review and not laboratory confirmation, and lack information on timing of vaccination during pregnancy and circumstances leading to hospitalization and illness outcomes. The cases need to be considered with how many pregnant women were hospitalized with influenza during the 2012-2013 influenza season in the state. Information in this report suggests that a portion of women who were hospitalized were in fact immunized with influenza vaccine earlier in the season. This finding is not totally unexpected given current influenza vaccine effectiveness, and deserves further investigation. Importantly, the key clinical message is that women who present with signs and symptoms suggestive of influenza and who report a history of earlier receipt of influenza vaccine should still be managed as if they have influenza until confirmatory testing is completed. This includes, but is not limited to, use of antivirals and compliance with local Infection Control practices. Population-based literature exists for this

purpose, and information collected about individual cases may not fill requirements necessary to contribute to this scientific knowledge base. Influenza after vaccination is not unexpected. But vaccination is thought to decrease the risk of Intensive Care Unit admission and death as compared to those who are unvaccinated on a population level. It is possible that some of these unvaccinated pregnant women were sicker than those who were vaccinated.

- Messaging needs to focus on the increased risk of severe illness and complications during pregnancy
- Providers need to take time to discuss influenza vaccine with their patients and if patients decline, need to have the conversation at each subsequent visit
- Lack of education of urgent care center and emergency room staff on the assessment and treatment of pregnant women presenting with influenza-like illness. This includes differentiating between normal side effects of pregnancy and symptoms of influenza

#### **Recommendations to address common findings include:**

- Further training of providers to better identify influenza among pregnant women and how the cases were confirmed
- Educate patients on the risks of influenza during pregnancy, risk reduction, and provide a strong recommendation for vaccination
- Examine the differences between patients who have been vaccinated and those who have not to better understand the success of many vaccination programs
- Educate urgent care clinics on how to manage pregnant patients with flu-like symptoms and to understand the guidelines for administering antiviral medication to pregnant women
- Need for better integration of care between primary care, ob-gyn, and hospital
- Additional patient education needed for those refusing to be vaccinated. There is a need for providers to also educate patients about risks of not getting immunized
- Educate patient about limiting her contact with those sick or not vaccinated
- Provide more options for free flu vaccines for pregnant women and their partners who may not have insurance

### MATERNAL INFLUENZA REVIEW PROGRAM

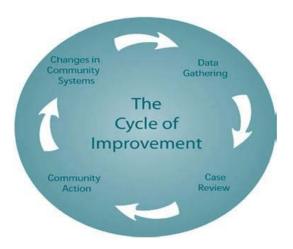
Training Manual

American College of Obstetricians and Gynecologists

#### Description of the Fetal and Infant Mortality Review Methodology

The Maternal Influenza Review Program (MIRP) is an adaptation of the Fetal and Infant Mortality Review (FIMR) methodology. The original FIMR methodology is an action-oriented, community-based process that monitors, assesses, and strives to improve service systems and community resources for women, infants, and families where a fetal or infant death has occurred. FIMR is an evidenced-based process that integrates 1) information gathered from a variety of sources such as medical and public health records; 2) a maternal interview; 3) case review by a Case Review Team (CRT) that makes recommendations for improvements; and 4) implementation of CRT recommendations by a Community Action Team (CAT). In the past two decades, communities have witnessed ongoing changes in the financing and delivery of health care services, greater attention to core public health functions, and increased emphasis being directed to improving quality and accountability, much of this resulting from the FIMR process. Complete confidentiality is a key component of the FIMR process. All patient, provider, and institutional identifying information are removed from the case review summary (see Appendix G) and any other review materials. Case review meetings are closed to the public and protected from subpoena or legal discovery. Case Review Team members sign a confidentiality pledge. And lastly, all information collected from medical records and maternal interviews is stored in a secured, locked location and destroyed upon completion of case reviews.

The FIMR is a continuous cycle of improvement. Data gathering and case reviews are the springboard for improvement in services and resources for women, infants, and families. Examination of new cases reveals where earlier interventions either succeeded or failed.



The FIMR has been adapted over the past several years to review other types of maternal events. Most recently, cases of women with HIV infection were reviewed as part of a CDC grant to ACOG. Adapting FIMR to review cases of women hospitalized for influenza during their recent pregnancy is *not* about conducting original research. Population-based literature exists for this purpose, and information collected about individual cases may not fill requirements necessary to contribute to this scientific knowledge base.

#### **Laving the Groundwork**

#### Introduction

To set up the Maternal Influenza Review Program in your state, you will need to address the following issues:

- Identify maternal influenza cases using case definition listed in the Background and Description of Pilot Project section
- Identify resources for data abstraction and conducting the home interview
- Identify and address legal and institutional issues related to the review
- Establish systems to maintain confidentiality and anonymity throughout the process
- Choose program leads
- Identify and convene Case Review Team

While the planning group needs to accomplish all of these tasks, the order in which they proceed may vary and some states already may have accomplished one or more of these activities.

#### Identifying Maternal Influenza Cases

It is important to define the community which comprises the cases for review. This can be statewide, a local community, or a county. Some questions to be considered when defining the community are (1):

- What is the geographic area? Will it include an entire state, city, county, perinatal region, or a cross-section of the community to be represented?
- Is the community defined in a way that will translate into local ownership, accountability, and pride?
- How many pregnant women who were hospitalized with influenza during the 2012-2013 influenza season are there in the state?

#### *Identifying Community Resources and Assets*

After identifying the geographic area(s) to be reviewed, the next step is to identify positive community assets. This involves a careful review of capacities, assets, and skills within the various public and private institutions, community associations, organizations, and individuals within the community (2,3). Information about community assets will help the case review and community action teams (CRTs and CATs) to understand the strengths upon which future actions may be built and better appreciate how to engage the community to address gaps in care and services.

#### References:

- 1. Melaville AI, Blank MJ. Together we can: A guide for crafting a profamily system of education and human services. Washington (DC): U.S. Government Printing Office; 1993
- 2. Striffler N, Coughlin PA, Magrab PR. Communities can workbook series: Developing collaborative services for children. Washington (DC): Georgetown University Child Development Center; 1994
- 3. Wise PH, Wulff LM, editors. A manual for fetal and infant mortality review. Washington (DC): American College of Obstetricians and Gynecologists; 1992

#### Identifying and Addressing Legal and Institutional Issues Related to the Review

The laws and regulations relevant to the Maternal Influenza Review process are found primarily in state rather than local or federal laws. All states have laws that afford immunity to those who participate in certain types of reviews. Because these laws vary enormously from state to state, it is very important to check your specific state laws as part of the review planning process. Attorneys affiliated with state or local health organizations are useful resources to help structure the review process to maximize available legal protection.

Immunity means that records pertaining to a particular case under review, as well as the minutes of the CRT meeting and other written records, cannot be subpoenaed or brought to court. In some instances, the FIMR process specifically may be named in the state law. More often, this process may be included under general terms such as "professional review," "peer review," or "public health evaluation." Protection from testifying usually is extended to individuals on the CRT and project staff.

Although situations requiring protection are rare, all maternal influenza review programs should seek protection as a necessary precaution and as an important reassurance for professionals serving on the CRT. Cases with pending or expected litigation should be avoided.

Additionally, immunity usually means that written information about cases is not discoverable through state laws or the federal Freedom of Information Act (FOIA), a law that gives any private citizen or organization the right to request written information on a particular topic from local, state, or federal governments. In the past, print and other media representatives have mistakenly thought that they could use the FOIA to access FIMR information; however, based on the experience of FIMR programs, being informed that the FOIA does not apply to the program usually closes the discussion and there are no further attempts to access FIMR records.

#### **Access to Medical Records**

When organizing a maternal influenza review program, it is important to make sure that all available laws related to accessing medical records and vital statistics are found and interpreted by state or local health department attorneys. Most laws that provide immunity for members of the team and their committee's written records also apply to medical records. Additionally, many states have other regulations that permit access to medical and vital statistic records for "investigations for the benefit of the health of the public" or comparable purposes. Hospitalization due to influenza is a reportable event in the states selected for the Maternal Influenza Review Pilot Program and, therefore, these review programs sponsored by the state health department should have a relatively easy time accessing these records.

Some programs access medical records through the federal Health Insurance Portability and Accountability Act (HIPAA) (1) that permits a covered entity, such as a hospital, to

#### References

 Magrab PR, Elder J, Kazuk E, Pelosi J, Wiegerink R. Developing a community team: A companion to the community workbook for collaborative services to preschool handicapped children. Washington (DC): Georgetown University Child Development Center; 1981 disclose protected health information to a "public health authority" for certain public health activities.

Many of the activities related to the maternal influenza review programs may fall within the purview of HIPAA public health disclosures. However, this permitted disclosure applies only to review programs that are sponsored by public health agencies or that are acting under a grant of authority from or contract with a public health agency.

Disclosures to maternal influenza review programs that are acting under the auspices of a public health agency should be permissible under the federal privacy rule. However, it is important to remember that HIPAA does not preempt any state law that requires reporting of disease or injury, child abuse, birth or death, or the conduct of public health surveillance, investigation, or intervention.

If it is not possible to access medical records under the auspices of state law or federal HIPAA regulations, records usually may be obtained if the mother signs a consent form to release her records and those of her infant. The planning committee will need to develop a release form that the mother can sign. This form should be reviewed and approved by state or local attorneys. All participating mothers must sign a consent form even if the program has access to her records under HIPAA or other statutes.

#### **Consent for Maternal Interview**

It is essential to have legally valid consent for the mothers who are selected for the home interview. All respondents should understand prior to the interview the reasons for collecting the information and the potential risks and benefits and steps being taken to protect their confidentiality. Typically, this information is included in the consent form. The interviewer should witness and co-sign the form to document that the mother has been informed about these provisions and understands them. It is important to seek legal advice regarding state statutes governing informed consent to be sure that the maternal interview consent form complies with these requirements. It also is important to have appropriate state legal authorities review the form.

#### **Dealing with Institutional Review Boards**

Some hospitals, universities, and other agencies have Institutional Review Boards (IRBs) whose purpose is to review all research proposals that are generated by the institution in order to ensure that 1) the research question and study design are valid and 2) that any "human subjects" (people who may participate in the study) are not harmed. The maternal influenza review pilot program is not research. However, some sponsoring agencies still may require that FIMR-like review programs be cleared through their IRB process and some hospitals may require IRB approval before a program is allowed to access medical records.

Having to apply for IRB approval may seem paradoxical, given that the maternal influenza review program is a continuous quality improvement process for the community and is <u>not</u> research. However, since data abstraction and maternal interviews are part of the process, it may be helpful to have a discussion with or provide written information to the IRB to explain the nature of the project and why it should not be subject to Board review.

The CDC has generated guidelines for describing attributes of public health research and non-research. The maternal review process was examined against the criteria in these guidelines and was determined to be a non-research project. This information may be helpful to assist IRBs to understand the true public health focus of the maternal influenza review process. (See Appendix J, CDC Statement of Non-Research used for FIMR/HIV Prevention Methodology.)

In the past, review programs have had to go through IRB approval. This process takes time and effort and involves both a written response to a lengthy set of questions about the program and possibly one or two formal meetings with members of the Board. If staff know that a program must pass the IRB approval process, it is important that the program be placed on the IRB meeting agenda as soon as possible. Here are some general tips in dealing with IRBs:

- Be aware that FIMR-like review programs are unique among types of proposals the IRB has reviewed
- Be prepared to briefly describe the underlying purpose of the review program (i.e., continuous quality improvement versus research), but only do so if requested. Too much information shared about the program during the actual IRB review may confuse the Board and extend the approval process
- Respond promptly to written and oral questions from the IRB
- Answer only the questions asked; do not volunteer extra information

Seek advice; try to recruit a colleague who has already gone through the IRB process and knows Board members. Because this pilot project is on a time-sensitive deadline, all efforts should be made to satisfy IRB requirements in a timely and prompt manner. For additional information on the IRB review process, please contact the ACOG National Fetal Infant Mortality Review Program or Immunization Program.

#### **Establishing Systems to Maintain Confidentiality and Anonymity**

Each step of the case review process is completely confidential. Each piece of information about the pregnant woman, her infant, family, and where they received their care is also confidential. This body of information is compiled into a case review summary (see Appendix G) to form a single anonymous knowledge base about that specific case. The case review summary developed from the data abstraction and home interview has de-identified information about the woman and her care. Preserving the privacy of all involved parties is of paramount importance to case review programs. Local providers and institutions will not participate in the process or provide records for review without assurance that all information will be kept confidential. Confidentiality also allows the committee to focus more on the events than the person and institutions where she received care. The following information must be kept confidential:

- Names, dates of birth, addresses, telephone numbers, email addresses, and other contact information for participants
- Names, addresses, telephone numbers, email addresses, and any other information that would identify providers (individuals, hospitals, clinics, etc.)
- Any documents that contain the name or medical record number for participants
- Completed medical record abstraction forms

- Completed maternal interview forms
- Tracking forms or cards that link a case number to a family name
- Any other forms or papers containing individual case information
- Case summaries, including de-identified case summaries
- Any other documents with descriptions sufficient to identify the case

All case documents must be clearly marked "Confidential" and kept in a locked file cabinet. Case summaries must be de-identified and destroyed after the case is reviewed, along with all case documents. If state law permits document shredding, a shredder dedicated to the maternal influenza review program is a worthwhile investment.

Electronic records should not contain any information linking program case numbers to individual names, providers, or institutions. No names or addresses should be entered into data bases; there is little long-term value to the retention of such information and great potential for harm. Electronic records, even without identifying information such as names and addresses, could be used to identify individual cases, and, therefore, access should be restricted in the same manner as access to paper records. Databases should be assigned a secure password known only to one or two staff involved in the review.

Case review team members' knowledge about the facts of the cases is also confidential. Discussion of cases should only take place behind closed doors, and then only for the purpose of developing better insight into the problems presented in a specific case. A formal pledge of confidentiality form should be developed for case review team members to sign at every meeting before they begin the review process (see CRT Confidentiality Agreement in Appendix D).

Confidential information must be properly contained. If not, the potential for harm to both the program participants and the program itself is real. If unsure whether to treat a document as confidential, staff should always err on the side of caution. In summary, the maternal influenza review process must be confidential at every level:

- All abstracted medical records, maternal interviews, and related records are stored in locked files or a password-secure database
- All identifiers (e.g., patient names, dates of birth, provider names, hospitals or clinic sites) are deleted from the abstracted records and maternal interviews
- Case review summaries are anonymous
- At each meeting, all case review team members must sign a pledge of confidentiality that prohibits them from discussing review specifics outside the team meetings (see Appendix D)
- The confidentiality of reviews is protected by relevant state statutes

As the planning group is laying the groundwork for a new maternal influenza review program, members need to be prepared to respond to professional or institutional concerns that the reviews could result in censure of providers or institutions or that the FIMR home interview may provoke medical liability suits. The planning group needs to continue to stress the strict

confidentiality of the model and review the safeguards provided above. Providers and institutions need to be reminded that the abstracted information is de-identified, will have been combined multiple times before being presented for review, and is thus impossible to connect providers or institutions to actual cases.

Even if some information may seem to reflect negatively on an individual or institution, it is important to remember that the information is abstracted from the record, summarized and reported to the team, and thus is combined multiple times by the time the team reviews it. Legally, that information is usually categorized as hearsay and would not be admissible in any type of legal action. Identifying and Prioritizing Cases

The Maternal Influenza Review Program addresses CDC's recommendation to review all cases as sentinel events. The state will select as many cases as possible of women who were hospitalized with influenza during their pregnancy during the current influenza season. Influenza must be documented in the woman's medical record. It is expected that each state will select approximately 15 cases for review, more if time and resources allow.

#### **Data Collection and Processing Methods**

The primary objective of the maternal influenza review process is to identify and address systems factors contributing to missed opportunities for immunization, prevention, and treatment. The information gathered will create a narrative summary of what happened in each case. Another use for the information is to develop a database that can be used for an aggregate analysis of cases that complements and supports the qualitative case review analysis. To facilitate this process, standardized data collection forms have been developed, revised, and updated based on the experiences of the pilot projects and existing programs. These forms were developed to allow the program to collect a wide range of information that captures the uniqueness of each case, while maintaining structure and consistency.

#### **Selecting Program Co-leads**

The state lead person will identify which staff will be responsible for abstracting medical and other records and conducting the home interview. The Maternal Influenza Review Program should be a collaboration between immunization and perinatal health experts within the state and community, and a team co-lead should be chosen from each of these groups to share the program responsibilities. Typically, there is a program director and a program coordinator. The program coordinator is responsible for implementing the day to day Maternal Influenza Review Program. The program director may be the sponsoring agency's or organization's director or, at the very least, should be able to work closely with the director, have influence in the sponsoring entity, be viewed as a leader in the overall community, and may already be involved with the planning group. This position is responsible for the planning process and for building and maintaining community-wide support and must have a good working relationship with other agency leaders. The program director will review the case summaries before each CRT meeting to make sure they are complete and often is the team leader for CRT deliberations and CAT meetings. He or she will engage and supervise the review staff, including abstractors and maternal interviewers, and be responsible for their training.

#### **Formalizing Policies and Procedures**

During the planning process, the planning group should begin to keep a written record of the emerging policies and procedures they will use in conducting the maternal influenza review program. These guidelines will be the program's detailed description and road map. The guidelines will evolve and expand as the program grows and should be revised annually to reflect the most current policies. This provision for regular updates will be even more important if two or more agencies implement the program jointly. A table of contents of written policies and procedures may include, but is not limited to:

- Description of the program mission statement, goals, and objectives
- Job descriptions (e.g., director, coordinator, interviewer, abstractor)
- Case review team (CRT) and community action team (CAT) responsibilities
- CRT and CAT rosters
- CRT and CAT meeting format
- Methods for maintaining confidentiality
- Methods for finding cases
- System to select and prioritize cases
- Methods for finding and contacting mothers
- Methods for conducting maternal interviews
- Methods for conducting medical records abstraction
- Forms used by the program

### MATERNAL INFLUENZA REVIEW PROGRAM

Training Manual
Case Review Team (CRT)

American College of Obstetricians and Gynecologists

#### **Selecting and Convening the Case Review Team**

The maternal influenza review planning group will recruit members of both the Case Review Team (CRT) and Community Action Team (CAT) members. Team members should include clinicians with expertise in immunizations, as well as those with perinatal health training, consumers, and advocacy groups. This section describes important aspects of building community support and collaboration for the maternal influenza review committee.

Choosing the right mix of individuals to serve on the maternal influenza review committee's CRT and CAT is crucial to the success of the program and requires careful planning. According to experts in building community alliances, and echoed by the experiences of many traditional FIMR programs, membership should include individuals who will bring diversity, influence, commitment, and consumer participation to the table. (1)

**Diversity** requires that both the CRT and the CAT memberships represent a wide array of personal and professional knowledge, expertise, and experience; the ethnic and cultural diversity in the community; and a broad, creative range of organizations, including some that may not have been involved in traditional maternal and child consortia. Choosing members who exemplify multicultural partnerships, family—consumer—community service agency partnerships, multiagency partnerships, and public health—private provider partnerships is vital to building maternal influenza review team diversity and sets a standard of cooperation and mutual respect that should be a model for individual team members, their respective organizations, and the community as a whole.

**Influence** refers to policy makers, institutional and professional leaders, and/or organizational spokespersons who have the power to make decisions for and mobilize fiscal and programmatic resources on behalf of their constituencies, agencies, or organizations. Team members with influence usually will be the leader of a specific agency or organization, an elected official, or a high-level staff member clearly entitled to represent organization and make decisions.

**Commitment** refers to a team member's proven track record of putting the interests of women, infants, and families before his or her own organization's or professional interest, expectations, or convenience. Commitment means that the member already has demonstrated the ability to act as an advocate or champion for improvement in systems even when deeply rooted and long-standing policies or interests oppose such change.

**Consumer participation** should be an integral part of the maternal influenza review process. In general, consumers are individuals who live in the chosen community and use its services and resources.

#### References

Material in this section was originally prepared by Dani Noell, ARNP, MSN, Florida State Pregnancy Associated
Mortality Review abstractor, FIMR coordinator and former medical record abstractor of the Broward County, FL
Healthy Mothers/Healthy Babies Program. Shaefer J, Noell D, McClain M. Fetal and infant mortality review: A
guide for home interviewers. American College of Obstetricians and Gynecologists, National Fetal and Infant
Mortality Review Program; Washington (DC): ACOG; 2003.

Mothers who were hospitalized for influenza during their pregnancy represent a special component of consumer participation for maternal influenza review programs. Although they will not directly participate on the team, they will be interviewed by the project to get their perspective. Examples of stakeholders who would be appropriate CRT participants include: agencies that provide services or community resources for women, infants, and families, such as the local health department (including a perinatal data expert); primary and tertiary care institutions; obstetric and pediatric providers; hospital administrators; Medicaid supervisors; WIC program nutritionists; family planning providers; health educators; community health workers; and representatives from drug treatment centers. Other representatives may include pastoral counselors, minority rights advocates, and HIV/AIDS advocates. Ideally, a successful CRT will have no fewer than 15 members.

When developing a preliminary list of potential CRT and CAT members, it may be useful to consider the following questions:

- 1. Does the list include a broad-based, multi-partner array of agencies and individuals?
- 2. Does the list include consumer advocates that represent the diverse ethnic and cultural makeup of the community?
- 3. Have specific potential members for the CRT and CAT been identified?
- 4. Are there sufficient members with the desired level of influence and administrative responsibility included in both teams?

#### **Membership**

To keep team size manageable, it may be useful to look for potential members who represent more than one constituency or point of view. Examples: a practicing obstetrician who also heads a local medical society or a pediatrician who provides well-baby care in a public health clinic.

After potential CRT and CAT members have been identified, the planning group should begin to recruit key members. As these members come on board, they can use their influence and connections to recruit other potential members and partners. When approaching potential members, the planning group should be prepared with the following information:

- Understand the organization's mission or purpose and any current issues the organization is facing
- Communicate specific ways the organization might assist the maternal influenza review program and know on which team (CRT or CAT) the member would best serve
- Describe the purpose and objectives of the maternal influenza review process in simple terms
- Explain why the community would benefit from the maternal influenza review process and how the process would specifically benefit the organization's mission or purpose
- Reinforce the rigorous confidentiality of the maternal influenza review process and be able to address any specific issues of concern
- Facilitate a candid discussion about the potential member's view of the maternal influenza review process and be able to respond to specific questions or concerns

#### **Abstracting Medical Records and Conducting the Home Interview**

#### Introduction

Once program development is complete and community support is ensured, the agency sponsoring the maternal influenza review program should select staff responsible for abstracting medical records and conducting the maternal home interviews. Practical experience suggests that people most likely to thrive as maternal influenza review abstractors or interviewers are flexible and creative, team players, self-motivated and choose to work on the program, have experience in maternal-child health, appreciate the cultural diversity of the community, and understand and respect community values. Basic descriptions of the medical records abstraction process and maternal interview process are presented in this section.

#### **Abstracting Medical Records**

Medical records abstraction is a core component of maternal influenza reviews. Abstractors should have sufficient clinical experience with perinatal health and pediatric care to be able to understand the information they abstract. Generally, perinatal or maternal and health nurses are well equipped to conduct maternal influenza review abstractions. Physicians, social workers, and others can also may make good abstractors.

The abstracting process takes time and information from one record may uncover another source of information for the mother or infant not previously identified. Initially, abstractors will concentrate on these maternal and infant records. Data from private providers, community case management providers, and others may be needed to complete the picture.

#### **Obtaining Access to Records**

Prior to beginning records abstraction, the maternal influenza review planning committee will have established the method for obtaining access to medical records. This process may have entailed 1) making sure that state statutes allow access to records, 2) complying with HIPAA regulations, and 3) going through each hospital's IRB process or establishing another type of agreement between the sponsoring agency and the hospital(s). Also, each institution's medical records staff will want information about the maternal influenza review program and will want to know who will be examining the records, how many records are expected to be involved, and how often the abstractor will be coming to the hospital.

It is important for the abstractor to establish a good working relationship with the medical records staff at each hospital where records will be abstracted. Taking time to lay the groundwork with medical records staff will pay off in long-term cooperation. Arriving at the record room with an official letter from the head of the maternal influenza review program's sponsoring agency that explains the program may facilitate the abstraction process (see sample letter, Appendix E). Also, the abstractor should consider making the program's year-end report available to hospital staff.

Records from private providers may be more difficult to obtain. Release of information from private providers is voluntary and usually not covered in the state laws that allow for release of hospital records. A letter about the program and a sample of the abstracting form may dispel any fears and encourage participation from private providers. Also, it is important to identify

which office staff the abstractor will be contacting to follow up a request for medical information. Physicians' schedules are hectic, and it is likely the office manager or nurse will be the gatekeeper of the records. The fewer number of office staff involved in the requests the better. Keeping a confidential communication sheet with the record to note the names and titles of staff in each office with whom the abstractor talks is a good way to keep track of case contacts and communication.

#### Procedures and tips for abstracting records

- 1. Call hospital(s) to arrange to review records. Be sure to agree upon a time to examine the records. The record room staff usually will be able to pull the requested record within 24–72 hours.
- 2. Assemble a packet for each case containing the appropriate abstraction forms and case identification information for the mother and infant (names and dates of birth).
- 3. Identifying information should be stored in a locked file and carried in the locked trunk of the car for the trip to and from the hospital. Each abstraction form should contain only the case number; no identifying information should be written of the forms.
- 4. Review records only in designated areas of the hospital. **Do not photocopy** any portion of the record.
- 5. Determine if additional records should be requested from private providers' offices or other facilities.
- 6. Contact private providers to arrange to review records.
- 7. Document pertinent laboratory results.
- 8. Record any supportive information that will help in writing the case summary.
- 9. Keep a record of barriers encountered during abstracting, such as access difficulties, discrepancies in documentation, illegibility, and lost records.

#### How long does abstracting take?

It is difficult to calculate the time necessary to abstract a maternal influenza review case. Some cases are more involved than others, and in some cases records may be missing. Records for some cases will be available in a single location, whereas in other cases the records may be in various locations and additional travel time will be required. In general, a typical case takes 4 hours, although beginning abstractors will need extra time to become comfortable with the forms.

#### **Conducting Maternal Home Interviews**

"Maternal interviews give a voice to the disenfranchised in my community, those without clout or power. FIMR provides a rare opportunity for the *providers* in a community to hear from the *consumers*."

--Patt Young, FIMR Interviewer, Alameda/Contra Costa Counties, CA

As in the traditional FIMR, the cornerstone of all maternal reviews is the maternal home interview. The maternal interview provides the mother's perspective and allows her to tell her story in her own words. This is information not found in collected health records. Strategies to locate and interview mothers are the focus of a one-hour online module at the NFIMR.org website. The program is about traditional FIMR but content applies to the maternal influenza review. Maternal interviewers report on the use of this information at the CRT. Some report that the maternal

interview provides some of the most valuable information in the review.

The interviewer conveys the mother's story through the case summary presented to the case review team (CRT). Through them, the voice of the mother reaches the community at large. The mother's information allows team members to gauge the extent to which services and community resources for women are available, accessible, and culturally appropriate. Team members can more readily identify areas of deficiency or inequality in service delivery systems for pregnant women with influenza and can begin to address these problems more effectively. The intent of the maternal influenza review maternal interview is to:

- Learn about the mother's experiences before, during pregnancy, and after pregnancy in the mother's own words
- Learn about the impact of the care the mother received on her baby
- Identify community assets and deficits that affected the mother's life during the pregnancy, birth, and postpartum period
- Accurately summarize and convey the mother's story of her encounters with local service systems through the maternal influenza review case review
- Assess the family's needs and provide culturally appropriate health and human service referrals as needed

#### The Maternal Interviewer

The maternal home interview provides information about the mother's health and well-being that is not available in the medical records. It's an opportunity for the mother to relate her unique experiences as a pregnant woman who was hospitalized with influenza during her pregnancy. In other words, it's a chance for the mother to tell her story in a safe, confidential, and non-judgmental setting.

To be successful, the interviewer must be trained in interviewing and active listening techniques and in cultural competence. It is essential that the interviewer have a medical background with a good understanding of both pregnancy issues and influenza, be knowledgeable about community resources, and be able to make a wide range of referrals. The interviewer also needs to be familiar with the cultural and ethnic groups in the community. On a personal level, the interviewer must fully understand the mission of the maternal influenza review and be committed to the process. The interviewer must be comfortable making home visits but also flexible enough to meet the mother where she is most comfortable, be it the mother's home, a restaurant, a park, or a car. Each state has been given a standardized maternal interview form to facilitate the interview process.

#### **Consent for Maternal Interview**

The maternal interviewer must be committed to maintaining strict confidentiality. Case information must be kept anonymous. Information about the mother, the baby, caregivers, and institutions that provide services to mother and baby cannot be discussed with colleagues. Locating mothers without divulging the purpose of the visit to others can be challenging, but it's important that the mother trust the interviewer to protect her privacy. The maternal influenza review program recommends interviewing mothers privately and separately from other family members.

Occasionally, the woman's partner or other family member may want to participate in the interview. This participation may result in useful information, but there is always a risk that the mother will not feel free to give honest answers in the presence of another (e.g., an abusive partner or controlling family member). It's up to the interviewer to make a judgment call between obtaining what could be helpful information and safeguarding the mother's privacy and safety. If another person insists upon being present for the interview, the interviewer can compromise and begin the interview with open-ended questions. The remainder of the interview can be conducted with the mother alone. Another option is to offer to interview the partner or other family member separately.

#### **Interviewer qualifications**

Maternal interviewers usually are paid staff or subcontractors. They should be chosen from a pool of qualified candidates who volunteer for the position. Most interviewers are appropriately trained public health nurses or social workers with extensive experience in maternal-child health. An interviewer with only basic skills should receive on-going supervision from someone with advanced-level training in counseling. Regardless of the interviewer's background, the right personal qualities are important. Mothers relate well to an interviewer who is sympathetic, mature, warm, sincere, non-judgmental, and interested.

#### Training the interviewer

Training with an experienced traditional FIMR interviewer if possible is ideal and role-playing the interview is an important part of the training. Also complete the NFIMR online module. Content areas to be practiced are:

- Track, contact, and engage mother
- Prepare to conduct the interview
- Listen and record, do not interpret
- Conduct a standardized interview, including eliciting responses with open-ended and close- ended questions
- Maintain confidentiality
- Recognize public health and safety codes related to home visits and pertinent reporting requirements
- Handle difficult encounters and recognize personal safety issues and when to conclude or omit an encounter
- Conduct a home assessment and refer for needed services

#### **Maintaining confidentiality**

The process of locating mothers requires sensitivity and maintaining complete confidentiality. If the mother is not at home, the interviewer can make a general inquiry of apartment managers or neighbors about when she might be at home. The interviewer should only say something general, such as: "I'm\_\_\_\_\_\_ from the county health department. I am conducting a state-wide health department survey and would like to know when (person to be interviewed) will be home." If the interviewer leaves a business card for the mother, it should not include any information that identifies the maternal influenza review program. A sample letter and script for making contact with mothers are included in Appendix E and F, respectively.

#### **Locating mothers**

Locating mothers can be difficult. Some women move frequently because of poverty, unemployment, or homelessness, and do not leave forwarding information. Vital records usually have the mother's address, but not her phone number. If a woman has moved, the interviewer may be able to locate her by contacting family members, neighbors, landlords, the post office, or utility companies. The interviewer should gather as much information as possible from these other sources before setting out to visit the mother. However, when contacting any of these sources, the interviewer must remember to not mention the specific purpose of the interview. A detailed local map, a GPS, and a cell phone for emergencies are important tools for the interviewer.

Ensuring the safety of the maternal interviewer is an important issue that should be addressed before the interviews are begun. Networking with the local health department or home health agency that does the most home visiting in the community will provide some practical insights into the safety of individual neighborhoods. Safety is a relative issue and each community must identify local problems that could put the interviewer at risk.

#### How long does the maternal interview take?

The interview will take as long as it takes the mother to tell her story. The standardized maternal interview questionnaire takes about 1.5 hours. Some items may be skipped and it is likely that a mother will not answer every question. However, the interviewer must be able to balance the need to answer the questions with the mother's need to talk about her experiences. Both are important.

#### The interviewing process

When the interviewer greets the mother, she should introduce herself, tell the mother which agency she is from, and show her official identification. The mother should be fully informed about the maternal influenza review process and the significance of her participation. The interviewer should emphasize the extent of the privacy and confidentiality offered by the program. If the mother agrees to participate, the interviewer should review the consent form with her and obtain her signature. (see sample consent form in Appendix C) The interviewer should assure the mother that she can decline to answer questions and may terminate the interview at any time without fear of loss of any current or future services.

The best way to start the interview is to ask the mother to describe her hospitalization for influenza during her recent pregnancy. When the mother has completed her initial comments, the interviewer may proceed with the questionnaire.

The interviewer must adapt to the mother's environment, whether it's her home or some other location. The manner in which the interviewer is received and the way the interviewer responds to the mother influences the tone of the entire visit. A mother will be especially sensitive to any hint of criticism about her health, lifestyle habits or parenting skills. Unless there is a present danger to health or safety, any criticism should be avoided. The interviewer should be understanding and neutral, avoiding any expression of surprise, pleasure, approval or disapproval at any answer or comment (1). Developing a "value-neutral therapeutic" interviewing technique will require some experience and skill.

When the interview is completed, the interviewer should thank the mother for her participation and give her the opportunity to relate any feelings or comments she may have about the interview process. Any immediate health or safety crises (e.g., no heat in winter, no food available, critical health problems for mother, baby, or other children) should be addressed. Any other referrals that the family needs or wants may be given at that time or in a follow-up visit or conversation.

Most maternal review programs provide some sort of token of agreement to mothers participating in the interview process to thank them for their time and to show that their participation has value. Grocery or department store gift cards of \$25 to \$50 are typical, depending on program budgets.

#### How to handle interview refusals

In successful maternal review programs, the program coordinator and the maternal interviewer have an ongoing dialogue to evaluate success in tracking and interviewing. If a mother is reluctant to participate, the interviewer may try the following (1):

- Explain that it is important to complete interviews for as many mothers as possible to assure the most complete information about services and resources in the community
- Explain that the information gathered from the interview will be used to look at ways to improve health and community services for pregnant women who were hospitalized for influenza.
- Ask the mother to begin the interview and answer one or two sample questions. Assure her that she is free to stop the interview at any time and that she can refuse to answer any questions that she thinks are too sensitive. Many times this approach encourages the mother to provides most of the information needed for the interview
- Offer to call back in a few months to revisit the mother's decision to not participate

#### When a maternal interview is not recommended

Most programs avoid interviewing mothers who are hospitalized for psychiatric conditions or who are in litigation with providers or institutions.

#### References

1. Brustman B, Buckley K, Cohen M, Medvesky M. Infant mortality review: Progress report. Albany (NY): New York State Department of Health; 1993.

#### The Role of the Case Review Team

#### Introduction

The case review team (CRT) reviews and analyzes the case review summary which has been developed for the meeting and consists of relevant findings from both the medical record data abstraction and maternal home interview. A copy of a sample case review summary is provided at the end of this training manual (see Appendix G). A Tip Sheet for Developing the Case Review Summary is in Appendix H. The CRT discusses the case review summary in-depth to identify systems issues for improvement for the future and develop recommendations to improve the community's service delivery systems and community resources. FIMR projects have found that by having members on the CRT who are in a position to implement some of the recommendations adds another layer of effectiveness to the project. FIMR is an action-oriented process.

The process for case review should reflect the maternal influenza review program's mission statement, and success depends on the team's commitment to this purpose. Continued success also depends on the team leader's ability to keep the team focused on the work that needs to be accomplished while engendering a spirit of team pride and ownership for the work that team members do through the program to benefit their community.

#### **CRT Membership**

Diversity on the CRT is a key component of the maternal influenza review program. It is essential to have a multidisciplinary team, representing a broad range of providers, institutions, community advocates, professional organizations, and private agencies that provide services for women, infants, and families. Programs report that the broader the representation on the team, the more relevant the proposed interventions will be. Team size may vary, but 12–25 members is typical. If teams are too small, the element of diversity is lost; if teams are too large, the group dynamics become too unwieldy.

What Maternal Influenza Case Review Does *Not* Accomplish

- Maternal Influenza Case Review is not about fault-finding or assigning blame. Comprehensive local and state professional peer review and public health and institutional quality assurance programs already are in place to respond to this issue.
- Maternal Influenza Case Review is not research. The information collected about individual
  cases or trends among multiple cases may not fulfill the requirements necessary to
  contribute to this scientific knowledge base.

#### **Preventability**

The maternal influenza review process goes beyond examination of medical care and asks questions about social, economic, and system factors associated with a woman hospitalized while pregnant with influenza. Most cases of perinatal influenza transmission will have a number of interrelated factors rather than one deciding factor, which if corrected, might have changed the outcome.

Lengthy CRT debates about whether or not an exposure or transmission was preventable take

valuable time away from the overall discussion of whether service systems or community resources are optimal or could be improved. Maternal influenza CRT members should focus on identifying correctable system factors and implementing remedies for deficiencies in resources with the expectation of preventing future occurrences similar to those uncovered by the case reviews.

#### The CRT Orientation

In the beginning, the program director or other senior level person in the sponsoring agency usually is the Case Review Team leader. Over time, the team leader will continue to play an important role, but team members may take turns presenting cases and leading the discussions. Regardless, the team leader/facilitator should be a skilled leader so that team members will feel comfortable with the process and with one another.

The team leader's primary goal is to create a comfortable atmosphere for members to voice their opinions and engage in constructive discussion. The leader's other responsibility is to keep the process moving so that it does not get bogged down in tangential issues. The team leader should exemplify the democratic nature of the team. The following points may help to create the proper atmosphere:

- 1. Ensure that the team adheres to established ground rules
- 2. Solicit everyone's opinion— not just the opinions of the individuals with the expertise on topics specific to particular cases, but also the opinions of those who may have more general knowledge about the community.
  - 3. Support the idea that all contributions are valuable. The team leader should remind the group that all opinions are valid, even when members express opinions that go against the team's overall philosophy. Try to incorporate some aspect of dissenting opinions into the discussion.

CRT meeting participants should be comfortable and relaxed. Refreshments or a light meal may be served. The seating arrangement helps set a tone of cooperation and sharing. Chairs should be arranged around a meeting table so individuals face each other and can easily begin dialog. Some programs find it helpful to use tent cards to assign seating for the first few meetings. This way, like groups of professionals (e.g., physicians, nurses, social workers, etc.) will not cluster together.

Members of new CRTs (or new members of established teams) will need time 1) to become acquainted with the maternal influenza review program goals and objectives (see Appendix K, NFIMR orientation sheet for new CRT/CAT members), 2) to become familiar with the case summary format, and 3) to become comfortable with each other. When possible, team leaders should plan at least one orientation meeting before introducing cases. Activities for this meeting should include the following:

• Give each team member an information packet, including a brief description of the maternal influenza review program; program mission statement; maternal influenza staff and CRT rosters; a CAT roster if available; sample case summaries and forms; useful articles and other literature. Present these materials in a binder so that additional material

- may be added later.
- Have team members introduce themselves, giving their professional backgrounds and current positions. Place tented name cards on the table before the meeting to help distribute the team around the table and make it easier to link names and faces during the meeting.
- Explain the importance of absolute confidentiality and review the confidentiality protocol; members should sign and return the confidentiality oaths at this and every meeting.
- Review the specific objectives of the maternal influenza case reviews and describe how these objectives will be carried out by the team
- Describe how case information is collected and summarized
- Distribute the Guide for Case Review Discussion and a sample case
- Discuss in detail the process for reviewing cases and making recommendations
- Explain the relationship of the CRT to the CAT, the process for sending the CRT's recommendations to the CAT, and subsequent community action

Once the CRT understands its role, the team should establish operating ground rules (see Laying the Groundwork). This may take place at a later meeting, after the team has been guided through a few reviews by the team leader.

#### **Subsequent CRT Meetings**

Case review summaries of 3–5 cases need to be prepared prior to each CRT meeting. These summaries include the most relevant information from both the data abstraction forms and the maternal home interview. Using the case summary format rather than the actual medical records allows for each team member to have a brief, concise summary of the information so that after everyone has read it, the CRT can begin discussing the case. The other benefit to having a case review summary is that before the summary is given to the members, all confidential information about the woman, where she received her healthcare, and what providers she saw have been removed and de-identified so that the review is more about the systems issues than about the individual woman. The case summary should include as much of the following information as is available:

- Medical information for the mother and exposed infant
- The family's living situation during and after the pregnancy
- Information from the maternal interview not available in the medical records, such as substance abuse, mental illness, domestic violence, and employment and sources of income
- Services and community resources the mother was known to have received or should have received. If the mother had obvious need for particular services, were referrals made and if so, were the referrals followed up? Are there specific reasons that the mother did not receive needed services?

#### Tips for preparing case review summaries

- Use the same format for every case
- Separate the medical record information from information gained during the maternal interview. This helps to identify inconsistencies between the two sets of information. Many FIMR projects use boxes to separate the medical records information on a specific topic from the maternal home interview summary information so that comparisons by topic can

be easily made by the CRT as they go through the summary as a team (see sample case review summary, Appendix G).

Many programs mail, courier, or email the de-identified case summaries to team members 3–5 days before the meeting. This allows team members to review the cases ahead of time and use the questions in the guide to help determine what issues they want to raise during the case discussion.

If these summaries are paper copies, the envelope that contains the documents **and** each page of the summary should be marked "confidential." Team members should be reminded to not make copies of the summaries. If the summaries are sent electronically, the email should be marked "confidential" and formatted so that the email may not be forwarded. The emailed document also should be marked "confidential" and team members should be instructed to not share the downloaded document with anyone.

All paper copies of the cases and case summaries should be collected at the end of each meeting and shredded by maternal influenza review staff. Emailed case summaries should be retracted and deleted by staff immediately after the meeting.

#### **Conducting subsequent meetings**

Maternal influenza review staff will coordinate and schedule all CRT meetings and prepare case summaries. If team members have received the written case review summaries in advance of the meeting, they are responsible for bringing the summaries to the meeting. Some programs will wait until the meeting to distribute case summaries. In either situation, each team member must read and sign the confidentiality form before the cases are presented.

The maternal influenza program director usually presents each case summary for discussion at the first few meetings. Subsequently, this responsibility may rotate among members, with assignments being made in advance. Programs typically allow 30–45 minutes for each case discussion. Discussion points should include, but are not limited to:

- Did the mother and infant receive the appropriate medical services and community resources?
- Were the services and systems culturally and linguistically appropriate?
- What gaps in services or duplication of service systems are apparent or suggested in this case?
- What does this case indicate about the ability of pregnant women with influenza to access existing local services and resources?
- What does this case indicate about the ability of pregnant women to be vaccinated against influenza?

This discussion allows the team to develop a list of all possible issues related to the case. Identified issues should be recorded for all to see, such as on a white board or flip chart. Initially, this list may include as many as 10–12 suggestions for community improvement. If possible, the list should be narrowed to the three or four most important issues. This will facilitate

the development of future recommendations and action plans that are based on the most important findings identified from cases over time.

Maternal influenza CRT members need to accomplish a lot during each meeting. The average meeting is approximately 2 hours long and 3–5 cases will be reviewed. Prolonged discussion about any one case may hinder progress. Therefore, it is the team leader's responsibility to keep an eye on the clock and keep the discussion moving. Most maternal influenza programs ask that the medical record data abstractor and the maternal interviewer participate in all meetings and be prepared to answer questions about issues that are not included in the case summaries or for clarification. Copies of the complete abstracted records and home interview should be available nearby (stored in a locked file) for referral. Maternal influenza review program staff should be mindful of the need for strict confidentiality when called upon to provide additional information about a case and be careful not to divulge any information that might identify the patients, providers or institutions.

At the end of the meeting, all copies of the de-identified case summaries and other review documents are to be collected by program staff and shredded. Program staff are responsible for preparing the minutes of the meeting in a timely fashion (within two weeks).

#### **Meeting minutes**

Meeting minutes are crucial to the process, as they summarize the decisions made by the CRT. Again a caution: When meeting minutes are being prepared, care should be taken to preserve the anonymity of the cases as well as the anonymity of comments and suggestions from individual team members. Maternal influenza review program staff will use these minutes to prepare a summary of cumulative CRT findings to present to team members on a regular basis, usually quarterly. These findings form the justification for recommendations. Keep in mind that it is equally useful to identify adequate services as it is to determine where there is room for improvement.

#### What CRTs Can Accomplish

The overall goal of the maternal influenza review is to enhance the health and well-being of pregnant women by ensuring that they get immunized for influenza and treated promptly and appropriately when diagnosed. This may be accomplished by improving the service systems and community resources available to them. Specific actions that relate to this goal include the following:

#### **Review cases**

The case review process is a distinguishing characteristic of the FIMR methodology. Involving individuals from many disciplines and aspects of the community makes the case review findings and opinions especially valuable. Information discovered by the CRT about the way community resources and services are provided to a pregnant woman can be the basis for creative problem solving to improve overall health and related service delivery systems within the community. Discoveries can include sentinel events, trends, and incidental findings.

#### **Sentinel Events**

Influenza during pregnancy is a sentinel event and one that in many instances could have been

prevented. Findings from the review can alert the community to problems or situations with services or resources. The maternal influenza case review process identifies and presents the problems and issues clearly and often suggests a solution.

#### **Trends**

Over time, several cases will identify similar problems or situations. Taken together, the cases will better illustrate a particular problem than a single case presentation.

#### **Incidental Findings**

Incidental findings are problems or issues uncovered by the maternal influenza review that are not necessarily part of the case review process. For example, during early program development, staff or team members may discover gaps in service delivery systems that should be addressed.

#### **Develop initial recommendations for eventual action**

The core of the maternal influenza review program is a careful and thorough study of each case by the CRT to determine the adequacy of local care systems and community resources for women with influenza during pregnancy and to make recommendations for improvement. While a preliminary discussion of recommendations occurs at each case review session, recommendations are not finalized at that time. The team should be encouraged to think creatively and not be limited by feasibility.

The maternal influenza program director or team leader will have kept a record of findings and recommendations (see "Meeting minutes" and "Tips for preparing case review summaries" in this section). Meeting minutes will have recommendations and the case review will have findings. These findings should be presented to the CRT. After reviewing the findings, the CRT must identify and prioritize the major trends that require systems change. Team members should select 6–10 of the most important trends as recommendations to be sent to the CAT, selecting a mix of long- term (more than 1 year), short-term (less than 1 year), and immediate actions. Refining and overseeing the implementation of recommendations is the job of the CAT.

New maternal influenza review programs often do not convene the CAT until year two of the project and the first set of recommendations will be presented at that time. However, once the CAT is up and running, recommendations from the CRT may be forwarded as often as the CAT meets (typically quarterly).

Findings from case reviews may prompt CRT members to initiate limited actions individually or jointly with other team members and their organizations. It is important to track any actions taken as a result of the MIRP process.

#### Individual

Many CRT members are powerful members at their own agencies or organizations and are in a position to stimulate or make changes in communications, availability of services, and access in the community. As cases are reviewed, a member may recognize a barrier or gap in services in his or her own agency and personally act as the agent of change.

Caution: Any specific information about maternal influenza case reviews or CRT proceedings that pertain to issues identified by a specific agency always remain confidential and cannot be shared by the team member as a rationale for encouraging his or her agency's system change.

#### **Interagency or Joint Interventions**

Sometimes case reviews point out a simple problem that rallies some or all of the CRT members to develop a limited action together. It is important for CRT members to consider what the overall community outcome of their decisions could be and to advise the CAT of their actions. The CAT can then consider whether to expand the scope of this intervention to other service providers or agencies.

#### Report to the CAT

Periodically as determined by the maternal influenza review program, the program director, the CRT team leader, and/or a delegation from the CRT should formally report the CRT recommendations for action to the CAT. This report usually is oral with an accompanying Power Point presentation. Suggested components of the report may include, but are not limited to:

- Number of CRT meetings and hours spent in review
- Number of cases reviewed
- Trends— in issues, in adequacy of services relative to the cases reviewed
- Priority recommendations
- CRT members' limited actions (if available)

Much of this information already will have been documented in the course of developing the periodic summaries for the CRT. The CRT should take pride in reporting their recommendations to the CAT. This formal report is the culmination of their thorough examination and consideration of case information. Their recommendations and rationale provide a strong argument for improving services and resources for pregnant women with influenza.

#### **Common Questions about the CRT Process**

### Q: What happens when one of the team members has been involved with a case under review?

A: The maternal influenza case review includes all of the systems of care that could have been involved with a case, not just medical and social services. At each meeting, before the case summaries are presented, remind the team that if any of them were providers for a case or know who the providers were, they should **not** identify themselves, others, or the institutions involved. Emphasize that if they have additional information about the case or if the information has been presented incorrectly, they should refrain from identifying themselves and not provide any additional information. That team member should contact the program coordinator following the case reviews. If necessary, the case can be re-abstracted for clarification or to correct any misrepresentation. Remember, the case review may include only information found in the records or obtained through the maternal interview, not anecdotal information from team members.

### Q: How to respond if during a meeting a team member identifies her/himself as being involved with the case?

**A:** Self-identification as a provider on a case under review can and does happen. If it does, stop the conversation immediately and reiterate the confidentiality standards. Do not allow any non- abstracted information to be shared and ask the person to not divulge the names of other providers.

### Q: How to respond if a team member wants to know the names of providers involved with cases under review?

**A:** Maternal influenza review is a systems review, not a peer review. Cases are anonymous and provider identifiers are never on file or recorded on abstraction forms. All forms are shredded after each case review meeting. The fewer the number program staff in possession of identifying information the better. Additionally, remind the team member that all CRT team members and maternal influenza program staff have signed confidentiality agreements and that the provider information cannot be divulged.

### Q: In what circumstances would the subject(s) of a maternal influenza case review (the mother and/ or child) have to be revealed?

**A:** In the case of suspected child abuse or neglect, the mother or other involved family member would have to be reported to the appropriate authorities. Individual geographic areas have different methods to accomplish this, which should be determined before case reviews begin. Mothers consenting to the interview are notified of this provision before the interview. Remember, there is never a reason to reveal this information to the CRT.

### Q: When is it appropriate for a CRT member to share information about maternal influenza findings prior to their formal presentation to the CAT?

**A:** Sometimes, review team members are stimulated by CRT discussions and elect to initiate systems change in their own institutions before recommendations are made public. However, any specific information about the maternal influenza review case histories or proceedings of individual CRT meetings that pertain to issues identified at a particular agency are confidential and cannot be shared as the rationale to encourage the change.

#### **Additional Information and Sample Forms**

Sample forms that should be useful for the project are included as appendices at the end of this tool kit. Forms labeled [SAMPLE] are simply a guide and can be edited to meet the state's requirements for informed consent.

The Confidentiality Agreement (Maternal Influenza Review Program Case Review Team (CRT) Confidentiality Pledge) is *not* open for edits or alterations and must be signed by each member of the Case Review Team (CRT) including all program leads, data abstractors, interviews, and other state and nonstate employee members.

The Case Review Summary example is a fictional example of how the states may want to organize their Case Review Summaries. States should use a format that works best for them whether it is this example or something else.

For any questions about any of the sample forms, please contact ACOG's Immunization Program at immunization@acog.org

## MATERNAL INFLUENZA REVIEW PROGRAM

 $\begin{array}{c} Training \ Manual \\ Implementing \ Community \ Action \ (CAT) \end{array}$ 

American College of Obstetricians and Gynecologists

#### **Development of initial recommendations for eventual action**

The core of the Maternal Influenza Review Program (MIRP) is a careful and thorough study of each case by the CRT to determine the adequacy of local care systems and community resources for women with influenza during pregnancy and to make recommendations for improvement. Although a preliminary discussion of recommendations occurs at each case review session, recommendations are not finalized at that time. The team should be encouraged to think creatively and not be limited by feasibility.

The maternal influenza program director or team leader will have kept a record of findings and recommendations. These findings were developed by the CRT. After reviewing the findings, the CRT identified and prioritized the major trends that require systems change. CRT team members usually select 6–10 of the most important trends as recommendations to be sent to the CAT, selecting a mix of long-term (more than 1 year), short-term (less than 1 year), and immediate actions. Refining and overseeing the implementation of recommendations is the job of the CAT. The role of the CAT is to initiate systems change based on CRT findings and recommendations.

Once the CAT is up and running, recommendations from the CRT may be forwarded as often as the CAT meets. Findings from case reviews may prompt CRT members to initiate limited actions individually or jointly with other team members and their organizations.

#### Description of Maternal Influenza Review Program: Implementing Community Action

Following the completion of the Community Review Teams (CRT), which reviewed cases and made recommendations for systems improvement around prevention of maternal influenza resulting in hospitalization, states should set up a Community Action Team (CAT). Community Action Teams should identify ways to implement as many of the recommendations from the Case Review Team as possible to create systems change and potentially reduce future morbidity caused by maternal influenza. The following information describes the process to implement the Community Action Team.

#### **Role of Community Action Team**

The role of the CAT is to:

- Review findings from the CRT and make recommendations for change.
- Develop new and creative solutions to improve services and resources for families from the recommendations made by the CRT.
- Enhance the visibility of issues related to women, infants, and families in the state by informing the community about the need for these actions through presentations, media events, and written reports.
- Work with the state and local communities to implement interventions to improve services and resources.

#### **CAT Sponsorship**

Each CAT needs to have a sponsoring organization that will choose the CAT team members, chair the meetings, and encourage team action. For the MIRP program, the sponsor will be the state health department. The Maternal Influenza Review Program should be a collaboration between immunization and perinatal health experts within the state and community, and team coleads should be chosen from each of these groups to share the program responsibilities. Typically, there is a program director and a program coordinator. The program director may be the sponsoring agency's or organization's director, or at the very least should be able to work closely with the director, have influence in the sponsoring entity, be viewed as a leader in the overall community, and may already be involved with the planning group. This position is responsible for the planning process and for building and maintaining community-wide support and must have a good working relationship with other agency leaders. The program director will review the case summaries before each CRT meeting to make sure they are complete and often is the team leader for CRT deliberations and CAT meetings. He or she will engage and supervise the review staff, including abstractors and maternal interviewers, and be responsible for their training.

#### Relationship between CRT, CAT, and the State

The relationship between the CRT, CAT, and the state are meant to be interactive and responsive to state and local issues or problems. For example, the CRT reviews health care and related service systems to determine if gaps in services or community resources exist, to document opportunities for improvement and to report findings to the CAT. For example, the CRT may document a trend that might indicate that some prenatal providers are not promoting influenza vaccines to their pregnant patients. Based on the recommendation from the CRT to provide more training and education to prenatal providers on influenza vaccination during pregnancy, the CAT might then identify ways to target prenatal care providers to provide them with education about the safety and benefit of influenza vaccination to both the mother and her newborn. And finally, this outreach effort may lead to establishing a coalition, new policies, and other approaches to improve immunization for pregnant women.

#### **Identifying the Community to Target Community Action**

It is important to reexamine the geographic area of each state which comprised the cases that were initially reviewed to better understand the target audience and the specific part of the state on which to focus implementation. The geographic area can be statewide, a local community, or a county. Two questions to be considered:

- Is the community defined in a way that will translate into local ownership, accountability, and pride?
- How many pregnant women who were hospitalized with influenza during the 2012–2013 influenza season are in the state?

#### **CAT Membership Considerations**

The CAT is composed of two types of members: those who have the political will and fiscal resources to create larger-scale systems change, and those who can help define a community or state perspective on how best to create change in the state. The CAT members need to take charge and help the process stay focused on the big picture, which is improving or restructuring existing resources and services. After potential CAT members have been identified, the planning group should begin to recruit key members. As these members come on board, they can use their influence and connections to recruit other potential members and partners.

In addition, there needs to be attention to important aspects of building community support and collaboration for the maternal influenza review committee's CAT. Choosing the right mix of individuals to serve on the maternal influenza review committee's CAT is crucial to the success of the program and requires careful planning. According to experts in building community alliances, and echoed by the experiences of many traditional FIMR programs, membership should include individuals who will bring diversity, influence, commitment, consumer participation to the table and are willing to sign a pledge of confidentiality. (1)

**Diversity** requires that the CAT membership represents a wide array of personal and professional knowledge, expertise, and experience; the ethnic and cultural diversity in the community; and a broad, creative range of organizations including some that may not have been involved in traditional maternal and child consortia. Choosing members who exemplify multicultural partnerships, family—consumer—community service agency partnerships, multiagency partnerships, and public health—private provider partnerships is vital to building maternal influenza review team diversity and sets a standard of cooperation and mutual respect that should be a model for individual team members, their respective organizations, and the community as a whole.

**Influence** refers to policy makers, institutional and professional leaders, and/or organizational spokespersons who have the power to make decisions for and mobilize fiscal and programmatic resources on behalf of their constituencies, agencies or organizations. Team members with influence usually will be the leader of a specific agency or organization, an elected official, or a high level staff member clearly entitled to represent organization and make decisions.

Commitment refers to a team member's proven track record of putting the interests of women, infants and families before his or her own organization's or professional interest, expectations, or convenience Commitment means that the member already has demonstrated the ability to act as an advocate or champion for improvement in systems even when deeply rooted and long-standing policies or interests oppose such change. It is also important that every member of the CAT be an equal partner in the process.

#### References

1. Fetal and Infant Mortality Review Manual: A Guide for Communities. 2nd Edition, National FIMR Program, American College of Obstetricians and Gynecologists, Washington, DC, August 2008.

Consumer participation should be an integral part of the maternal influenza review process. In general, consumers are individuals who live in the chosen community and use its services and resources. Mothers who were hospitalized for influenza during their pregnancy represent a special component of consumer participation for maternal influenza review programs. Although they did not directly participate on the CRT, they were interviewed by the project to get their perspective on their hospitalization for influenza during their latest pregnancy. Recommendations coming out of the CRT for what changes are needed ensures that their voices for improvement will be heard.

**Confidentiality** is essential to having an effective CAT. Members need to read and sign the confidentiality pledge at the end of this training manual. Confidentiality needs to be adhered to during the entire CAT process.

#### **Overlapping Membership from CRT**

Given the strong working relationship between the CRT and the CAT, it is beneficial to have some CRT members also participate as members of the CAT. This may include a few clinicians, such as a perinatal nurse and ob-gyn, the home interviewer, data abstractor, case presenter, and others who are in a position of influence to either further explain what is needed based on CRT deliberations or who have sufficient influence to assist with change. In addition, the CAT should include a facilitator who may be the CAT coordinator and a recorder.

#### **CAT Orientation**

The chairperson for the CAT must set the tone for overall collaboration for the CAT members. Members of the CAT will need time to become familiar with their roles and responsibilities and with each other. Specific tasks to orient the CAT include: understanding the MIRP process, how data were collected both via data abstraction and from home interviews; and reviewing the project objectives and how they will be carried out. Members of the CAT must understand the process by which the CRT recommendations were developed and explain that these recommendations will be the only ones discussed as they prioritize and identify which will be targeted for implementation. Each member will be provided with a list of recommendations from the cases reviewed. In response, the CAT will develop an action plan. The action plan is the basis for identifying the subsequent work to be done by the team.

#### **Role of the Facilitator**

Some programs may use a CAT facilitator who will observe the group process and intervene as needed to encourage full participation; establish ground rules and procedures; promote a climate of openness, trust, and cooperation; and provide structure and focus to the discussion (1).

#### References

1. FIMR Staff Workshop Preparing for Community Action. Maryland Department of Health and Mental Hygiene

#### Structure of the CAT

The group discussion should be kept on-track, focused on systems issues, and use a consistent format from case to case. The following steps may be helpful:

- 1) Develop priorities based on findings and recommendations
- 2) Identify key state and local partners with whom to collaborate
- 3) Identify means to implement activities to improve systems of care
- 4) Facilitate implementation of activities

#### **Translating Recommendations to Action**

The CAT uses the recommendations from the CRT to translate recommendations into action through implementing different types of systems change agreed to by the committee. This requires some shared knowledge of both processes. The CAT will decide who will do what, when, and with what resources to improve services and resources for families.

#### **Creating an Action Plan**

The CAT works through several steps to create an action plan to guide their work, including:

Developing a list of actions or interventions responsive to the issues. This includes identifying prior actions taken, refining the CRT recommendations if necessary, and including additional action strategies. Ideally, the plan should be:

- Limited to a reasonable number of actions
- Able to specify a person/agency that should be accountable for the action
- Realistic in terms of resources available
- Time-framed with both short-term and long-term objectives
- Able to prioritize the actions as needed.
- Staffed by a subgroup who volunteers to be responsible for overseeing the action.

#### **Setting Priorities for Action Change: Three Scenarios and Action Steps**

- 1. The solution or action is obvious. Assign the issue to the CAT.
- 2. The recommendation needs further clarification. Work to refine possible actions before delegating to the CAT
- 3. The recommendation is beyond the scope or range of the CAT. Delegate to an appropriate group to address the issue.

**Developing an objective for achievement.** Make sure it is realistic. Action plans should take into account state politics, resources, and priorities.

#### **Prioritizing Actions**

An important consideration for the CAT is which recommendations will have priority for implementation. One approach is to begin with those recommendations that will be easiest to implement. Another approach is to build on existing initiatives. This approach can help ensure

that actions can be sustained over time and that the process is integrated into the existing state or community infrastructure. In some cases, the CAT may also create a subcommittee to move specific actions forward or convene an issue-specific taskforce.

#### **Monitoring Progress**

It is important to keep track of decisions about the CAT actions, work plan, and subsequent progress. The CAT members responsible for each action can incorporate this information into an informal work plan. A document that identifies the responsible person/agency, how the action will be tracked, and its status can serve as a practical tool to track the progress on actions and any changes in the plan. It is important to keep track of the program's decisions, actions, and outcomes.

#### Reporting

Periodically, as determined by the maternal influenza review program, the program director, the CRT team leader, and/or a delegation from the CRT should formally report the CRT recommendations for action to the CAT. Suggested components of the report may include, but are not limited to:

- Number of CRT meetings and hours spent in review
- Number of cases reviewed
- Trends in issues and adequacy of services relative to the cases reviewed
- Priority recommendations
- CRT members' limited actions (if available)

Much of this information already will have been documented in the course of developing the periodic summaries for the CRT. The CRT should take pride in reporting their recommendations to the CAT. This formal report is the culmination of their thorough examination and consideration of case information. Their recommendations and rationale provide a strong argument for improving services and resources for pregnant women with influenza.

#### Maternal Influenza Review Program Questions & Answers

#### Q: Is it OK to use a recording device during the maternal interview?

**A:** Use of a recording device during the interview is strongly discouraged. Recording the conversation can take away from the relationship between the mother and the interviewer and may make the mother more likely to hold information back. It also raises another level of confidentiality issues, both in terms of securing the tape in a safe location and convincing the woman that no one else will have access to what is on the tape.

#### Q: Do you need consent for home interview and permission for data abstraction?

**A:** Yes. You will need consent from every mother that is interviewed. See the example of the maternal consent form in Appendix C of the Training Manual. Data abstractors will need to get permission from the health care facilities to access medical charts. It is recommended that you bring an official letter from the state health department when you go to the facility explaining exactly what you need, what you are doing with the information, and why this information is important to public health. It is also helpful to emphasize that all information will be de-identified.

#### Q: Can you do the maternal interview over the phone?

**A:** No. The maternal interview is a home interview that should take place in person at the woman's home or another location where she is most comfortable. Telephone interviews will not have the same effect in terms of the important information that the woman will be willing to discuss with the interviewer.

# Q: What if a woman is willing to do a phone interview, but absolutely cannot be persuaded to do an in-person interview? In this case can phone interviews be permitted?

A: Conducting maternal home interviews is a requirement of the project. Therefore, states will need to use experienced interviewers to contact the women and hopefully all of them will agree to a home interview. Experienced interviewers use a variety of techniques to encourage a woman to participate in in-person interviews. These might include explaining the program briefly, and explaining how telling details of their experiences with influenza while hospitalized during their pregnancy can lead to new prevention strategies for other women in their state. Also, gently probing into reasons for a woman's reluctance to participate and addressing some of their concerns can sometimes lead to overcoming hesitancy. Some FIMR project staff who occasionally encounter a mother who does not initially want to participate might ask her if she will answer one or two questions to get an idea of the process; frequently, the woman may find that she feels comfortable and is willing to complete the rest of the interview. Another issue that occasionally comes up is that it may not be convenient for the woman to do the interview at her home. In this case the location could be changed as long as there is privacy while conducting the interview.

Conducting a phone interview also may compromise the level of detail that the interviewer may be able to get from the mother, since she has not met the woman face to face. We strongly recommend only doing home interviews. If after exhausting all possible approaches and if the woman will only agree to a telephone interview, then it is permissible in this rare and special circumstance for this one case. It still would be expected that all the remaining home interviews will be done in person. ACOG would like to stress the importance of doing the interview in person in order to make the process more candid and personal and to allow the woman to feel comfortable and open in answering the questions.

#### Q: What is the online database and how do we use it?

A: The online database is a SurveyMonkey® form containing all of the questions in the home interview and data abstraction forms. De-identified data can be collected and entered here and collated data reports can be generated from these surveys (i.e., percent of cases that got a flu shot vs. those who did not). The use of this electronic system is optional and was developed as a tool if the states think this would be helpful. This database form is available from ACOG's Immunization Program by contacting Immunization@acog.org.

### Q: What happens if we find that the majority of the women were in fact vaccinated against influenza?

**A:** Although vaccination against influenza is something we are looking at, we do not assume that these women were hospitalized because of lack of vaccination. There are many other factors we want to look at such as early and appropriate treatment when flu-like symptoms present in pregnant women, education and recommendation from the physician/health care provider, and vaccination status of other family members and close contacts that all could have led to the hospitalization.

#### Q: Do all states need to use the same standardized form for the CRT Summary sheet?

**A:** No. The sample case review summary provided in Appendix G of the Training Manual is just an example of one type of summary which we think is short, concise, and organizes the topics that need to be covered. Since you will not be submitting your case review summaries to ACOG, there is no need for your state's summaries to use the same standardized format as the other states. We think the general layout of the sample CRT summary sheet is ideal, however this is meant to be a tool to help mitigate the CRT meeting process. States can develop the summaries in a way that works best for them and accurately captures what they see as the most important information. It is advisable for each state to decide on the format they like and use that same format for each case they review.

### Q: If a maternal home interview cannot be conducted for a given case, should the case still be reviewed using the data abstraction information or should the case be discarded?

**A:** The home interview is the cornerstone of the fetal—infant mortality review process and every effort should be made to make the interview happen. FIMR team members report that the home interview provides some of the most valuable information to the case review. It is very

important to select interviewers with experience who can connect with the women, find the deeper issue as to why they do not want to be interviewed, and try everything to overcome that barrier. After every attempt is made to interview the woman, if it is not possible for the interview to occur, the information abstracted from the medical chart should still be reviewed.

Q: Do you recommend having both a Case Review Team and a Community Action Team, or can one group accomplish the each of the goals?

**A:** There should be a separate group of people on the CRT and the CAT. It is best to have both a CRT and a CAT.

## MATERNAL INFLUENZA REVIEW PROGRAM

APPENDIX A: Home Interview Form

American College of Obstetricians and Gynecologists

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#### **BEGINNING THE INTERVIEW**

The first 10 to 15 minutes of the home visit will usually be used to develop rapport with the mother, to thank her for allowing the visit, and to explain the program. Suggested language for describing the project:

"The purpose of this program is to identify factors associated with maternal hospitalization as a result of catching the flu and to find ways to help families such as yours in the future. To achieve these goals, we wish to interview mothers who were recently hospitalized with the flu while pregnant. You have been asked to participate in the program because you were recently hospitalized with the flu while pregnant."

\*\*For the purpose of this review, an "influenza case" is defined as a pregnant woman, immunized or non-immunized, hospitalized at any stage of gestation with a hospital medical chart-documented diagnosis of influenza (any type) during the 2012–2013 influenza season; i.e. October 2012–May 2013.

Be sure to inform the mother that the information she tells you is confidential and will not be used for any purpose without protecting her identity and will only be used to improve services to women in the future. Once a comfortable atmosphere has been achieved, the best way to begin the interview is to ask the mother to describe in her own words the events leading up to her hospitalization with the flu. The goal of this discussion is to find out if the mother was vaccinated, and if not, why not? If the mother was vaccinated, then the goal is to discover what other system or treatment failures might have occurred resulting in her hospitalization?

It is important to remain sensitive to the mother's need to expound on or digress from any particular event that generates strong feelings and to give her time to recall details and relate her experiences in her own words.

How are you and (baby's name) doing since your delivery? (Refer to baby by name, if known)

Note: The interviewer should *listen* while the mother expands on this question and ask permission to take notes to ensure accuracy of the data. Additional notes should be recorded after the home visit.

#### PART A – PRECONCEPTION HEALTH INFORMATION

The first question is about the time just before the start of your pregnancy during the 2012–2013 flu season; i.e. October 2012–May 2013.

1.	Vere you ever told you had any of the following health problems <u>before</u> you became pregnant?
(Ch	k all that apply)

Obesity
Gestational Diabetes
High Blood Pressure
Seizures/Epilepsy
Anemia
Viruses/Infections (specify)
Asthma
HIV
Chronic Lung Disease



Cardiovascular Disease Immune Suppression Metabolic Disorder Neurological Disorder Neuromuscular disorder Renal Disease Other (specify) I did not have any of these problem Don't remember		
<b>1a.</b> If yes to any problems, what treats	nent was provided	
<u>P</u>	PART B – PRENATA	AL CARE
These are a few questions about the	e prenatal care you r	eceived.
1. How many weeks pregnant were Weeks	r <b>e you when you firs</b> Don't ren	t thought you <i>might</i> be pregnant?
2. How many weeks pregnant wer (For example, you had a pregnan Weeks		urse said you were pregnant.)
During this pregnancy		
3. Did you receive any prenatal ca another health care provider of		=
Yes (select from the following)		
Obstetrician		
Perinatologist		
Family Physician		
Osteopath		
Nurse Practitioner		
Nurse-Midwife		
Other (please specify the t	ype of provider)	
No (if no, skip to question 11)		
4. Did you get prenatal care as eas	rly as you wanted?	
No If no, check all that apply		
I had no one to take care of	of my children	I did not think I was pregnant
I had no way to get to the	· ·	I did not know where to go
I could not get a doctor or I could not get an appoint		patient
I did not have enough mor	ney or insurance to pa	y for my visits
Other (specify reason):		



	lu season, did any of the following make it difficult s as you would have liked? (Check all that apply)				
I had no one to take care of my children  I did not have enough money or insurance to pay for my visits					
I had no way to get to the clinic or office					
I did not know where to go					
I could not get an appointment earlier in my pregn	ancy				
None	uncy				
Other (specify)					
6. How many weeks pregnant were you on your	first visit for prenatal care?				
(Don't count a visit that was only for a pregnancy tes	-				
weeks (convert months to weeks)	I can't remember				
7. Where did you go for your first prenatal visit?					
Private Provider's Office (specify by checking app	propriate box below)				
Obstetrician					
Perinatologist					
Family Physician					
Osteopath					
Nurse Practitioner					
Nurse–Midwife					
Other (please specify the type of provider	r)				
Clinic at work or at school					
County Health Department					
Clinic in a hospital					
HIV clinic or provider					
Hospital emergency room or as needed					
care provider					
Community Health Center					
I did not get any more prenatal care					
Correctional facility (jail, prison, detention center)					
Other: specify					
Don't remember					
8. How did you pay for your prenatal visits? (Che	eck all that apply)				
Private Insurance	Medicaid				
Managed Care Organization (MCO)	Military				
Ryan White Program	Self pay				
Other [What other way did you pay for prenatal ca	rre?]:				
Don't remember					
9. Did you have to change your prenatal care prov	vider during this pregnancy?				
Yes No (If no, skip to question #11)	• • •				
If yes, why? (Check all that apply)					

The provider would not accept Medicaid



The provider would not accept my insurance.
Could not pay
Moved
To see a specialist [What specialist did you see?]
Other reason (specify):
10. If you had to change prenatal care providers, where did you receive the rest of your prenatal care? (Check one answer)
Private Provider's Office (specify by selecting from options below)
Obstetrician
Perinatologist
Family Physician
Osteopath
Nurse Practitioner
Nurse-Midwife
Other (please specify the type of private provider)
Clinic at work or at school
County Health Department
Clinic in a hospital
Hospital emergency room or as needed care provider
Community Health Center
I did not get any more prenatal care
Correctional facility (jail, prison, detention center)
Other (specify the type of provider)
Don't remember
11. During your pregnancy during the 2012–13 flu season, did you attend any of the following? (Check all that apply)
Childbirth education classes
Parenting classes
Counseling sessions about stress, family problems or mental health problems
Other classes in preparation (specify)
Don't remember
12. Did you develop any of the following health problems while you were pregnant?
Obesity
Gestational Diabetes
High Blood Pressure
Seizures/Epilepsy Anemia
Viruses/Infections (specify)
Asthma
HIV
Chronic Lung Disease Cardiovascular Disease
Immune Suppression
Metabolic Disorder
Neurological Disorder
Neuromuscular disorder



Renal Disease Other (specify) I did not have any of these problems Don't remember  12a. If yes to any problems, what treatment was provided					
13. How would you do  Excellent	escribe your overall l Good	health during p Fair	regnancy? Poor		
One of the happiest to A happy time with a A moderately hard time One of the worst time Don't remember	imes of my life few problems me	ing your pregna	ancy?		
15 Is there anything	else you would like	to tell me about	your pregnancy?		
These next questions	are about your flu va		S AND HOSPITALIZATION s and subsequent illness during	the 2012-13	
flu season i.e. October					
1. Did you receive a fl Yes, first trimester Yes, second trimester Yes, third trimester Yes but do not rement At the time of your of No, did not receive a Don't remember	r mber when lelivery	oregnancy? If so	o, When?		
or talked to you abou all that apply. For each	<b>It when you received</b> In statement that applic Inding appropriate bo	l prenatal care of es, ask which property ox below the state	urse, or any other health worked during your most recent pregnations ovider had the conversation with tement. Checking the box indicated	ancy. (Check the patient,	
△ Doctor △Nurse Pr Did he/she talk with shot while pregnant?	⚠ Nurse actitioner you about the importa	△Nurse–Mid- △Office Staff unce of receiving	f(specify) a Tdap (tetanus, diphtheria, and	pertussis)	
△ Doctor △ Nurse F  Did he/she talk with		△ Nurse–Mid· △ Office Staff that you may ne			

If so, which ones?



	△ Doctor ∠	<b>∑</b> Nurse	△Nurse–Midwife
	△ Nurse Practit	ioner	$\triangle$ OfficeStaff(specify)
		bout other sh	ots that you may need after you deliver?
If so, wh	ich ones?	<b>A N</b> T	ANT 26'1 'C
		<b>∆</b> Nurse	△ Nurse–Midwife
Did ha	△ Nurse Practit		△Office Staff(specify)  s to you and your baby of contracting flu while pregnant?
Dia ne	A Doctor ∠		A Nurse–Midwife
	△ Nurse Practit		△Office Staff(specify)
Did he			ortance of good hygiene (hand washing, etc) in preventing
	s diseases such as fl		
	△ Doctor ∠	<b>\S</b> Nurse	△Nurse–Midwife
	△ Nurse Practit	ioner	$\Delta$ OfficeStaff(specify)
	g which discussion duestion 6)	did you dec	ide to get the flu shot? (if the patient did not receive a flu shot
	rst discussion with r		
	econd discussion with		
	(specify)	my provider	about the Hu Shot
	t remember		
	e did you receive yo tric Care Provider (p		by selecting from the options below)
	Obstetrician		
	Perinatologist		
	Family Physician	1	
	Osteopath		
	Nurse Practitione	er	
	Nurse-Midwife		
Pharm Hospi Health Work Emerg	Primary Care Doctoracy		of private provider)
			hot? (check all) pecify by selecting from the options below)
	Obstetrician		
	Perinatologist		
	Family Physician	1	
	Osteopath		
	Nurse Practition	er	
	Nurse-Midwife		
	Other Health Car	e Provider (r	please specify the type of private provider)
	to protect my baby	u	

6



Other, Please Explain Did not receive a flu shot  6. If your provider recommended that you receive a flu shot and you declined, did your provider have follow-up conversations with you repeating the recommendation? Yes (please specify how many additional conversations were had about immunizations) No, they did not bring the topic of flu shots up again I don't remember  7. What made you decide not to get a flu shot? (check all that apply) Provider never talked to me about it My provider recommended it but could not administer it at his/her office I've never had the flu Didn't know it was recommended Safety concerns for the baby I'u shots make you sick Flu shots contain mercury that could cause autism in my baby My provider's office said that I should not get a flu shot (if selected please specify provider) Obstetrician Perinatologist Family Physician Osteopath Nurse Practitioner Nurse-Midwife Other (please specify the type of private provider) Don't think they work I'm healthy so I didn't think I needed one There was a vaccine shortage and I could not find anywhere that had the shot I'm allergic to a component of the shot Didn't have time I could not get transportation Didn't know where to go Would have had to go somewhere besides my provider Never get a flu shot Cost/Could not afford Don't know  8. Did the baby's father get a flu shot prior to delivery? Yes No Don't know  9. How do you think you got the flu? Was it from: A family member A co-worker	Watched it on the news or read about it Talked to friends and/or family members about it
6. If your provider recommended that you receive a flu shot and you declined, did your provider have follow-up conversations with you repeating the recommendation?  Yes (please specify how many additional conversations were had about immunizations)	· · · · · · · · · · · · · · · · · · ·
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<ul> <li>Don't know</li> <li>8. Did the baby's father get a flu shot prior to delivery?  Yes  No  Don't know</li> <li>9. How do you think you got the flu? Was it from:  A family member  A co-worker</li> </ul>	· ·
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No Don't know  9. How do you think you got the flu? Was it from: A family member A co-worker	·
Don't know  9. How do you think you got the flu? Was it from:  A family member A co-worker	
A family member A co-worker	
A co-worker	
	A co-worker

Some other way [Please explain how you think you got the flu]



First trin	mester
	trimester
Third tr	
	me of your delivery
Don't re	emember
	point before you were hospitalized did you contact your provider about your symptoms? alled my:
	Obstetrician
	Perinatologist
	Family Physician
	Osteopath
	Nurse Practitioner
	Nurse-Midwife
	Other (please specify the type of private provider)
	o to question 14) emember
12. When	you called, what did your provider instruct you to do?
My	
	Obstetrician
	Perinatologist
	Family Physician
	Osteopath
	Nurse Practitioner
	Nurse-Midwife
Told me to	Other (please specify the type of private provider)  o (check all the apply)
	Rest and drink plenty of fluids
	Come to his/her office to be seen
	Go to the Emergency Room
	Call back later if symptoms got worse
	Take antiviral medication which he/she prescribed over the phone
	Other (please specify the instructions from the provider)
13 When	Don't remember you called your provider did you tell them you were pregnant?
Yes	you cance your provider the you ten them you were pregnant.
	ase explain)
rvo (piec	I was scared
	I forgot
	I didn't think it mattered
	I assumed they already knew
	No one asked
	Other (please specify the reason)
Don't	emember
ווטע נדנ	AHCHIOCI

10. At what point in your pregnancy were you hospitalized with the flu:



14. At what point did you seek medical attention for your symptoms?

As soon as I started to feel sick
After a few days of illness
After a week or more of illness
Don't remember
15. Did you visit your provider or other health care worker with symptoms prior to being hospitalized?
Yes, I visited my:
Obstetrician
Perinatologist
Family Physician
Osteopath
Nurse Practitioner
Nurse-Midwife
Other (please specify the type of private provider)
No
Don't remember
16. Did your provider prescribe antiviral medication over the phone before you were hospitalized?
Yes, I was prescribed antiviral medication over the phone by my:
Obstetrician
Perinatologist
Family Physician
Osteopath
Nurse Practitioner
Nurse-Midwife
Other (please specify the type of private provider)
No (skip to 18)
Don't remember
17. How long did you take antiviral medication before being hospitalized?
days
Don't remember
18. Were you prescribed antiviral medication while hospitalized?
Yes please specify the medication if you remember:
No
Don't remember
19. At what point during your illness do you remember starting medication (if you were prescribed
anything)?
As soon as I called my provider
Upon admission to the hospital After being tested for flu
After test results were received for flu
Was not prescribed medication
My doctor recommended medication but I was not comfortable taking it (explain)
Don't remember



Preterm Labor		
Pneumonia		
Hypertension		
No complications Don't know		
Other specify		
other speerly_		
21. From your perspective, do yo hospitalized with flu?	u think there is anything the	at could have been done to prevent being
	PART D - DELIVERY OF	F BABY
1. Please explain any medical pro	oblems you experienced dur	ing your delivery:
2. Hann mann nighte did oon etoo	. : 4h a h a mital/ath a fa ailit	u aftau daliussiu a tha babu?
2. How many nights did you stay	•	
of nights	I did not stay overnight	Don't remember
3. Did you go into labor prematu	roly? If so, by how many do	ve or weeks?
Yes	No	Don't remember
103	110	Bon t remember
4. Is there anything else you wou	ld like to tell me about the d	elivery of your baby?
n.	DE E INFORMATION OF	N MOTHER
PAI	RT E – INFORMATION O	NMOTHER
1. What was your marital statu	s during the pregnancy?	
Single	Divorced	Married
Separated	Widowed	
Other (specify):		
. 1 357		
2. Has your marital status chan	iged just before pregnancy,	during pregnancy or after delivery?
Yes If yes, specify		No
3. Where were you born (city/s	tate/country)?	
4. Which one of these groups b	est describes your racial bac	ckground?
☐ White		
☐ Black or African American		
<ul><li>☐ Asian</li><li>☐ Native Hawaiian or other Pacif</li></ul>	. T-1 J	
☐ American Indian or Alaska Nat		
☐ Other (specify)	110	
☐ Unknown		
_ CIMIOWII		
5. Are you Spanish or Hispanic	??	



Yes (sp	pecify below)					
	Mexican, Mexi	can-American, Chicano				
	Cuban					
	Puerto Rican					
	Central or Sout	h American				
	Other Spanish/	Hispanic (specify):		_		
No	-			_		
Don't l	know					
6. Wha	nt is the highest g	rade/year of school or co	ollege you completed?			
0-8	9-11	12/GED	some college	Associ	ates I	Degree
Bachel	ors Degree	Graduate Degree				
7a & 7b) English	h	speak at home? (if selec	cting "Spanish" or "Other" please	: comple	te que	estions
Spanis	n					
Other (specify):						
(specify).						
Very c comfor Question	omfortable/fluent rtable Fairly unc on 7B)	you speaking and listening (omewhat omfortable ( <i>Go to</i> onot speak English ( <i>Go to</i>				
7b. Were		erpretation or translation	n services in the following setting	s durin	g	
F8	-3 -			,	Yes	No
During	g prenatal care			···		
At an e	mergency room					
	P	ART F – INFORMATIO	ON ON CLOSE CONTACTS			
I would l			s of the baby including the baby	's fathei	r. oth	er
family m	embers, and car		situation at the time you were pro			
Yes, No Don't l						
**Please	Explain why or v	vhy not:				



#### 2. How did your partner feel about you receiving a flu shot?

Did not care

Thought it was important

Don't know

#### 3. If your partner did not receive a flu shot, please list the reason(s):

Provider never talked to me about it

Provider recommended it but could not administer it at his/her office

He/she has never had the flu

Didn't know it was recommended

Safety concerns for the baby

Flu shots make you sick

Flu shots contain mercury that could cause autism in my baby

My provider's office said that he/she should **not** get a flu shot (if selected please specify provider)

Obstetrician

Perinatologist

Family Physician

Osteopath

Nurse Practitioner

Nurse-Midwife

Other (please specify the type of private provider)

Don't think they work

He/she is healthy so didn't think they needed one

There was a vaccine shortage and he/she could not find anywhere that had the shot

He/she is allergic to a component of the shot

Didn't have time

Could not get transportation

Didn't know where to go

Would have had to go somewhere besides usual provider

Never get a flu shot

Cost/Could not afford

Don't know

#### 4. Did everyone else living with you at the time receive a flu shot before the baby was born?

Yes

No

Don't know

#### 5. Did the baby's caretakers (grandparents, daycare workers, nanny, etc) get a flu shot?

Yes

No

Don't know

#### 6. During your pregnancy did anyone discourage you from receiving a flu shot?

Yes, my partner

Yes, my parents

Yes, other family and friends

Yes, coworkers

Provider (specify the provider)

Obstetrician

Perinatologist

Family Physician



Osteopath				
Nurse Practitioner				
Nurse–Midwife Other (please specify the type of private provider)				
Yes, other Explain: No (skip to Question 7)				
Don't know				
6a. If anyone discouraged yo	u from i	receiving a flu shot, what were their reason	as?	
7. How did you feel about you Very satisfied	our ovei	rall living situation?  Somewhat dissatisfied	Somewhat satisfied	
Very dissatisfied				
8. How many other people li and children in the chart be		h you in this house during your pregnanc	y? Please list all adult	
	<u> </u>	Got a flu shot during 2012-13 flu seas	onie	
Relationship to mother	Age	October 2012-May 2013?	on i.e.	
•				
	1			
Total Adults:	-	Total Children:		



9. Did multiple people ha	ve to share rooms or beds	in your home?	
Yes explain:			
No			
Don't remember			
10. Did you feel you had	l adequate space in your l	nouse for the num	ber of people living there?
Yes No			
Somewhat			
Other explain			
11. How many times did	d you move in the past yea	ar?	<del>_</del>
12. Did you live in any o	of the following places dur	ring this pregnanc	<b>y?</b> (Check all that apply)
Prison/correction Facilit	ies		
Mental Health Facilities			
Drug treatment center			
Battered women's shelte	r		
Homeless shelter			
Home for pregnant teens	3		
Other (specify):			
None of these (skip to Q	uestion 13)		
12a. If yes, did they provid	e or help you get prenatal o	care?	
Yes No			
Don't remember			
12 During your progno	nov during the 2012 13 fl	u caccan ar cinaa s	your baby was born, was there a
			oay the rent or mortgage?
Yes No	Don't remember	· ·	, 3 3
14 - D'I b ab		L	
• •	Rarely		you during your pregnancy?
·	•	Most o	of the time
Never	Sometimes		
15. During your recent play/month to the next?	pregnancy, did you worry	about not having	genough money from one
Not worried at all	Very v	worried	
Extremely worried	A little	e worried	Not sure
16 T.A 41 T.	1110	1 , 1.	• • •
16 Is there anything else	e you would like to tell me	about your living	situation?

#### SECTION G – LIFE CHANGES/SOCIAL SUPPORTS

Pregnancy can be a difficult time for some women. The next questions are about some things that may have happened to you during your most recent pregnancy.

Your race		the unfair treatment.) Your age	Your culture	
Being female		Your citizenship	Your height or weight	
The type of insurance you had		Your partner	Tour neight of Weight	
• •	iy)	•		
No				
2. In the last month, how oft	en have you felt depre	ssed/down/blue?		
Almost never	Never	Fairly often		
Very often	Sometimes	Dor	Don't know	
. Have you/Did you see(n) a	·	•	·	
SECTION H – MATERN	LET OF TELLIFER			
Now I am going to ask you so	me questions about yo	ou and your health care	after your delivery.	
lelivery? Yes (skip to question 2)				
No Don't remember				
No Don't remember				
No Don't remember  Ia. [If no] Why not  2. Have you had any medical parts.		our hospitalization with	flu since delivery?	
No Don't remember  1a. [If no] Why not  2. Have you had any medical parts.	problems related to yoo (skip to question 3)	our hospitalization with	flu since delivery?	
No Don't remember  I.a. [If no] Why not	problems related to yo o (skip to question 3) ve you had?	our hospitalization with	flu since delivery?	
No Don't remember  la. [If no] Why not  2. Have you had any medical page of the second	problems related to yo o (skip to question 3) ve you had? our health is?	our hospitalization with Don't remember		
No Don't remember  1a. [If no] Why not 2. Have you had any medical pyes No  2a. [If yes] What problems ha  3. In general, would you say y Poor [Please tell me more all	problems related to yo o (skip to question 3) ve you had? our health is?	our hospitalization with Don't remember	·	

### CLOSING

I have asked these questions so I can understand more about you and your experiences during your recent pregnancy.

1. Is there anything else you'd like to tell me about your experiences with flu that you feel is important for me to know?	
2. Thinking back on this entire experience, is there anything about the care you received before or during hospitalization that you think can be improved? Your ideas about potential improvements are very important to us.	
3. What do you think can be done to better help protect pregnant women from flu?	
4. Do you plan to get a flu shot in the future? (yes/no; please explain if yes, why? If no, why?)	
5. Interviewer's notes: please use this space to document any additional information, including pertinent details elicited by the interview but not recorded elsewhere, description of surroundings during the interview, etc.	

Data Entry Staff:			
Is this record completely entere	ed?		
Yes No	o		
INTERVIEWER NOTES: (Interviewer: please describe home environment, and note any other information that may help you summarize this case.)			

## MATERNAL INFLUENZA REVIEW PROGRAM

APPENDIX B: Data Abstraction Forms

American College of Obstetricians and Gynecologists



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Emergency Department and Hospitalization Records
Pregnancy Course/Prenatal Care Records
Maternal, Labor, Delivery & Postpartum Records

#### **Emergency Department and Hospitalization Record**

1.	☐ Emergency Department Only
	☐ Hospital Admission
• •	
2. Da	te of admission
3. Pati	ient Date of Birth:
4. Ges	stational Age at time of emergency department or hospital admission:
5. Ad	mitting Diagnoses (text only, ICD9/10 not required)
A	
В	
C	
D	
6. Ad	mission Vital Signs
	ıt:kilograms orpounds
Heart	Rate:
Respin	ratory Rate Pressure/
Blood	Pressure/
7. Wa	s the patient intubated?
□ Ye	S
□ No	
□ Un	known
8 Did	the patient require supplemental oxygen?
	s (If yes, check all that apply)
	☐ Supplemental
	□ Oxyhood
	□ CPAP
	☐ Conventional
	☐ Oscillator
	□ Jet
	□ Nitric oxide
	□ ECMO
	□ NCPAPNasal cannula?
	☐ Highest level of O2
	☐ Other ( <i>specify</i> )
☐ No	

<ul><li>9. Did the patient require ventilatory assistance?</li><li>☐ Yes</li><li>☐ No</li></ul>
10. Was the patient admitted to the ICU  ☐ Yes ☐ No
11. Were any comorbidities noted before or during the hospital stay?  ☐ Yes  ☐ Obesity (BMI > 30) ☐ Anemia ☐ Asthma ☐ Diabetes ☐ Chronic Lung Disease ☐ Cardiovascular Disease ☐ Gestational Diabetes ☐ High Blood Pressure ☐ HIV ☐ Immune Suppression ☐ Metabolic Disorder ☐ Neurological Disorder ☐ Neuromuscular disorder ☐ Seizures/Epilepsy ☐ Renal Disease ☐ Viruses/Infections (specify) ☐ Other (specify)
☐ No comorbidities documented in chart
12. Discharge Diagnosis(es) (text only, ICD9/10 not required)  A
13. Discharge Date
14. Time of Discharge (military)
<ul> <li>15. At discharge, was the patient continuing any medications prescribed during hospitalization?</li> <li>□ Yes</li> <li>□ No (skip to Question 17)</li> </ul>

If yes, list all medications prescribed, the dosage, and the frequency

•		, <u> </u>	
Medication	Dose	Frequency	

<ul><li>16. If yes, was patient instructed on medication administration?</li><li>☐ Yes, by:</li></ul>	
☐ Obstetrician	
☐ Perinatologist	
☐ Family Physician	
☐ Osteopath	
<ul> <li>□ Nurse Practitioner</li> <li>□ Nurse-Midwife</li> <li>□ Other (please specify the type of provider)</li> <li>□ No</li> </ul>	
□ Unknown	
<ul> <li>17. Was a follow-up visit scheduled for the patient?</li> <li>☐ Yes</li> <li>☐ No (move to Influenza Related Questions)</li> </ul>	
17a. If yes, specify  ☐ With private physician	
☐ Obstetrician	
☐ Perinatologist	
☐ Family Physician	
☐ Osteopath	
☐ Nurse Practitioner	
☐ Nurse-Midwife ☐ Other (please specify the type of provider)	
☐ At clinic/hospital outpatient department	
Other (specify)	
□Unknown	
<ul><li>Influenza-Related Ouestions</li><li>1. Was the patient offered a rapid influenza diagnostic test?</li></ul>	
☐ Yes ☐ No (skip to Question 1b)	
<ul><li>1a. If yes, what were the results?</li><li>□ Positive</li><li>□ Negative</li></ul>	
o	

☐ No (skip to question 9

1b. If no, why not?  ☐ Already received test elsewhere*  ☐ Symptoms did not indicate the need for a test  *If the patient had already received a test elsewhere, please indicate where and the results of this test if recorded in the patient chart here
<ul><li>2. Was a second diagnostic test performed?</li><li>☐ Yes</li></ul>
<ul> <li>□ No (skip to Question 3)</li> <li>2a. If yes, what were the results?</li> <li>□ Positive</li> <li>□ Negative</li> </ul>
3. What influenza strain was the patient diagnosed with?  ☐ A (H1N1) Influenza ☐ A (H3N2) Influenza ☐ B Influenza ☐ Unknown ☐ Other
<ul> <li>4. What influenza-like illness symptoms are documented in the patient's chart?</li> <li>Fever</li> <li>Feeling feverish/chills</li> <li>Cough</li> <li>Sore throat</li> <li>Runny or stuffy nose</li> <li>Muscle or body aches</li> <li>Headaches</li> <li>Fatigue (tiredness)</li> <li>Other (specify)</li> </ul>
<ul> <li>5. How long did the patient report experiencing symptoms of influenza-like illness before seeking medical care?</li> <li>Days</li> <li>Do not know</li> </ul>
<ul><li>6. Did the patient contact any provider prior to being admitted to the hospital?</li><li>☐ Yes, she contacted her</li></ul>
☐ Obstetrician
Perinatologist
☐ Family Physician
□ Osteopath
<ul> <li>□ Nurse Practitioner</li> <li>□ Nurse-Midwife</li> <li>□ Other (please specify the type of provider)</li> </ul>

Client I.D. # Data Abstraction

<ul><li>7. When the patient contacted her provider prior to being hospitalized did she notify the provider that she was pregnant?</li><li>Yes</li></ul>
□ No
☐ Can't tell from chart
8. When the patient contacted her provider prior to being hospitalized what did the provider instruct her to do? (check all that apply)
☐ Rest and drink plenty of fluids
☐ Come to his/her office to be seen
☐ Go to the Emergency Room
☐ Call back later if symptoms got worse
☐ Take antiviral medication which he/she prescribed over the phone
☐ Other (please specify the instructions from the provider)
9. Prior to hospitalization, was the patient prescribed antiviral medications as soon as influenza infection was suspected?
☐ Yes, when she contacted the provider via phone antivirals were prescribed
<ul> <li>☐ Yes, when she came in for an in-person visit antivirals were prescribed</li> <li>☐ Yes, other time (please explain)</li> </ul>
□ No
□ Unknown
9a. If no, does the chart indicate a reason? Explain:
10. What was the treatment plan for the patient at the hospital once diagnosed with influenza? (check all that apply)  ☐ Sent home ☐ Admitted to the hospital ☐ Admitted to ICU ☐ Prescribed antiviral medication
<ul><li>11. Did the patient report having received an influenza vaccination prior to hospitalization?</li><li>☐ Yes</li><li>☐ No</li></ul>
<ul><li>11a. If yes, was this confirmed by chart documentation?</li><li>☐ Yes</li><li>☐ No</li></ul>
<ul><li>11b. If no, was the patient given an influenza vaccination prior to discharge?</li><li>☐ Yes</li><li>☐ No</li></ul>
<ul> <li>12. If antiviral medication was prescribed at the hospital, at what point was treatment started?</li> <li>□ Upon arrival to the hospital</li> <li>□ Upon admission to the hospital</li> </ul>



	After test results were received
	After secondary test was received
	At Discharge
	Other (specify)
	. If treatment was delayed before or during hospitalization does the chart indicate a reason? If yes ease explain.
	Yes treatment was delayed during hospitalization because:
	Yes, treatment was delayed before hospitalization <i>because</i> :
	Flu was not confirmed by diagnostic test
	The patient had an allergy to the medication(s) indicated for treating the flu
	Flu was not considered as a possible cause of illness initially
	Other (please specify the reason)
	Unknown
	Decree of Comments
	Pregnancy Course/Prenatal Care Records
	Race of mother (Check only one)
	White
	Black or African American Asian
	Native Hawaiian or other Pacific Islander
	American Indian or Alaska Native
	Other (specify)
	Unknown
1 ค	. Hispanic ethnicity?
	Yes (specify)
	☐ Mexican, Mexican-American, Chicano
	Puerto Rican
	Central/South American
	☐ Other, Hispanic (specify) ☐ Unknown
	No No
	Unknown
2	Country of Dieth?
	Country of Birth? U.S.A.
	Outside of U.S.A. (specify)
	Not documented in record

6



	Did the mother receive prenatal care? Yes No (skip to Question 9) Unknown
	What was the mother's marital status at prenatal registration? Single Married
	Separated Divorced Widowed Unknown
	What was the primary language spoken at prenatal registration?  English  Spanish  Other (specify) Unknown
6.	What was the payer source at registration for prenatal care? (Check all that apply)
	Private Insurance
	Medicaid
	Managed Care Organization (MCO)
	Military
	Ryan White Program
	Self pay
	Other [What other way did you pay for prenatal care?]:
	What type of health care practitioner provided the patients prenatal care? (Check all that apply) Nurse Practitioner Obstetrician Nurse–Midwife Perinatologist Family Physician Osteopath Other (specify)
	Where did the mother receive prenatal care during pregnancy? (Check all that apply) Private Provider's office  Obstetrician Perinatologist Family Physician Osteopath



	□ Nurse Practitioner
	□ Nurse-Midwife
	☐ Other (please specify the type of provider)
	County or City Health Department
	Managed Care Organization (MCO)
	Clinic at work
	Clinic at school
	Clinic in a hospital
	Hospital emergency room
	Other episodic, or as needed care provider
	Community/Neighborhood Health Center
	Other (specify)
no	If the mother did <b>not</b> receive prenatal care (PNC), was a notation made of the mother's reason(s) for t seeking services?  Financial
	Limited/absent availability of service
	Other reasons (specify)
	Unknown
10	. The patient was weeks gestation at initial provider visit (with any provider).

11. Please provide pregnancy history information below in reverse chronological order, most recent pregnancy first.

Pregnancy	Year of	Gestational	Birth	Influenza	Outcome	Comments/Complications
	Delivery	Age	Weight	Vaccine	(See key	
				Received	below)	
				During		
				Pregnancy?		
1						
2						
3						
4						

Pregnancy Outcome KEY:

- A Live birth, still living
- B Live birth, deceased
- C Preterm
- D Elective Abortion
- E Spontaneous Abortion
- F Ectopic
- G Intrauterine Fetal Demise



#### Influenza-Related Documentation in Prenatal Care Record:

in	. At any time during the prenatal period were any of the following immunization topics documented writing as having been discussed?
	Influenza vaccination during pregnancy
	1 6 9
	Other (explain)
	None (skip to Question 13)
12	a. If immunizations were discussed, which provider had this discussion with the patient?
	Doctor
	Nurse
	Nurse-Midwife
	Nurse Practitioner
	Office staff (explain)
	Other (specify)
	. Does the provider have standing orders for influenza vaccine? Yes
	No
	Can't tell
	. Did the physician offer to provide the patient with the influenza vaccine in his or her office? Yes ( <i>specify the provider type</i> )
	□ Obstetrician
	□ Perinatologist
	☐ Family Physician
	□ Osteopath
	□ Nurse Practitioner
	☐ Nurse-Midwife ☐ Other (please specify the type of provider)
П	No
	Unknown
	a. If no, did the physician refer the patient to one of the following providers for an influenza
	ccination? Different Private Provider's office (specify below)
	,
	□ Obstetrician
	☐ Perinatologist
	☐ Family Physician
	□ Osteopath
	□ Nurse Practitioner
	□ Nurse-Midwife
_	Other (please specify the type of provider)
$\Box$	County or City Health Department

☐ Clinic at work
☐ Clinic at school
☐ Clinic in a hospital
☐ Hospital emergency room
□ Pharmacy
☐ Community/Neighborhood Health Center
☐ Other (specify)
□ Unknown
□ No (skip to Question 15)
14b. If the physician referred the patient to one of the above providers for an influenza vaccination, is there documentation in the chart that the patient received the immunization?  ☐ Yes
□ No
15. Did the woman receive a flu shot during any prenatal care visit?
☐ Yes, atweeks gestation
□ No (skip to Question 17)
□ Not documented
16. If yes, where did the woman receive her flu shot?
Primary Care Provider (please specify by selecting from the options below)
□ Obstetrician
☐ Perinatologist
☐ Family Physician
□ Osteopath
□ Nurse Practitioner
□ Nurse-Midwife
☐ Other (please specify the type of provider)
□Pharmacy
Hospital
Health Department
□Work
Emergency Room
Other Please Explain
17. If the patient was recommended and offered the influenza vaccination, but declined, please indicate
any notations on the chart regarding the reason.
Provider never talked about it
Provider recommended it but could not administer it at his/her office
☐She has never had the flu
Didn't know it was recommended
Safety concerns for the baby
Thought flu shots make you sick
Flu shots contain mercury that could cause autism in the baby
Provider's office said that she should <b>not</b> get a flu shot ( <i>if selected please specify provider</i> )

	Diabetes
	High Blood Pressure
	Seizures/Epilepsy
	Anemia
	Viruses/Infections (specify)
	Asthma
	HIV
	Chronic Lung Disease
	Cardiovascular Disease
	Immune Suppression
	Metabolic Disorder
	Neurological Disorder
	Neuromuscular disorder
	Renal Disease
	Other (specify)
☐ None do	cumented
pregnancy? ☐ Yes	Obesity (BMI >30)
	Gestational Diabetes
	High Blood Pressure
	Seizures/Epilepsy
	Anemia
	Viruses/Infections (specify)
	Asthma
	HIV
	Chronic Lung Disease
	Cardiovascular Disease
	Immune Suppression
	Metabolic Disorder
	Neurological Disorder
	Neuromuscular disorder
	Renal Disease
	Other (specify)
☐ None do	cumented
22. Number	r of Prenatal Appointments GivenTotal

#### Maternal. Labor. Delivery & Postpartum Records

	the mother develop any significant medical ostpartum period?	l or obstetric problems during this labo	r and delivery or				
	(please describe)						
□ No							
□ Unk	nown						
2. Was ☐ Yes	2. Was the mother referred to any other providers for medical consultation during labor and delivery?						
□ No (	(skip to Question 3)						
2a. Plea ☐ Inter	ase specify the provider the patient was ref	erred to during labor and delivery:					
☐ Peri	natologist						
☐ Nurs	se Practitioner						
□ Mid	wife						
☐ Othe	er (specify)						
3. Mod	de of delivery (Check all that apply)						
☐ Force	ceps						
□ Rep	eat C-section						
□ Vac	uum extraction						
☐ Spor	ntaneous vaginal delivery						
□ Vag	inal birth after previous C-section						
□ Prin	nary C-section						
□ Othe	er (specify)						
DELIV	YERY DATA ON INFANT RECORDED I	IN MOTHER'S CHART					
4. Pleas	se complete the following information for	each live birth during this pregnancy (2	2012-2013 season):				
Baby	Birthweight (grams or pounds/ounces)	Gestational Age (weeks and days)	Male/Female				
#1							
#2							
#3							
#4							
5. Were	e any neonatal resuscitation measures requ	ired/attempted in the delivery room for	any or all of the				
babies? ☐ Yes	•		·				
	(skip to Question 6)						
5 - 1C	and the state of t						
	es, check all that apply						
-	sical stimulation						
☐ ETS	& Mask						
	DUCTION						

	Intubation Respiratory meds Ext. cardiac massage Cardiac meds Other (specify) Oxygen blow by
PO	OSTPARTUM .
6.	Was the mother referred to any other providers for medical consultation during the postpartum hospita
	y?
⊔	Yes  Internist
	☐ Gastroenterologist
	☐ Cardiologist
	□ Neurologist
	☐ Other please specify
	No Suite preuse speerly.
7.	What was the duration of postpartum stay?hours
8.	Did the mother sign herself out of the hospital against medical advice (AMA)?
	Yes
	No
9.	Which maternal immunizations were discussed during the postpartum stay?
	Flu
	Tdap
	Hepatitis B
	Pneumococcal (PCV)
	Other (please specify immunizations discussed)
	None (skip to Question 10)
9a	. If maternal immunizations were discussed, which provider had these discussions with the patient?
	Doctor
	Nurse
	Nurse Midwife
	Nurse Practitioner
	Office staff (explain)
	Other (specify)
10	. Were the following immunizations given to the mother any time during her hospital stay?
	Tdap
	Influenza
	Hep B
	Other (specify the immunization given)



**Data Abstraction** 

<ul> <li>11. Is a maternal discharge plan documented in the records (i.e., plans for follow-up visits)?</li> <li>☐ Yes</li> <li>☐ No</li> </ul>
12. Maternal HGB/HCT at discharge
ABSTRACTOR'S NOTES: (Add any information that will help you summarize this case.)

APPENDIX C: Maternal Home Interview Consent Form

#### **Maternal Home Interview Consent Form**

#### **Purpose of the Interview**

The state health department is conducting interviews with new mothers who were hospitalized with influenza during their recent pregnancy.

The purpose of this program is to identify factors associated with maternal hospitalization as a result of influenza infection and to find ways to help families such as yours in the future. To achieve these goals, we wish to interview mothers who were recently hospitalized with influenza while pregnant. You have been asked to participate in the program because you were recently hospitalized with influenza while pregnant. If you voluntarily agree to participate, a trained interviewer from the (*STATE HD*) will ask you a series of questions about your illness and hospitalization, as well as your pregnancy, health, family, and use of health care and social services. The interview will take place in your home at a time that is convenient for you. The interview will take about one hour. Although participation in this program may not benefit you or your family directly, it may help other families in the future.

#### **Description of Potential Risk**

There is no expected risk of injury for participants in this study. Information we collect during the study about you and your household will be kept private to the extent legally possible. Any information we collect that could identify you will be destroyed when the study is done. We will only use information about you grouped with information from many other adults. If, during the course of the interview, you feel you do not want to continue, you may ask the interviewer to stop the interview at any time.

#### **Description of Potential Benefits**

You will receive no health benefit from taking part in this research study. However, the information you provide to this program may help prevent the influenza-associated hospitalizations of future pregnant women.

#### **Alternate Procedures**

The alternative to participating in this interview is to choose not to participate at all. Refusing to take part will not affect any medical care or benefits you are receiving.

#### **Confidentiality of Records**

All information that identifies you, your family, or your health providers and medical facilities will be removed before the interview questionnaire is reviewed. All staff and consultants have

signed an oath of confidentiality. Therefore, confidentiality will be protected to the fullest extent permitted by law.

#### Compensation

You will not be paid for participating in the interview.

#### **Voluntary Participation**

Your participation in this program is completely voluntary and you may refuse to answer any questions that you do not wish to answer. You are also free to end the interview at any time without any consequences to you or your family. Not participating will in no way affect your current benefits or health care.

#### **Ouestions**

If you have questions concerning the interview or the program, you may call (*Name of state contact person*), collect, at the (*NAME of STATE*) at (*contact telephone number*).

#### Consent

I have read this form and understand the purpose and conditions for participation in the Maternal Influenza Review Program. I hereby consent to participate in the program. I agree to participate in an interview. I understand that all information obtained from the interview will be strictly confidential, and that neither my name nor the name of anyone else in my family will appear in any publications or reports or be given to anyone else.

Print Name:	
Signature:	
Date:	
Interviewer's Name:	
Interviewer's Signature:	
Date:	

APPENDIX D: Maternal Influenza Review Program Case Review Team (CRT) Confidentiality Pledge

#### Maternal Influenza Review Program Case Review Team (CRT) Confidentiality Pledge

The Maternal Influenza Review Program is a confidential process throughout the entire course of implementation. Family members or caregivers, health care and other providers, and service-providing agencies are to be protected from disclosure of information. Informed consent for maternal interviews and release of medical records from service-providing agencies specifically guarantees this protection.

The nature of the review meeting is designed to encourage free discussion and exploration of issues. Participants may express opinions which do not reflect their agency position or which may later change. Some factors discussed will be sensitive: some will involve matters of values and beliefs or may concern cultural variables. In order for there to be a free exchange of ideas, it is important that opinions expressed are not repeated outside of the meeting or used to express judgments about any individual, agency, or profession. In addition, all materials distributed to team members during the review meeting must be destroyed following the meeting.

Actual recommendations or findings of the CRT should not be represented outside of the review meetings until reviewed by the Community Action Team and an action plan is developed.

As a Maternal Influenza Review Program CRT team member, I pledge to:

- 1. Refrain from discussing or sharing information about the case, the case summary, and the proceedings of the CRT outside of the CRT meeting
- 2. Refrain from speculation about the identity of the case (mother, family, providers, and/or agencies) before, during, or after the meeting, even when I may recognize an aspect of the case.
- 3. Respect the opinions and positions of fellows members; differing opinions are welcome, but should be expressed in a respectful manner and any disagreements should remain in the confines of the meeting
- 4. Support the work of the CRT by discussing publicly the general work of the Maternal Influenza Review Program, but not disclosing any specific findings or recommendations until the Community Action Team has developed an action plan
- 5. Promote the work of the Maternal Influenza Review Program action plan by disseminating the action plan developed by the CAT to your institution, agency, or community members and soliciting ideas and resources that may be useful in the plan, as needed

Signature:			
Printed name:			
Date:			

APPENDIX E: Sample Letter to Families Introducing the Project

#### Sample Letter to Families Introducing the Project

Dear <*NAME*>:

On behalf of the State Health Department we are contacting you because you were hospitalized with influenza during your recent pregnancy in 2012-2013 and we would like to invite you to be part of an in-home interview to better understand some of the issues around your hospitalization and to get your thoughts as to how hospitalizations from influenza during pregnancy may be prevented. By talking with women who have encountered the same situation, we hope to learn from their experience. Perhaps we can then become more informed and help prevent some of these hospitalizations in the future.

We hope you will want to participate. The interview will take approximately 1 hour and we will come to your home or a place that you are most comfortable in for the interview. Should you choose to participate in this program, *CONTACT NAME*> from the *NAME OF STATE PROGRAM GROUP* will schedule a meeting with you, preferably in the privacy and comfort of your own home or another place, if you choose. This visit will give you an opportunity to talk about your pregnancy, your personal experiences surrounding your hospitalization, and the services that you received and the ones you may have wished for that were not available. Your participation in this program is completely voluntary, and all information gathered is completely confidential; your name and the name of your child and other family members will never be identified.

I hope you will choose to take part in this program. By doing so, you will help improve the services and care for all mothers and babies in *NAME OF STATE*. Thank you for your consideration. *<CONTACT NAME>* will contact you within the next few weeks.

Sincerely,

<NAME OF DIRECTOR OR PROGRAM COORDINATOR>

<TITLE>

 $\begin{array}{l} \textit{APPENDIX F: Sample Call Script} \\ \textit{and Q \& A} \end{array}$ 

#### Sample Call Script and Q&A

In some cases, programs send a letter with a self-addressed reply note that allows the mother to indicate whether she wishes to be contacted. Whatever method is used, the language in the letter should be simple, consistent, and written at about a sixth-grade reading level.

A call or visit should be made no more than 1 week after the letter is sent. Telephoning can impose some limitations on communication because the interviewer may miss nonverbal cues. However, it can be useful for making an initial contact in a timely manner. The person who makes the initial contact should be sure to review any background information on the family and infant before making the call. Telephone etiquette requires that the interviewer identify herself or himself and state the name of the program before proceeding with the conversation. The caller should try to establish an atmosphere of trust by using a gentle, reassuring approach, starting with general, nonthreatening questions and progressing cautiously to the more sensitive, potentially painful ones.

An example would be "Hello, Ms.\_\_\_\_. My name is\_\_\_\_. I am from\_\_\_\_\_(agency) and am calling to follow up on a letter that I sent you last week. Ms.\_\_\_\_\_, I was so very sorry to hear about your hospitalization during your recent pregnancy during the 2012-2013 flu season."

People can be sensitive to voice tone and the manner in which information is presented. Personal names should be used to increase the level of trust.

The mother's response will determine the interviewer's next response. There may be a period of silence.

The interviewer may then continue, "My letter was about an important community program that I am involved with. The purpose is to learn about each pregnant woman's hospitalization in our area and to find ways to help families such as yours avoid such experiences in the future."

If no questions are voiced, the caller should clarify the interview process and set a date and time to meet with the mother.

"I would like to make an appointment to visit you and hear your story. What would be convenient for you?"

The interviewer should leave a telephone number where she can be reached so the mother can change the appointment if she wishes.

*Refusals*. Not all mothers want to participate in the program. When a mother says that she does not wish to participate, the interviewer may try the following (4):

- Explain that the information gathered from the interview will be used to look at prenatal and child health services and community resources to find ways to help families such as theirs in the future.
- Ask the mother to at least begin the interview and answer one or two sample questions on a trial basis. Let her know she is free to stop the interview at any time. Also, she can refuse to answer any question that she does not like or feels is too sensitive. Many times, this approach encourages the mother to provide most of the information needed for the interview.
- Ask permission to call back in a week or two to revisit the mother's decision not to participate.

#### **Questions Mothers May Ask:**

Following are sample questions and answers that mothers may ask about the interview. The interviewer might want to develop sample questions and responses that relate to a new FIMR program's particular circumstances.

**Question:** How did you learn my name?

Sample Answer: All hospitalizations due to influenza are routinely reported to the State Health

Department

**Question:** How did you learn my phone number?

Sample answer: Your number was found by (a) Calling information, or (b) Looking in the local

directory

**Question:** How did you find my unlisted phone number?

Sample Answer: Hospitals in our community routinely forward copies of records of

hospitalizations due to influenza to the health department. We obtained it from those records.

**Ouestion:** What's in this for me?

**Sample Answer:** Health and medical care are important concerns for us all. The information you provide may help to provide information about changes we need to make to improve care for women in the future. Also, I may be able to help arrange for health or social services that can assist you and your family.

**Question:** How do I really know you represent the State Health?

**Sample Answer:** I will show you my official identification badge. You can also call this county number to check. I will be glad to send you information by mail if you prefer.

**Question:** Why is the interview worthwhile?

**Sample answer:** The information obtained will be used to look at prenatal and hospital care and health habits to find ways to help families and prevent future hospitalizations from occurring.

APPENDIX G: Sample Case Review Form of How to Organize the Report with The Chart Review and Maternal Interview Data

## Sample Case Review Form of How to Organize the Report with the Chart Review and Maternal Interview Data

CASE # 2014, Ohio NFIMR Fictitious Case for CRT Vital Statistics Fetal Death Certificate Information:

Sex: Male

Cause of Death: Intrauterine fetal demise

Weight: 8 pounds 7 ounces Weeks' Gestation: 40

Mother: 20, white, 12 years' education, single

Previous Pregnancies: none

**Father:** 22, white, 12 years' education **Prenatal Care:** 1<sup>st</sup> month, 17 visits **Weight** 

Gain: 25 pounds Substance Use: none Delivery: vaginal

#### Cases summary synopsis: (information from medical record and interview)

The mother was 20, gravida 2 para 0010, single, 12 years education, homemaker. She entered prenatal care at 6 weeks at an OB private office with 17 visits. Medical history was significant for termination of pregnancy age 15. Prenatal history was significant for anemia treated with iron and multiple hospital ER visits for complaints spotting and discharge after 28 weeks. Prenatal referrals to WIC and Healthy Start. At 40 weeks she presented to a Level I hospital with contractions and complaints of abdominal pain. Fetal demise was noted on ultrasound. Four hours after admission she had a vaginal delivery with small placental abruption noted. Birth weight was 8 pounds 7 ounces. An autopsy was requested but refused by family. Day after delivery, mother left hospital against medical device with her boyfriend. Bereavement support was documented. Mother agreed to FIMR interview 8 weeks after delivery. Interview took place at her parent's house. She requested boyfriend never know of the interview. During the interview she told nurse that he had threatened to harm her during her pregnancy and she was worried that was what "killed her baby".

#### MEDICAL RECORD

#### 1. Medical: Mother

**Prenatal Medical record:** 

Mother 20, white, USA, gravida 1 para 000

Previous Pregnancies: none

**LMP:** 10/10/06 **EDC:** 7/17/07 by dates,

7/20/07 by sonogram at 12 weeks

HIV: tested negative, pre and posttest counseling

documented

**Prenatal labs:** A+, GC neg., Chlamydia neg., Rubella immune, Hep neg., urine culture neg. PAP

wnl. Initial H/H 12/36.2

Results unremarkable except for elevated GTT 146,

3 hour GTT wnl. Repeat H/H 9.8/30.2

Treatment was Iron tabs bid. Repeat H/H 11/32.

Pre-existing medical problems: none

**Medications:** PNV, Iron **Problems developed:** none

**Nutrition:** assessment not documented

**Pre-pregnancy Weight: 176** 

Height: 5'4"

**Identified nutritional factors:** none **Gained:** 40 pounds by 40 weeks.

**Body Mass Index:** 30 (obese) **Nutritional referrals:** WIC

Other testing/Procedures: HIV, urine C&S, 1 hour GTT at 30 weeks wnl, AFP 17 week's wnl.

#### **Prenatal Hospitalizations: Level I ER**

(Abstractor Note: All visits between hours 11Pm and 3 AM)

- 28 weeks for abdominal pains and complaints spotting. Labor check only, then discharged.
- 32 weeks for abdominal pains and complaints spotting. Labor check, not in labor. Boyfriend noted in record as having alcohol on breath and acting impatient, wanting her to be discharged to drive him home.
- 35 weeks for complaints yellow vaginal drainage. Vaginal culture negative, not in labor.
- 37 weeks complaints abdominal pains and vomiting. US normal, good fetal movement, not in labor.
- 39 weeks: c/o spotting, vomiting and

#### **MATERNAL INTERVIEW**

#### 1. Medical: Mother

She was single, 20 years old, born in USA and is white. She completed 11 years of education and is attending night school for her GED. Her baby was a singlet. Prior to this pregnancy she had a termination at age 15 but her boyfriend and parents don't know.

She was 4 weeks when she thought she might be pregnant. She was 6 weeks when she was sure she was pregnant. She was satisfied with her care. During her pregnancy she did not attend parenting or childbirth classes. Her boyfriend did not want her to go.

She took no special precautions to prevent preterm labor. She describes her health during her pregnancy as good but she said she always worried something would happen to her baby. The ending weeks of her pregnancy she was scared something was happening to the baby as her boyfriend kept threatening her. She went to the ER frequently to be checked.

She was not on a special diet. Her prepregnancy weight was 165, and she gained a total of 36 pounds and she is 5'4". She craved ice.

abdominal pains. US wnl. + fetal movement. Not in labor. Sent home with instructions.

#### **Labor and Delivery Medical Record:**

**Hospital Level: I** 

**Date/Time:** 7/21/97 at 11:20PM **Gestational Weeks:** 40 weeks

**Reason for Admission:** Admitted 11:20PM to L&D triage with abdominal cramping and sent to L&D. Onset labor 9:30PM. Had been visiting with friend when pains began. Waited for a ride.

**Admission History:** 4:20PM: BP 132/60, temp 98.7, pulse 119. Dilated 4cm, effaced

70%/Floating. Vaginal spotting. Sonogram done by OB on call at 11:30PM notes no fetal activity. Last fetal movement at 4:00PM.

**LABS:** admission: WBC 15.6 H/H 9/29.6

Discharge: WBC 16 H/H 8.8/27

Membranes: SROM 11:45PM, meconium

**Monitoring:** External monitoring no tracing noted. Fundal height 36cm. US confirmed fetal demise. **Problems in labor and delivery:** fetal demise

Referrals: none

Medications: Demerol and Phenergan, Pitocin

Anesthesia: none

**Delivery:** 7/22/07 at 1:22AM, spontaneous vaginal delivery of 8 pounds 7 ounces, male with Cord around neck x3, small abruption.

**Resuscitation:** none. Appars 0/0

**Discharged:** Home after 1 day with clinic F/U in 6

weeks.

Placental exam: 770 grams, Third trimester, meconium stained. 3 vessels cord, area infarction

and abruption.

#### Labor and Delivery: (Maternal Interview)

She was not transferred from one hospital to another. She was never refused admission. She delivered on 7/22/07. Her due date was 7/20/07. She describes her delivery: Contractions began at 9:30PM. She didn't get to the hospital until 11 PM because she was waiting for her sister to pick her up. When she arrived at the hospital the nurse was unable to find a heartbeat. She waited to have the ultrasound done. While she was waiting her water broke and she was leaking everywhere. A nurse told her baby was dead. She spent 1 night in the hospital. After her delivery her boyfriend wanted her home.

She says what happened is: the baby's father was to take her to the hospital but he did not show up. They had had a fight that morning and he had left. She called her sister who lived in another town. She then went to the hospital as her stomach hurt. and she did not feel the baby was moving as much. After her baby was born she got to hold him and pictures were taken. She was scared but he was so beautiful and perfect... Her parents were with her. Everyone was helpful. When her boyfriend came he didn't want to see the baby and would not talk to her very much. He told her she need to come home the next day. She left as she was worried he would do something.

#### 2. Medical: Fetal/Infant:

**Fetal demise.** Weight 8 pounds, 7 ounces. Cord wrapped around neck. Small placenta abruption noted.

**Autopsy:** Refused by family.

#### 2. Medical: Fetal/Infant:

She does not know why her baby died. She thinks her boyfriend "killed the baby" by threatening her so much during her pregnancy.

3. Payment for Services: Medical Prenatal & L&D: Managed Care	3. Payment for services: Prenatal & L&D: Her parent's insurance.
4. Problems with Prenatal Care Prenatal care: First visit at 6 weeks, private provider with 2 health care givers. Prenatal Appointments: 17 with 1 missed appointment. Followed up by telephone call. Visits: BP ranged 90/60 –120/80. Instructed to monitor fetal movement three times a day. Last visit 7/14/07 wnl.	4.Problems with Prenatal Care She received prenatal care as early as she wanted. It was not difficult obtaining prenatal care. Her first prenatal visit was at 6 weeks at a private provider's office. She saw the same provider and did not change providers during the pregnancy
5. Problems with Pediatric Care: N/A	5. Problems with Pediatric Care: N/A

FIMR Case # 2014, Ohio NFIMR				
6. Substance use Healthy Start: denies usage Prenatal: denies usage L&D: denies usage	6. Substance Use She did not smoke or drink. She took only vitamins and iron. She was asked if she smoked and was told how it would affect her baby. She was asked if she was drinking and was told how it would affect her baby. Her boyfriend drank a lot and was mean to her when he drank.			
6. Prenatal Risk Assessment Healthy Start Screen Score: 4 Prenatal risk factor: single, less than 12 years education, transportation difficulties Healthy Start Coordination: unable to locate after 2 telephone calls and one home visit.	6. Prenatal Risk Assessment: Her doctor told her she was a low-risk pregnancy.			
7. Infant Risk Assessment: N/A	7. Infant Risk Assessment: N/A			

#### 9. Social Support

**Prenatal:** single mother with involved boyfriend **L&D:** single. Family and boyfriend listed as support persons. Father of baby not present during delivery.

#### 9. Social Support

If a problem had come up in the 12 months before the baby was born her sister or parents would have helped. The baby's father completed 12 years education and is 21 and white. She describes her relationship with the baby's father as good but it changed frequently and she was not satisfied with his contributions financially. During the pregnancy the baby's father had problems with his job and finances. She describes her relationship with the father now as poor. She feels their relationship changed for the worse during the end of her pregnancy and after the baby died. Her parents have been very helpful though.

#### 10. Homeless/Transient:

Healthy Start: has housing, feels safe.

**Prenatal:** lives with boyfriend in an apartment. **L&D:** Has housing, air conditioning, and heat.

#### 10. Homeless/transient

She felt satisfied with her overall living situation. She lived with her parents and her boyfriend and did not have to pay rent each month. She did not live in public housing. She moved three times in the past year. There was never a time when she couldn't afford a place to stay or when she couldn't afford the rent or mortgage and she was never evicted from her home and her utilities were never turned off.

#### 11. Poverty

No source data.

#### 11. Poverty

During her pregnancy she felt she never had to cut down on the amount of food she bought. There was never a time there wasn't enough money. Sources of family income were wages from family members and her boyfriend and her estimated yearly income was unknown. Before the baby died, she never worried about not having enough money from one month to the next. Now she is not sure how she is going to get by.

#### 12. Mental Health/ Stress

Healthy Start: No to receiving mental health

counseling

**Prenatal:** No history of postpartum depression

#### 12. Mental Health/Stress

During the 12 months before delivering her baby she lost a family member, moved, changed jobs and met her boyfriend. During the pregnancy the boyfriend experienced job difficulties, drank a lot, and had financial problems.

In the last month she has not felt good about her ability to handle her personal problems and felt her difficulties were piling up so high that she thought could not overcome them. She often feels depressed. Since her baby died, she and her partner have not received counseling or joined a support group for parents who have lost a baby. Her boyfriend does not want to talk about the baby.

#### 13. Family Violence/Neglect:

**Healthy Start:** No to being hit or hurt in past year **Prenatal Record:** Negative for domestic violence on prenatal record checklist

**L&D:** Negative history of domestic violence on nursing admission assessment

#### 13. Family Violence/ Neglect

She was physically pushed by her boyfriend during her pregnancy. He yelled at her a lot during the pregnancy and she went to live with her parents. She moved back with him her last trimester because he was sorry and wanted her back. She almost left him again but he kept threatening her and she was scared to leave and scared he would do something to hurt the baby. Her family wanted her to stay with them as they were worried about her. She was scared to stay as her boyfriend threatened to harm her family. She didn't know what to do.

#### 14. Culture

Prenatal: English speaking

**L&D:** No to "cultural or belief issues affecting

care"

Religion: Baptist.

#### 14. Culture

No issues expressed.

#### FIMR Case # 2014, Ohio NFIMR 15. Transportation 15. Transportation Healthy Start: transportation difficulties She traveled by bus to get to prenatal Prenatal: 17 visits. Missed one visit due to appointments and it took 30 minutes. Sometimes transportation difficulties. her boyfriend took her. **L&D:** No personal transportation. Had to wait for a ride to come to hospital. 16. Provision/ Design of Services 16. Provision/Design of services **Documented education:** Education discussed with her during her prenatal Prenatal: Education section blank in prenatal care included getting tested for HIV, preterm records. Documentation of HIV pre- and labor signs, complications of pregnancy, posttest counseling and fetal movement noted in sexuality, fetal movement, labor and delivery prenatal notes. process, infant care seat, and infant sleep L&D Education: Self care positioning. She was asked if she had enough **Bereavement:** "Family in to see mother and baby. food to eat. She did not attend any classes, as she Pictures and footprints taken. Bereavement did not have transportation at night and her information given." boyfriend did not want her to go. Nutrition was **Referrals:** discussed with her. She did not see a dietitian. Prenatal: WIC & Healthy Start Care She had WIC. Advice given at WIC included Coordination eating properly, how to buy food, to cut down or L&D: none stop smoking. It was easy to get WIC vouchers. No one asked her about physical or emotional abuse. 17. Environment/Occupation Hazards: 17. Environment/Occupation Hazards: None, unemployed *She did not work during the pregnancy*

**18. Family Planning:** Intended pregnancy. Used birth control pills prior to pregnancy.

#### 18. Family Planning

She remembers feeling that she wanted to be pregnant earlier. She never considered not continuing her pregnancy. During the three months before she became pregnant she was not using birth control, as she wanted to get pregnant. She expects to have more children and plans to wait a few years. She is currently not using birth control.

19. Other issues: Home Interviewer note: The mother showed the baby's pictures and footprints to the interviewer. Mother talked about how perfect baby looked. Information regarding community support groups requested and given to her. Mother talked about being depressed but says she is doing better and that talking about what happened has helped. She thanked the interviewer for letting her talk. She was glad to know somebody cares. She is staying with her parents right now but hopes to get back with boyfriend someday. Her family has been very supportive. She does not want "her boyfriend to know she did this interview. He does not like to talk about the baby".

19. Other Issues: Thinking back on the entire experience, she feels it would have made things better if she had not gone back with her boyfriend at the end of her pregnancy. She also thinks that her boyfriend would have been happier and more involved if he had less stress and drank less during her pregnancy. She thinks joining a support group or going to counseling might be helpful to women and families who experience the death of a baby. She would also like to share that she is thankful she got to hold her baby in the hospital and that she has pictures of him to keep forever.

APPENDIX H: Tip Sheet for Developing the Case Review Summary

#### **Tip Sheet for Developing Case Review Summary**

What is a Case Review Summary?

• The Case Review Summary is a de-identified, condensed version of the medical information and home interview data that you have collected. It is essential that information be de-identified before giving the summary to the Case Review Team members to protect the confidentiality of the mother, providers, and the medical institution. The summary should be 4-6 pages and include what you consider the most relevant information from hospital records and the home interview. Developing a case summary rather than using actual medical records for the Case Review Team meeting is essential to the review process because it allows the program to de-identify the information first as well as give participants a shortened version of the most important information from both the medical data abstraction and home interview. The review team members will have a much easier time studying the cases when they only have to read a brief summary rather than many pages of forms or the actual medical records.

#### What Format Should I Use to Develop the Case Review Summary?

- You can use whatever format you like. We have attached a sample Case Review Summary (Appendix G) you can use or modify one that is from another FIMR program. However, the case summary should include the following information which focuses on the mother's hospitalization for influenza:
  - O Detailed medical information about events leading up to the hospitalization for influenza, events surrounding hospitalization, and what services were provided while hospitalized. The overall goal of the case review will be to undercover potential systems issues that could be improved to avoid hospitalization for flu during pregnancy in the future.
  - O Home interview summary which briefly recounts the chain of events that led to hospitalization for flu from the **mother's perspective**. (The mother's perspective may contain information on nonmedical systems issues too.) What happened from the family's perspective? If the family needed specific services, were referrals made?

Other Tips for Developing and Using the Case Review Summary

- Use the mother as the main subject for the summary.
- Use the same format for each case review summary. Case Review Team members will more easily understand the case when they know where to find the information that is important to them in each summary.
- Separate interview information from medical records information. Some programs find it helpful to cross-reference by topic the information from the medical chart and home interview so that as the team discusses a topic, the case review summary will have information from both the chart and mother's perspective in one location.
- Send out the case review summaries to the CRT members 3-5 days in advance of the meeting. This allows members of the team time to read the cases beforehand and use the questions contained in this guide to determine what issues they want to raise during the discussion.

APPENDIX I: Maternal Influenza Review Program Community Action Team (CAT) Member Confidentiality Pledge

#### Maternal Influenza Review Program Community Action Team Member (CAT) Confidentiality Pledge

The Maternal Influenza Review Program is a confidential process throughout the entire course of implementation. Family members or caregivers, health care and other providers, and service providing agencies are to be protected from disclosure of information. Informed consent for maternal interviews and release of medical records from service providing agencies specifically guarantees this protection.

The nature of the review and community action meeting is designed to encourage free discussion and exploration of issues. Participants may express opinions which do not reflect their agency position or which may later change. Some factors discussed will be sensitive: some will involve matters of values and beliefs or may concern cultural variables. In order for there to be a free exchange of ideas, it is important that opinions expressed are not repeated outside of the meeting or used to express judgments about any individual, agency, or profession. In addition, all materials distributed to team members during the review meeting must be destroyed following the meeting. Actual recommendations or findings of the CRT should not be represented outside of the review meetings until reviewed by the Community Action Team and an action plan is developed.

As a Maternal Influenza Review Program CAT team member, I pledge to:

- 1. Refrain from discussing or sharing information about the case, the case summary, and the proceedings of the CAT outside of the CAT meeting
- 2. Refrain from speculation about the identity of the case (mother, family, providers, and/or agencies) before, during, or after the meeting, even when I may recognize an aspect of the case.
- 3. Respect the opinions and positions of fellow members; differing opinions are welcome, but should be expressed in a respectful manner and any disagreements should remain in the confines of the meeting.
- 4. Support the work of the CAT by discussing publicly the general work of the Maternal Influenza Review Program, but not disclosing any specific findings or recommendations.
- 5. Promote the work of the Maternal Influenza Review Program action plan by disseminating the action plan developed by the CAT to your institution, agency, or community members and soliciting ideas and resources that may be useful in the plan, as needed.

Signature:		
Printed name:		
i iiiica name.		
Date:		

APPENDIX J: CDC Statement of Non-Research used for FIMR/HIV Prevention Methodology

#### CDC Statement of Non-Research used for FIMR/HIV Prevention Methodology

The FIMR/HIV Prevention Methodology (FHPM) is a non-research project. The information below is provided to demonstrate how the "non-research" determination was made by the Centers for Disease Control and Prevention (CDC) – the agency sponsoring the project.

#### GENERAL ATTRIBUTES OF NON-RESEARCH1:

# Intent of the project is to identify and control a health problem or improve a public health program or service;

Intended benefits of the project are primarily or exclusively for the participants (or clients) or the participants' community;

Data collected are needed to assess and/or improve the program or service, the health of the participants or the participants' community;

Knowledge that is generated does not extend beyond the scope of the activity;

Project activities are not experimental.

#### TRUE FOR FHPM?

- **YES.** The intent of FHPP is to enhance the health and well being of HIV-infected positive pregnant women, their infants and families by improving services and resources available to them.
- **YES.** The intended benefits of the project are primarily for HIV-infected women and their children in the participants' communities.
- **YES.** The data collected are used to identify the significant social, economic, cultural, safety, MCH health systems and HIV service system factors that are associated with improving care of HIV positive women and their infants.
- **YES.** While common systems factors that are identified may eventually warrant assistance from federal partners or national organizations, the knowledge generated is for the benefit of the participants' local communities.
- **YES.** The FIMR (Fetal and Infant Mortality Review) methodology has been successfully used in over 200 communities and also used for several conditions other than HIV.

#### GENERAL ATTRIBUTES OF RESEARCH1:

Intent of the project is to generate generalizable knowledge to improve public health practice;

Intended benefits of the project may or may not include study participants, but always extend beyond the study participants, usually to society;

Data collected exceed requirements for care of the study participants or extend beyond the scope of the activity.

#### TRUE FOR FHPM?

- **NO.** The intent of FHPP is to enhance the health and well being of HIV-infected positive pregnant women their infants and families by improving services and resources available to them within the participants' communities,
- **NO.** While some of the benefits extend beyond the individual participants, the benefits largely extend to the participants' community. The tools used will be made available to other communities, but the data will not, and the information collected from participants will not be generalized.
- **NO.** The data collected are used to identify the significant social, economic, cultural, safety, MCH health systems and HIV service system factors that are associated with improving care of HIV positive women and their infants in the participants' communities.

Based on the answers provided in the research determination charts above, the FHPM has received a "NON-RESEARCH" classification from the Associate Director of Science in the Center for HIV, STD & TB Prevention at CDC. This document may be used to help guide non-research determinations by other organizations participating in FHPM. Questions regarding this non-research classification should be directed to the FHPM Project Officer at CDC, Margaret Lampe, via phone (404-639-5189) or e-mail (mlampe@cdc.gov).

APPENDIX K: NFIMR Orientation Sheet for New CRT/CAT Members



# ORIENTATION FOR NEW FIMR CRT/CAT MEMBERS

This publication provides an overview of the Fetal and Infant Mortality Review (FIMR) process, the role of CRT and CAT members, and suggested team members. More detailed information is available in A Guide for Communities: Fetal and Infant Mortality Review Manual at www.NFIMR.org.

## FIMR: AN APPROACH FOR SYSTEM IMPROVEMENT

The US infant mortality rate has been steadily decreasing, but racial and ethnic disparities in infant mortality still persist. FIMR is an evidence-based process to examine fetal and infant deaths. FIMR is a community-owned & action oriented process to improve service systems and resources for women, infants and families. FIMR offers the community:

- A warning system that can describe effects of health care systems change
- A method for implementing continuous quality improvement (CQI)
- A means to implement needs assessment, quality assurance and policy development which are essential public health functions, at the local level.

#### THE FIMR PROCESS: A HOLISTIC APPROACH

- The FIMR process brings a multi-disciplinary community team together to review deidentified infant and fetal death
- Composed of health, social service and other experts; the FIMR case review team (CRT) examines the case summary, identifies issues, and makes recommendations for community change if appropriate.
- Community leaders representing government, consumers, key institutions, and health & human service organizations serve on the community action team (CAT) which acts to implement recommendations.

### **STEPS IN FIMR Death Occurs** FIMR PROCESS: CONTINUOUS QUALITY **IMPROVEMENT (CQI) Cases Selected** Data Gathering Data abstracted Changes in THE CYCLE OF **CRT** reviews **Community IMPROVEMENT** & recommends **Systems CAT proposes** & takes Action community action

Improved health

The FIMR process is not about assigning blame, it is an examination of circumstances surrounding the death to identify system gaps. The FIMR process is similar to a root cause analysis. Because cases are selected based on the community disparities for infant mortality, it is not a surveillance system either. The first step is for the Case Review Team to review all the case data and make recommendations. The next step is for the Community Action Team to take the recommendations, prioritize them, and make the changes needed in the community's service delivery system.

**CASE REVIEW TEAM ROLE** 

- Information processor of the FIMR program
- Reviews and analyzes the information collected in interviews and medical data abstractions
- Summarizes findings and create recommendations to improve the community's service delivery systems and community resources.

#### **COMMUNITY ACTION TEAM ROLE**

- Develop new and creative solutions to improve services and resources for families from the recommendations made by the case review team
- Enhance the credibility and visibility
  of issues related to parents, infants
  and families within the broader
  community by informing stakeholders
  about the need for these actions
  through presentations, media events
  and written reports
- Work with the community to implement interventions that will improve services and resources
- Determine if the needs of the community are changing over time and decide which interventions should be added or altered to meet the needs
- Safeguard successful FIMR systems changes from being discontinued in the future.

Members invited to the CRT and CAT will vary depending on the needs in the community. These members are for identification and implementation of recommendations. The engagement of team members is key to the success of a FIMR program.

Community Participation: Suggested FIMR Membership

## PLEASE INDICATE THE NAME OF THE PERSON WHO CAN PARTICIPATE IN THE FIMR PROCESS

Reminder: Some community members will participate on the Case Review Team or on policy development through the Community Action Team. Everyone benefits from improved collaboration.

IVEN CO	MMUNITY	IFABERC
K		I FADERS

- ☐ Mayor, County Executive
- ☐ Religious Leaders
- ☐ Business Leaders,
  Chamber of Commerce
- ☐ Civic and Fraternal Groups, such as Kiwanis, Jaycees, AKA, Junior League, etc.
- □ Educators

#### **HEALTH CARE PROVIDERS**

- ☐ Obstetrician/Gynecologist
- ☐ Pediatrician/Maternal-Fetal Specialist
- ☐ Obstetric/Pediatric Nurse
- ☐ Social Workers
- ☐ State and/or County Medical Society
- ☐ Hospital Administrator
- □ MCO/HMO Representative
- ☐ EMS

#### **PUBLIC HEALTH PROVIDERS**

- ☐ City and/or County
  Health Department(s)
- □ Medicaid
- □ Medical Examiner
- ☐ WIC Supervisor
- ☐ Outreach Workers
- ☐ Family Planning Representatives

#### **HUMAN SERVICE PROVIDERS**

- ☐ Child Welfare Agencies
- ☐ Substance Abuse Services
- ☐ Mental Health Services
- ☐ Department of Corrections
- ☐ Housing Authority
- ☐ Transportation Authority

#### **CONSUMER AND ADVOCACY GROUPS**

- ☐ March of Dimes
- ☐ Healthy Mothers/Healthy Babies
- □ MCH Coalitions
- ☐ Perinatal Infant Grief Professionals
- ☐ Bereaved Family and Other Consumer Representatives

#### **CONSUMER AND ADVOCACY GROUPS**

- ☐ Family Support Groups
- ☐ Minority Rights Groups
- ☐ Women's Rights Groups
- ☐ Union and Workers Rights Groups
- ☐ Housing and Tenants Rights Groups

Adapted from: Striffler N, Coughlin PA, Magrab, PR. Communities can workbook series: developing collaborative services for children. Washington, DC: Georgetown University Child Development Center. 1994:4 and Phelps, A. Florida Department of Health