Using the MMRIA Committee Decisions Form

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Amy St. Pierre, Project Manager, CDC Foundation
Julie Zaharatos, Partnerships and Outreach Manager, CDC Foundation

Please note: webinar is being recorded

Agenda:

- Review how to use the form, step-by-step — Amy
- Share tips for facilitating decision-making — Julie
- Answer some FAQs — Nicole
- Discussion — All

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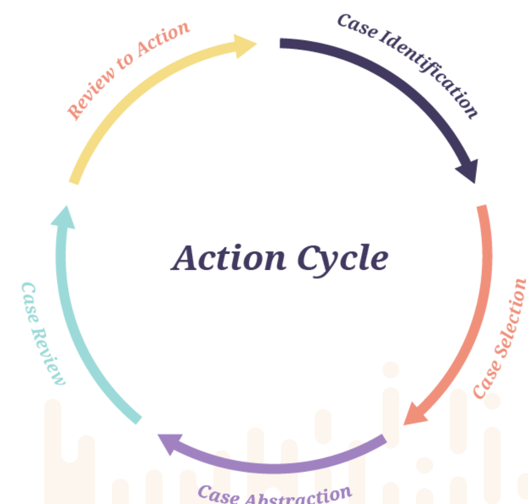
Who We Are

REVIEW to ACTION

Building U.S. Capacity to Review and Prevent Maternal Deaths promotes the maternal mortality review process as the best way to understand why maternal mortality in the United States is increasing, and identify interventions to prevent maternal deaths. The initiative will produce stronger data than ever before and foster collaboration that can lead to effective interventions. It is the result of a collaboration between the CDC Foundation, the Centers for Disease Control and Prevention (CDC), and the Association of Maternal and Child Health Programs (AMCHP). Funding for the collaboration was provided through an award agreement with Merck on behalf of its *Merck for Mothers* program.

What does the form provide?

- A synthesis of various forms from MMRCs around the U.S.
- A common language
- A way to collect data that feeds ACTION!



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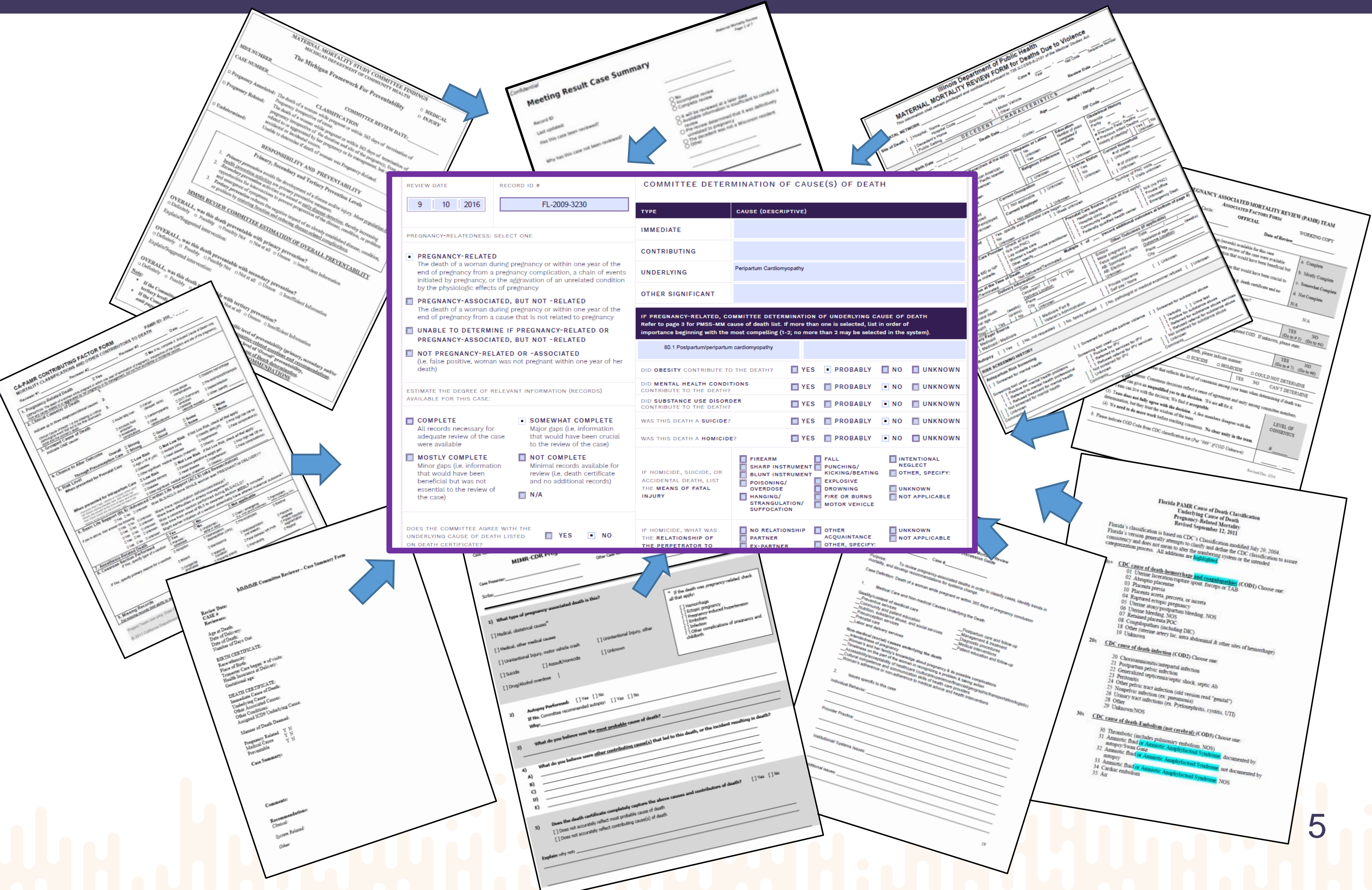
Synthesis of Various Forms

REVIEW to ACTION



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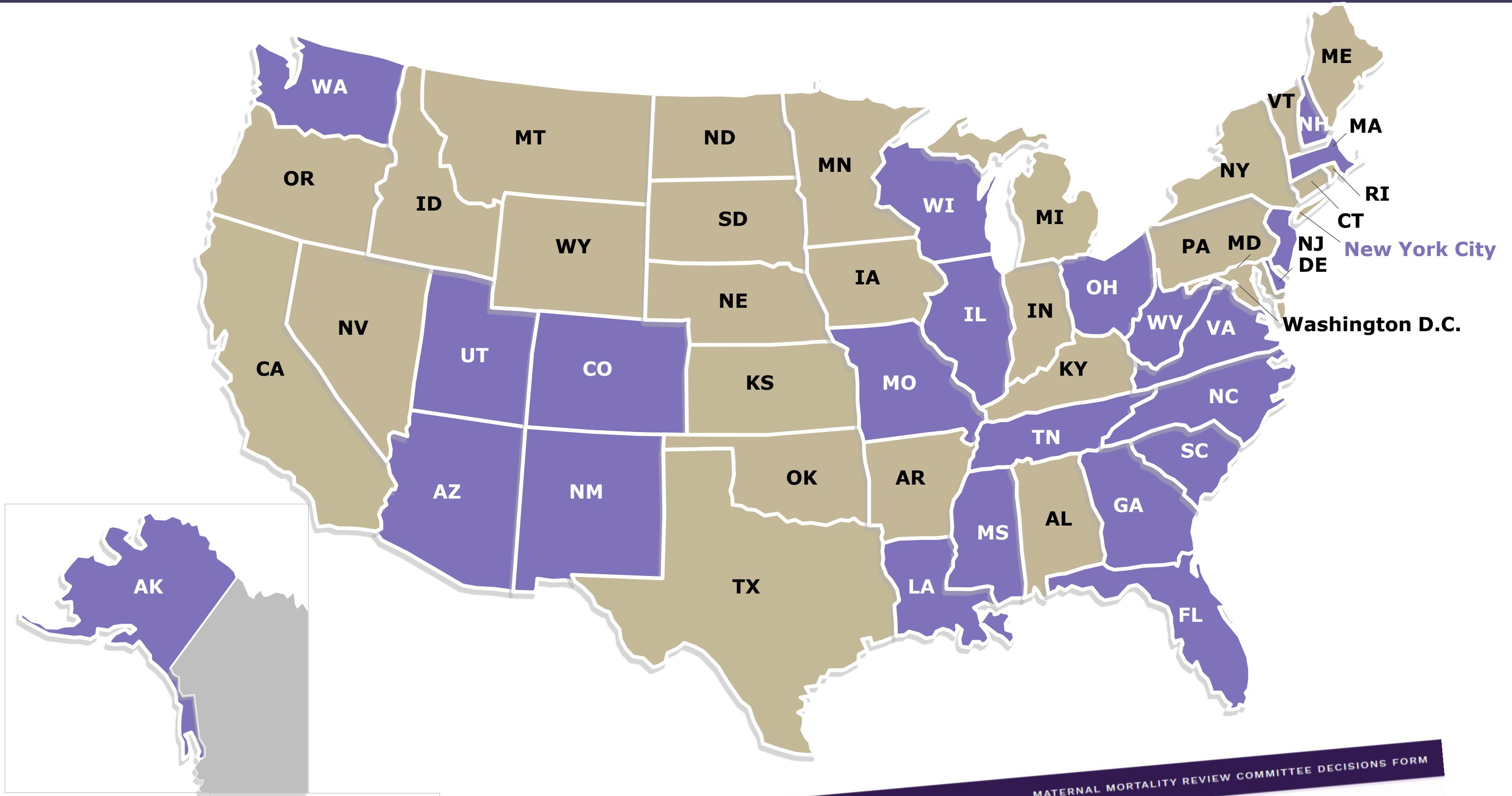
A Common Language

REVIEW to ACTION



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MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM

REVIEW DATE

RECORD ID #

PREGNANCY-RELATEDNESS: SELECT ONE

☐ **PREGNANCY-RELATED**
The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy

☐ **PREGNANCY-ASSOCIATED, BUT NOT -RELATED**
The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy.

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
Refer to attached page for PMSS-MM cause of death list. If more than one is selected, list in orde[r]... importance beginning with the most compelling (1-2; no more than 2 may be selected in the syst[em])

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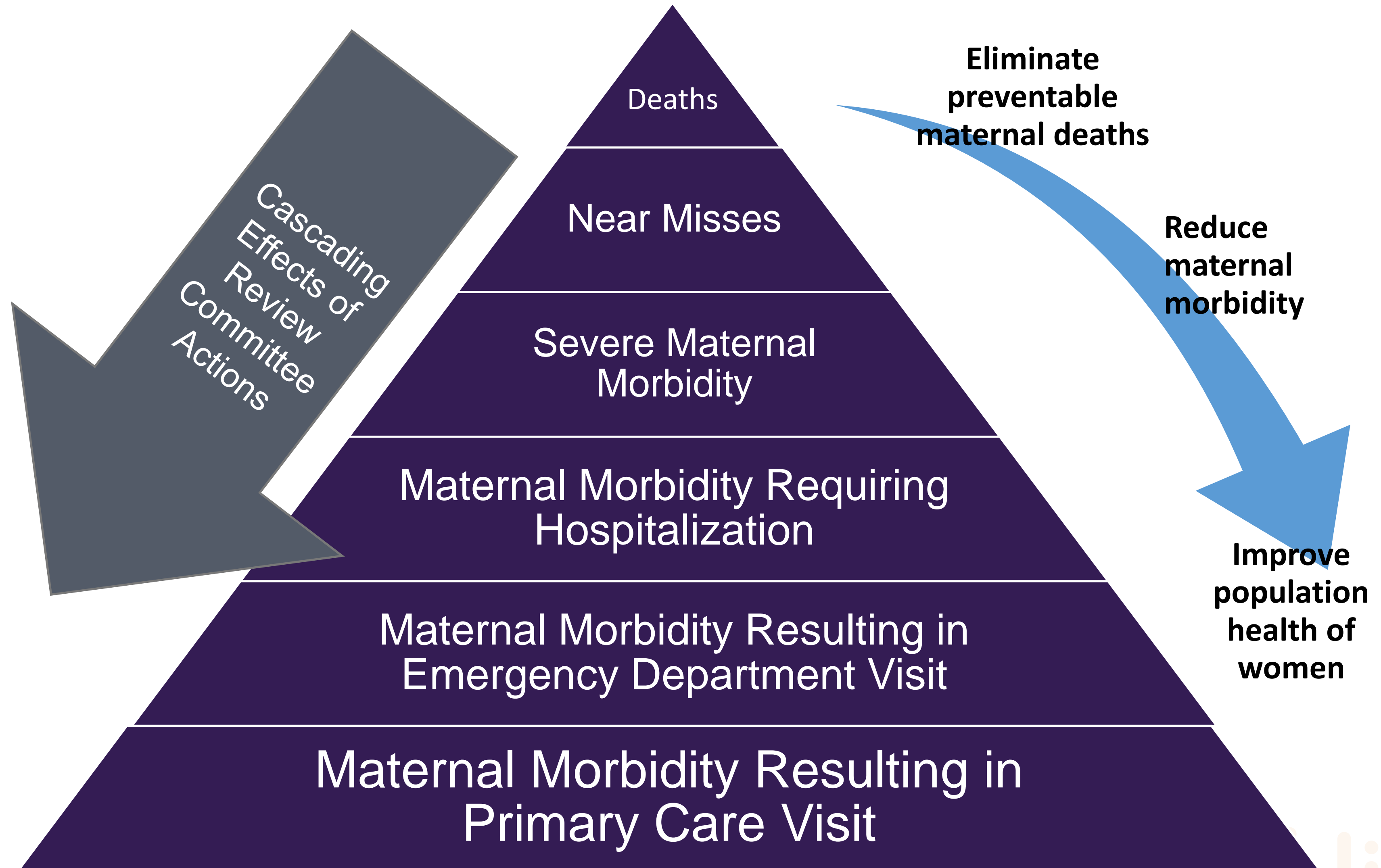
Data That Feeds Action

REVIEW to ACTION



What does the form NOT provide?

- A perfect way to cleanly capture every possible cause, manner and contributor to every possible maternal death
- …and never will

Page 1: The Basics

MMRIA | REVIEW to ACTION

REVIEW DATE: 9 | 10 | 2016

RECORD ID #: FL-2009-3230

PREGNANCY-RELATEDNESS: SELECT ONE

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ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:

- [ ] **COMPLETE** All records necessary for adequate review of the case were available
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- [ ] **NOT COMPLETE** Minimal records available for review (i.e. death certificate and no additional records)
- [ ] **N/A**

DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? [ ] YES [x] NO

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
Refer to page 3 for PMSS-MM cause of death list. If more than one is selected, list in order of importance beginning with the most compelling (1-2; no more than 2 may be selected in the system).

80.1 Postpartum/peripartum cardiomyopathy	

Question	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**

- [ ] FIREARM
- [ ] SHARP INSTRUMENT
- [ ] BLUNT INSTRUMENT
- [ ] POISONING/ OVERDOSE
- [ ] HANGING/ STRANGULATION/ SUFFOCATION
- [ ] FALL
- [ ] PUNCHING/ KICKING/BEATING
- [ ] EXPLOSIVE
- [ ] DROWNING
- [ ] FIRE OR BURNS
- [ ] MOTOR VEHICLE
- [ ] INTENTIONAL NEGLECT
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

IF HOMICIDE, WHAT WAS **THE RELATIONSHIP OF THE PERPETRATOR TO**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

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Page 2: Data for Action

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.

WAS THIS DEATH PREVENTABLE?	■ YES	☐ NO
CHANCE TO ALTER OUTCOME?	■ GOOD CHANCE	☐ SOME CHANCE
	☐ NO CHANCE	☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

CONTRIBUTING FACTOR LEVEL	CONTRIBUTING FACTOR AND DESCRIPTION OF ISSUE
PATIENT/FAMILY	Low health literacy: lack of understanding of diagnosis; Lack of access to health care; Late entry into prenatal care with limited visits (36 weeks/4 visits); Intimate partner violence (restraining order against father of baby); English as a second language (Creole); Obesity
PROVIDER	Quality of care issues; Inadequate risk assessment (cardiac history) leading to lack of care coordination—prenatal/labor and delivery (anesthesiology); Misdiagnosis—emergency department; vital history of cardiomyopathy not obtained; Policies/procedures
FACILITY	Lack continuity care within same hospital at different visits (known chronic health history on previous records, OB not notified (postpartum ER visit); communication (postpartum discharge instructions); use of official translation services
SYSTEM	Communication, Continuity of care; Obstetrics/ cardiology/emergency medicine in postpartum period; Need for patient centered medical home (primary care) in inter-conception period for care coordination including reproductive health planning; Cultural competency:
COMMUNITY	Social support (Referral community resources for woman with history of IPV)

RECOMMENDATIONS OF THE COMMITTEE

If there was at least some chance that the death could have been averted, what were the specific and feasible actions that, if implemented or altered, might have changed the course of events?

RECOMMENDATIONS OF THE COMMITTEE	LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
Obstetric provider should refer patients with a reported cardiac condition to cardiologist during prenatal care or between pregnancies.	primary	medium
Anesthesiology should evaluate and/or refer patients with reported cardiac conditions who present to Labor and Delivery, if not already done	secondary	small
All providers should utilize official translation services to discuss patient medical conditions, care, education, and follow-up.	secondary	small
OB should document reasons for patient's late entry to prenatal care.	secondary	small
OB should provide referrals to supportive community resources.	secondary	small
L&D nurses should perform postpartum risk screening on women with chronic medical needs in order to form postpartum discharge care plan.	primary	medium
State perinatal quality collaborative (PQC) should educate obstetric providers and ER staff on peripartum cardiomyopathy signs, treatment plans, and available resources	primary	large
State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

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Page 3: Reference

REVIEW to ACTION

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH* PMSS-MM

If more than one is selected, please list them in order of importance beginning with the most compelling (1-2; no more than 2 may be selected in the system).

*PREGNANCY-RELATED DEATH: THE DEATH OF A WOMAN DURING PREGNANCY OR WITHIN ONE YEAR OF THE END OF PREGNANCY FROM A PREGNANCY COMPLICATION, A CHAIN OF EVENTS INITIATED BY PREGNANCY, OR THE AGGRAVATION OF AN UNRELATED CONDITION BY THE PHYSIOLOGIC EFFECTS OF PREGNANCY.

- ☐ 10 Hemorrhage (excludes aneurysms or CVA)
- ☐ 10.1 Hemorrhage – rupture/laceration/ intra-abdominal bleeding
- ☐ 10.2 Placental abruption
- ☐ 10.3 Placenta previa
- ☐ 10.4 Ruptured ectopic pregnancy
- ☐ 10.5 Hemorrhage – uterine atony/ post-partum hemorrhage
- ☐ 10.6 Placenta accreta/increta/percreta
- ☐ 10.7 Hemorrhage due to retained placenta
- ☐ 10.8 Hemorrhage due to primary DIC
- ☐ 10.9 Other hemorrhage/NOS
- ☐ 20 Infection
- ☐ 20.1 Post-partum genital tract (e.g. of the uterus/ pelvis/perineum/necrotizing fasciitis)
- ☐ 20.2 Sepsis/septic shock
- ☐ 20.4 Chorioamnionitis/antepartum infection
- ☐ 20.5 Non-pelvic infections (e.g. pneumonia, TB, meningitis, HIV)
- ☐ 20.6 Urinary tract infection
- ☐ 20.9 Other infections/NOS
- ☐ 30 Embolism - thrombotic (non-cerebral)
- ☐ 30.9 Other embolism/NOS
- ☐ 31 Embolism – amniotic fluid
- ☐ 40 Pre-eclampsia
- ☐ 50 Eclampsia
- ☐ 60 Chronic hypertension with superimposed preeclampsia
- ☐ 70 Anesthesia complications
- ☐ 80 Cardiomyopathy
- ☐ 80.1 Post-partum/peripartum cardiomyopathy
- ☐ 80.2 Hypertrophic cardiomyopathy
- ☐ 80.9 Other cardiomyopathy/NOS
- ☐ 82 Hematologic
- ☐ 82.1 Sickle cell anemia
- ☐ 82.9 Other hematologic conditions including thrombophilias/TTP/HUS/NOS
- ☐ 83 Collagen vascular/autoimmune diseases
- ☐ 83.1 Systemic lupus erythematosis (SLE)
- ☐ 83.9 Other collagen vascular diseases/NOS
- ☐ 85 Conditions unique to pregnancy (e.g. gestational diabetes, hyperemesis, liver disease of pregnancy)
- ☐ 88 Injury
- ☐ 88.1 Intentional (homicide)
- ☐ 88.2 Unintentional
- ☐ 88.9 Unknown/NOS
- ☐ 89 Cancer
- ☐ 89.1 Gestational trophoblastic disease (GTN)
- ☐ 89.3 Malignant melanoma
- ☐ 89.9 Other malignancies/NOS
- ☐ 90 Cardiovascular conditions
- ☐ 90.1 Coronary artery disease/myocardial infarction (MI)/atherosclerotic cardiovascular disease
- ☐ 90.2 Pulmonary hypertension
- ☐ 90.3 Valvular heart disease
- ☐ 90.4 Vascular aneurysm/dissection
- ☐ 90.5 Hypertensive cardiovascular disease
- ☐ 90.6 Marfan's syndrome
- ☐ 90.7 Conduction defects/arrhythmias
- ☐ 90.8 Vascular malformations outside head and coronary arteries
- ☐ 90.9 Other cardiovascular disease, including CHF, cardiomegaly, cardiac hypertrophy, cardiac fibrosis, nonacute myocarditis/NOS
- ☐ 91 Pulmonary conditions (excludes ARDS-Adult respiratory distress syndrome)
- ☐ 91.1 Chronic lung disease
- ☐ 91.2 Cystic fibrosis
- ☐ 91.3 Asthma
- ☐ 91.9 Other pulmonary disease/NOS
- ☐ 92 Neurologic/neurovascular conditions (excluding CVAs)
- ☐ 92.1 Epilepsy/seizure disorder
- ☐ 92.9 Other neurologic diseases/NOS
- ☐ 93 Renal disease
- ☐ 93.1 Chronic renal failure/End-stage renal disease (ESRD)
- ☐ 93.9 Other renal disease/NOS
- ☐ 95 Cerebrovascular accident (hemorrhage/ thrombosis/aneurysm/ malformation) not secondary to hypertensive disease
- ☐ 96 Metabolic/endocrine
- ☐ 96.1 Obesity
- ☐ 96.2 Diabetes mellitus
- ☐ 96.9 Other metabolic/endocrine disorders
- ☐ 97 Gastrointestinal disorders
- ☐ 97.1 Crohn's disease/ulcerative colitis
- ☐ 97.2 Liver disease/failure/transplant
- ☐ 97.9 Other gastrointestinal diseases/NOS
- ☐ 100 Mental health conditions
- ☐ 100.1 Depression
- ☐ 100.9 Other psychiatric conditions/NOS
- ☐ 999 Unknown COD

Tip: laminate a copy for everyone

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Page 4: Reference

REVIEW to ACTION

CONTRIBUTING FACTOR DESCRIPTIONS

DELAY OR FAILURE TO SEEK CARE
The woman was delayed in seeking or did not access care, treatment, or follow-up care/actions (e.g. missed appointment and did not reschedule).

ADHERENCE TO MEDICAL RECOMMENDATIONS
The woman did not accept medical advice (e.g. refused treatment for religious or other reasons or left the hospital against medical advice).

KNOWLEDGE - LACK OF KNOWLEDGE REGARDING IMPORTANCE OF EVENT OR OF TREATMENT OR FOLLOW-UP
The woman did not receive adequate education or lacked knowledge or understanding regarding the significance of a health event (e.g. shortness of breath as a trigger to seek immediate care) or lacked understanding about the need for treatment/follow-up after evaluation for a health event (e.g. needed to keep appointment for psychiatric referral after an ED visit for exacerbation of depression).

CULTURAL/RELIGIOUS, OR LANGUAGE FACTORS
Demonstration that any of these factors was either a barrier to care due to lack of understanding or led to refusal of therapy due to beliefs (or belief systems).

ENVIRONMENTAL FACTORS
Factors related to weather or terrain (e.g. the advent of a sudden storm leads to a motor vehicle accident).

VIOLENCE AND INTIMATE PARTNER VIOLENCE (IPV)
Physical or emotional abuse other than that perpetrated by intimate partner (e.g. family member or stranger); IPV: Physical or emotional abuse perpetrated by the woman's current or former intimate partner.

MENTAL HEALTH CONDITIONS
The woman carried a diagnosis of a psychiatric disorder. This includes postpartum depression.

SUBSTANCE USE DISORDER – ALCOHOL, ILLICIT/ PRESCRIPTION DRUGS
Substance use disorder is characterized by recurrent use of alcohol and/or drugs causing clinically and functionally significant impairment, such as health problems or disability. The committee may determine that substance use disorder contributed to the death when the disorder directly compromised a woman's health status (e.g. acute methamphetamine intoxication exacerbated pregnancy-induced hypertension, or woman was more vulnerable to infections or medical conditions).

TOBACCO USE
Woman's use of tobacco directly compromised the woman's health status (e.g. long-term smoking led to underlying chronic lung disease).

CHRONIC DISEASE
Occurrence of one or more significant pre-existing medical conditions (e.g. obesity, cardiovascular disease, or diabetes).

CHILDHOOD SEXUAL ABUSE/TRAUMA
Woman experienced rape, molestation, or other sexual exploitation during childhood plus persuasion, inducement, or coercion of a child to engage in sexually explicit conduct; or woman experienced physical or emotional abuse or violence other than that related to sexual abuse during childhood.

LACK OF **ACCESS/FINANCIAL** RESOURCES
System issues, e.g. lack or loss of healthcare insurance or other financial duress, as opposed to woman's noncompliance impacted woman's ability to care for herself (e.g. did not seek services because unable to miss work or afford postpartum visits after insurance expired). Other barriers to accessing care: insurance non-eligibility, provider shortage in woman's geographical area, and lack of public transportation.

UNSTABLE HOUSING
Woman lived "on the street" or in a homeless shelter or lived in transitional or temporary circumstances with family or friends.

SOCIAL SUPPORT/ISOLATION - LACK OF FAMILY/ FRIEND SUPPORT SYSTEM
Social support from family, partner, or friends was lacking, inadequate, and/or dysfunctional (e.g. domestic violence, no one to rely on to ensure appointments were kept).

INADEQUATE OR UNAVAILABLE **EQUIPMENT/ TECHNOLOGY**
Equipment was missing, unavailable, or not functional, (e.g. absence of blood tubing connector).

LACK OF STANDARDIZED **POLICIES/PROCEDURES**
The facility lacked basic policies or infrastructure germane to the woman's needs (e.g. response to high blood pressure or a lack of or outdated policy or protocol).

POOR **COMMUNICATION**/LACK OF CASE COORDINATION OR MANAGEMENT/ LACK OF CONTINUITY OF CARE (SYSTEM PERSPECTIVE)
Care was fragmented (i.e. uncoordinated or not comprehensive) among or between healthcare facilities or units, (e.g. records not available between inpatient and outpatient or among units within the hospital, such as Emergency Department and Labor and Delivery).

LACK OF **CONTINUITY OF CARE**
Care providers did not have access to woman's complete records or did not communicate woman's status sufficiently. Lack of continuity can be between prenatal, labor and delivery, and postpartum providers.

CLINICAL SKILL/QUALITY OF CARE
Personnel were not appropriately skilled for the situation or did not exercise clinical judgment consistent with current standards of care (e.g. error in the preparation or administration of medication or unavailability of translation services).

INADEQUATE COMMUNITY **OUTREACH**/RESOURCES
Lack of coordination between healthcare system and other outside agencies/organizations in the geographic/cultural area that work with maternal child health issues.

INADEQUATE LAW **ENFORCEMENT** RESPONSE
Law enforcement response was not in a timely manner or was not appropriate or thorough in scope.

LACK OF **REFERRAL** OR CONSULTATION
Specialists were not consulted or did not pr
referrals to specialists were no

FAILURE TO SCREEN/INA
RISK
Factors placing the wo
recognized, and the w
a provider able to give

LEGAL
Legal considerations th

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Page 1: The Basics

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REVIEW to ACTION

REVIEW DATE

9 | 10 | 2016

RECORD ID #

FL-2009-3230

PREGNANCY-RELATEDNESS: SELECT ONE

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ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:

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DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? [ ] YES [x] NO

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
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80.1 Postpartum/peripartum cardiomyopathy	

Question	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**

- [ ] FIREARM
- [ ] SHARP INSTRUMENT
- [ ] BLUNT INSTRUMENT
- [ ] POISONING/ OVERDOSE
- [ ] HANGING/ STRANGULATION/ SUFFOCATION
- [ ] FALL
- [ ] PUNCHING/ KICKING/BEATING
- [ ] EXPLOSIVE
- [ ] DROWNING
- [ ] FIRE OR BURNS
- [ ] MOTOR VEHICLE
- [ ] INTENTIONAL NEGLECT
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
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IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
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80.1 Postpartum/peripartum cardiomyopathy	

	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
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WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**

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IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
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- [ ] NOT APPLICABLE

Pregnancy-Relatedness

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PREGNANCY-RELATEDNESS: SELECT ONE

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- ☐ **UNABLE TO DETERMINE IF PREGNANCY-RELATED OR PREGNANCY-ASSOCIATED, BUT NOT -RELATED**
- ☐ **NOT PREGNANCY-RELATED OR -ASSOCIATED**
  (i.e. false positive, woman was not pregnant within one year of her death)

2014

Pregnancy-associated death: The death of a woman while pregnant or anytime within one year of pregnancy regardless of cause.

Pregnancy-related death: The death of a woman while pregnant or within one year of pregnancy from any cause related to or aggravated by the pregnancy or management, excluding accidental or incidental causes.

Pregnancy-associated, but not pregnancy-related death: The death of a woman while pregnant or within one year of pregnancy, due to a cause unrelated to pregnancy.

Could not determine: The death of a woman while pregnant or within one year of pregnancy, due to a cause that could not be determined to be pregnancy-related or not pregnancy-related.

Ohio Department of Health Pregnancy-Associated Mortality Review. https://www.odh.ohio.gov/odhprograms/cfhs/pamr/Pregnancy-Associated%20Mortality%20Review.aspx

MMRIA

REVIEW to ACTION

REVIEW DATE

9	10	2016

RECORD ID #

FL-2009-3230

PREGNANCY-RELATEDNESS: SELECT ONE

- [x] **PREGNANCY-RELATED** The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy
- [ ] **PREGNANCY-ASSOCIATED, BUT NOT -RELATED** The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy
- [ ] **UNABLE TO DETERMINE IF PREGNANCY-RELATED OR PREGNANCY-ASSOCIATED, BUT NOT -RELATED**
- [ ] **NOT PREGNANCY-RELATED OR -ASSOCIATED** (i.e. false positive, woman was not pregnant within one year of her death)

ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:

- [ ] **COMPLETE** All records necessary for adequate review of the case were available
- [x] **SOMEWHAT COMPLETE** Major gaps (i.e. information that would have been crucial to the review of the case)
- [ ] **MOSTLY COMPLETE** Minor gaps (i.e. information that would have been beneficial but was not essential to the review of the case)
- [ ] **NOT COMPLETE** Minimal records available for review (i.e. death certificate and no additional records)
- [ ] **N/A**

DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? [ ] YES [x] NO

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
Refer to page 3 for PMSS-MM cause of death list. If more than one is selected, list in order of importance beginning with the most compelling (1-2; no more than 2 may be selected in the system).

80.1 Postpartum/peripartum cardiomyopathy	

Question	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**

- [ ] FIREARM
- [ ] SHARP INSTRUMENT
- [ ] BLUNT INSTRUMENT
- [ ] POISONING/ OVERDOSE
- [ ] HANGING/ STRANGULATION/ SUFFOCATION
- [ ] FALL
- [ ] PUNCHING/ KICKING/BEATING
- [ ] EXPLOSIVE
- [ ] DROWNING
- [ ] FIRE OR BURNS
- [ ] MOTOR VEHICLE
- [ ] INTENTIONAL NEGLECT
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

MMRIA Completeness of Records

REVIEW to ACTION

Why?

Aggregate at end of year(s) of review; consider whether you need better access to records and use this data to communicate that to relevant stakeholders

ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:

- ☐ **COMPLETE** All records necessary for adequate review of the case were available
- ▪ **SOMEWHAT COMPLETE** Major gaps (i.e. information that would have been crucial to the review of the case)
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- ☐ **N/A**

MMRIA

REVIEW to ACTION

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DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? [ ] YES [x] NO

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
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80.1 Postpartum/peripartum cardiomyopathy	

Question	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
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DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

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- [ ] MOTOR VEHICLE
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- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

Agree with DC?

Why?

Highlight differences in committee findings vs. death certificate findings

DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? YES NO

MMRIA

REVIEW to ACTION

REVIEW DATE

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PREGNANCY-RELATEDNESS: SELECT ONE

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IMMEDIATE	
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80.1 Postpartum/peripartum cardiomyopathy	

	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
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Underlying COD

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v14 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
OTHER SIGNIFICANT	

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80.1 Postpartum/peripartum cardiomyopathy	

Underlying Cause of Death

the disease or injury which initiated the train of events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury

World Health Organization. http://www.who.int/violence_injury_prevention/surveillance/databases/mortality/en/

MMRIA

Underlying COD

REVIEW to ACTION

Two ways to capture underlying COD:

1. Free text grid

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v14 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
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IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
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80.1 Postpartum/peripartum cardiomyopathy	

MMRIA

Underlying COD

REVIEW to ACTION

Two ways to capture underlying COD:

1. Free text grid

2. PMSS-MM codes

Make sure to assign a PMSS-MM code to every death that your committee determines to be pregnancy-related

MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM v14 1

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
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80.1 Postpartum/peripartum cardiomyopathy	

MMRIA

Underlying COD

REVIEW to ACTION

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH* PMSS-MM

If more than one is selected, please list them in order of importance beginning with the most compelling (1-2; no more than 2 may be selected in the system).

*PREGNANCY-RELATED DEATH: THE DEATH OF A WOMAN DURING PREGNANCY OR WITHIN ONE YEAR OF THE END OF PREGNANCY FROM A PREGNANCY COMPLICATION, A CHAIN OF EVENTS INITIATED BY PREGNANCY, OR THE AGGRAVATION OF AN UNRELATED CONDITION BY THE PHYSIOLOGIC EFFECTS OF PREGNANCY.

- ☐ **10** Hemorrhage (excludes aneurysms or CVA)
- ☐ **10.1** Hemorrhage – rupture/laceration/ intra-abdominal bleeding
- ☐ **10.2** Placental abruption
- ☐ **10.3** Placenta previa
- ☐ **10.4** Ruptured ectopic pregnancy
- ☐ **10.5** Hemorrhage – uterine atony/ post-partum hemorrhage
- ☐ **10.6** Placenta accreta/increta/percreta
- ☐ **10.7** Hemorrhage due to retained placenta
- ☐ **10.8** Hemorrhage due to primary DIC
- ☐ **10.9** Other hemorrhage/NOS
- ☐ **20** Infection
- ☐ **20.1** Post-partum genital tract (e.g. of the uterus/ pelvis/perineum/necrotizing fasciitis)
- ☐ **20.2** Sepsis/septic shock
- ☐ **20.4** Chorioamnionitis/antepartum infection
- ☐ **20.5** Non-pelvic infections (e.g. pneumonia, TB, meningitis, HIV)
- ☐ **20.6** Urinary tract infection
- ☐ **20.9** Other infections/NOS
- ☐ **30** Embolism - thrombotic (non-cerebral)
- ☐ **30.9** Other embolism/NOS
- ☐ **31** Embolism – amniotic fluid
- ☐ **40** Pre-eclampsia
- ☐ **50** Eclampsia
- ☐ **60** Chronic hypertension with superimposed preeclampsia
- ☐ **70** Anesthesia complications
- ☐ **80** Cardiomyopathy
- ☐ **80.1** Post-partum/peripartum cardiomyopathy
- ☐ **80.2** Hypertrophic cardiomyopathy
- ☐ **80.9** Other cardiomyopathy/NOS
- ☐ **82** Hematologic
- ☐ **82.1** Sickle cell anemia
- ☐ **82.9** Other hematologic conditions including thrombophilias/TTP/HUS/NOS
- ☐ **83** Collagen vascular/autoimmune diseases
- ☐ **83.1** Systemic lupus erythematosis (SLE)
- ☐ **83.9** Other collagen vascular diseases/NOS
- ☐ **85** Conditions unique to pregnancy (e.g. gestational diabetes, hyperemesis, liver disease of pregnancy)
- ☐ **88** Injury
- ☐ **88.1** Intentional (homicide)
- ☐ **88.2** Unintentional
- ☐ **88.9** Unknown/NOS
- ☐ **89** Cancer
- ☐ **89.1** Gestational trophoblastic disease (GTN)
- ☐ **89.3** Malignant melanoma
- ☐ **89.9** Other malignancies/NOS
- ☐ **90** Cardiovascular conditions
- ☐ **90.1** Coronary artery disease/myocardial infarction (MI)/atherosclerotic cardiovascular disease
- ☐ **90.2** Pulmonary hypertension
- ☐ **90.3** Valvular heart disease
- ☐ **90.4** Vascular aneurysm/dissection
- ☐ **90.5** Hypertensive cardiovascular disease
- ☐ **90.6** Marfan's syndrome
- ☐ **90.7** Conduction defects/arrhythmias
- ☐ **90.8** Vascular malformations outside head and coronary arteries
- ☐ **90.9** Other cardiovascular disease, including CHF, cardiomegaly, cardiac hypertrophy, cardiac fibrosis, nonacute myocarditis/NOS
- ☐ **91** Pulmonary conditions (excludes ARDS-Adult respiratory distress syndrome)
- ☐ **91.1** Chronic lung disease
- ☐ **91.2** Cystic fibrosis
- ☐ **91.3** Asthma
- ☐ **91.9** Other pulmonary disease/NOS
- ☐ **92** Neurologic/neurovascular conditions (excluding CVAs)
- ☐ **92.1** Epilepsy/seizure disorder
- ☐ **92.9** Other neurologic diseases/NOS
- ☐ **93** Renal disease
- ☐ **93.1** Chronic renal failure/End-stage renal disease (ESRD)
- ☐ **93.9** Other renal disease/NOS
- ☐ **95** Cerebrovascular accident (hemorrhage/ thrombosis/aneurysm/ malformation) not secondary to hypertensive disease
- ☐ **96** Metabolic/endocrine
- ☐ **96.1** Obesity
- ☐ **96.2** Diabetes mellitus
- ☐ **96.9** Other metabolic/endocrine disorders
- ☐ **97** Gastrointestinal disorders
- ☐ **97.1** Crohn's disease/ulcerative colitis
- ☐ **97.2** Liver disease/failure/transplant
- ☐ **97.9** Other gastrointestinal diseases/NOS
- ☐ **100** Mental health conditions
- ☐ **100.1** Depression
- ☐ **100.9** Other psychiatric conditions/NOS
- ☐ **999** Unknown COD

For more info on PMSS history and process, see:

CDC Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

SEARCH

CDC A-Z INDEX

Reproductive Health

- Reproductive Health
- About Us
- Data and Statistics
- Emergency Preparedness and Response
- Maternal and Child Health Epidemiology Program

CDC > Reproductive Health > Maternal and Infant Health > Pregnancy-Related Deaths

Pregnancy Mortality Surveillance System

When did CDC start conducting national surveillance of pregnancy-related deaths?

CDC initiated national surveillance of pregnancy-related deaths in 1986 because more clinical information was needed to fill data gaps about causes of maternal death.

...thin 1 year of the end of a pregnancy ...ed to or aggravated by the

Pregnancy Mortality Surveillance System

Current Commentary

Challenges and Opportunities in Identifying, Reviewing, and Preventing Maternal Deaths

Amy St. Pierre, MBA, Julie Zaharatos, MPH, David Goodman, PhD, and William M. Callaghan, MD, MPH

https://www.cdc.gov/reproductivehealth/maternalinfanthealth/pmss.html
https://www.ncbi.nlm.nih.gov/pubmed/29215526

MMRIA

REVIEW to ACTION

REVIEW DATE

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PREGNANCY-RELATEDNESS: SELECT ONE

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- [ ] **NOT PREGNANCY-RELATED OR -ASSOCIATED**
  (i.e. false positive, woman was not pregnant within one year of her death)

ESTIMATE THE DEGREE OF RELEVANT INFORMATION (RECORDS) AVAILABLE FOR THIS CASE:

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DOES THE COMMITTEE AGREE WITH THE UNDERLYING CAUSE OF DEATH LISTED ON DEATH CERTIFICATE? [ ] YES [x] NO

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	Peripartum Cardiomyopathy
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80.1 Postpartum/peripartum cardiomyopathy	

	YES	PROBABLY	NO	UNKNOWN
DID **OBESITY** CONTRIBUTE TO THE DEATH?	[ ]	[x]	[ ]	[ ]
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **SUICIDE**?	[ ]	[ ]	[x]	[ ]
WAS THIS DEATH A **HOMICIDE**?	[ ]	[ ]	[x]	[ ]

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**

- [ ] FIREARM
- [ ] SHARP INSTRUMENT
- [ ] BLUNT INSTRUMENT
- [ ] POISONING/ OVERDOSE
- [ ] HANGING/ STRANGULATION/ SUFFOCATION
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- [ ] OTHER, SPECIFY:
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IF HOMICIDE, WHAT WAS **THE RELATIONSHIP OF THE PERPETRATOR TO**

- [ ] NO RELATIONSHIP
- [ ] PARTNER
- [ ] EX-PARTNER
- [ ] OTHER ACQUAINTANCE
- [ ] OTHER, SPECIFY:
- [ ] UNKNOWN
- [ ] NOT APPLICABLE

The "Checkboxes"

MMRIA

REVIEW to ACTION

Why?

- Fill gaps in information.
- Easy identification of deaths where obesity, mental health conditions and substance use **contributed**.
- Easy identification of suicide, homicide and overdose deaths.

DID OBESITY CONTRIBUTE TO THE DEATH?	YES	PROBABLY (■)	NO	UNKNOWN
DID MENTAL HEALTH CONDITIONS CONTRIBUTE TO THE DEATH?	YES	PROBABLY	NO (■)	UNKNOWN
DID SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	YES	PROBABLY	NO (■)	UNKNOWN
WAS THIS DEATH A SUICIDE?	YES	PROBABLY	NO (■)	UNKNOWN
WAS THIS DEATH A HOMICIDE?	YES	PROBABLY	NO (■)	UNKNOWN

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE MEANS OF FATAL INJURY	FIREARM SHARP INSTRUMENT BLUNT INSTRUMENT POISONING/ OVERDOSE HANGING/ STRANGULATION/ SUFFOCATION	FALL PUNCHING/ KICKING/BEATING EXPLOSIVE DROWNING FIRE OR BURNS MOTOR VEHICLE	INTENTIONAL NEGLECT OTHER, SPECIFY: UNKNOWN NOT APPLICABLE
IF HOMICIDE, WHAT WAS THE RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?	NO RELATIONSHIP PARTNER EX-PARTNER OTHER RELATIVE	OTHER ACQUAINTANCE OTHER, SPECIFY:	UNKNOWN NOT APPLICABLE

MMRIA

Page 2: Data for Action

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.

WAS THIS DEATH PREVENTABLE? ■ YES ☐ NO

CHANCE TO ALTER OUTCOME? ■ GOOD CHANCE ☐ SOME CHANCE ☐ NO CHANCE ☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

CONTRIBUTING FACTOR LEVEL	CONTRIBUTING FACTOR AND DESCRIPTION OF ISSUE
PATIENT/FAMILY	Low health literacy: lack of understanding of diagnosis; Lack of access to health care; Late entry into prenatal care with limited visits (36 weeks/4 visits); Intimate partner violence (restraining order against father of baby); English as a second language (Creole); Obesity
PROVIDER	Quality of care issues; Inadequate risk assessment (cardiac history) leading to lack of care coordination—prenatal/labor and delivery (anesthesiology); Misdiagnosis—emergency department; vital history of cardiomyopathy not obtained; Policies/procedures
FACILITY	Lack continuity care within same hospital at different visits (known chronic health history on previous records, OB not notified (postpartum ER visit); communication (postpartum discharge instructions); use of official translation services
SYSTEM	Communication, Continuity of care; Obstetrics/cardiology/emergency medicine in postpartum period; Need for patient centered medical home (primary care) in inter-conception period for care coordination including reproductive health planning; Cultural competency:
COMMUNITY	Social support (Referral community resources for woman with history of IPV)

RECOMMENDATIONS OF THE COMMITTEE

If there was at least some chance that the death could have been averted, what were the specific and feasible actions that, if implemented or altered, might have changed the course of events?

RECOMMENDATIONS OF THE COMMITTEE	LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
Obstetric provider should refer patients with a reported cardiac condition to cardiologist during prenatal care or between pregnancies.	primary	medium
Anesthesiology should evaluate and/or refer patients with reported cardiac conditions who present to Labor and Delivery, if not already done	secondary	small
All providers should utilize official translation services to discuss patient medical conditions, care, education, and follow-up.	secondary	small
OB should document reasons for patient's late entry to prenatal care.	secondary	small
OB should provide referrals to supportive community resources.	secondary	small
L&D nurses should perform postpartum risk screening on women with chronic medical needs in order to form postpartum discharge care plan.	primary	medium
State perinatal quality collaborative (PQC) should educate obstetric providers and ER staff on peripartum cardiomyopathy signs, treatment plans, and available resources	primary	large
State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

MMRIA

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.

WAS THIS DEATH PREVENTABLE? ■ YES ☐ NO

CHANCE TO ALTER OUTCOME? ■ GOOD CHANCE ☐ SOME CHANCE ☐ NO CHANCE ☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

CONTRIBUTING FACTOR LEVEL	CONTRIBUTING FACTOR AND DESCRIPTION OF ISSUE
PATIENT/FAMILY	Low health literacy: lack of understanding of diagnosis; Lack of access to health care; Late entry into prenatal care with limited visits (36 weeks/4 visits); Intimate partner violence (restraining order against father of baby); English as a second language (Creole); Obesity
PROVIDER	Quality of care issues; Inadequate risk assessment (cardiac history) leading to lack of care coordination—prenatal/labor and delivery (anesthesiology); Misdiagnosis—emergency department; vital history of cardiomyopathy not obtained; Policies/procedures
FACILITY	Lack continuity care within same hospital at different visits (known chronic health history on previous records, OB not notified (postpartum ER visit); communication (postpartum discharge instructions); use of official translation services
SYSTEM	Communication, Continuity of care; Obstetrics/cardiology/emergency medicine in postpartum period; Need for patient centered medical home (primary care) in inter-conception period for care coordination including reproductive health planning; Cultural competency:
COMMUNITY	Social support (Referral community resources for woman with history of IPV)

RECOMMENDATIONS OF THE COMMITTEE

If there was at least some chance that the death could have been averted, what were the specific and feasible actions that, if implemented or altered, might have changed the course of events?

RECOMMENDATIONS OF THE COMMITTEE	LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
Obstetric provider should refer patients with a reported cardiac condition to cardiologist during prenatal care or between pregnancies.	primary	medium
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State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

MMRIA

Preventability

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY			
A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.	WAS THIS DEATH PREVENTABLE?	☐ YES	☐ NO
	CHANCE TO ALTER OUTCOME?	☐ GOOD CHANCE ☐ NO CHANCE	☐ SOME CHANCE ☐ UNABLE TO DETERMINE

MMRIA

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system and/or community factors.

WAS THIS DEATH PREVENTABLE? ■ YES ☐ NO

CHANCE TO ALTER OUTCOME? ■ GOOD CHANCE ☐ SOME CHANCE ☐ NO CHANCE ☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

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RECOMMENDATIONS OF THE COMMITTEE

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State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

Contributing Factors

MMRIA

REVIEW to ACTION

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

CONTRIBUTING FACTOR LEVEL	CONTRIBUTING FACTOR AND DESCRIPTION OF ISSUE
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- Complete and specific contributing factor descriptions
  - Example:

CONTRIBUTING FACTORS WORKSHEET

What were the factors that contributed to this death? Multiple contributing factors may be present at each level.

CONTRIBUTING FACTOR LEVEL	CONTRIBUTING FACTOR AND DESCRIPTION OF ISSUE
SYSTEM	-Access/financial: obstetric provider shortage in rural areas. -Access/financial: late entry into prenatal care due to delays in pregnancy Medicaid enrollment.

MMRIA

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

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WAS THIS DEATH PREVENTABLE? ■ YES ☐ NO

CHANCE TO ALTER OUTCOME? ■ GOOD CHANCE ☐ SOME CHANCE ☐ NO CHANCE ☐ UNABLE TO DETERMINE

CONTRIBUTING FACTORS WORKSHEET

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RECOMMENDATIONS OF THE COMMITTEE

If there was at least some chance that the death could have been averted, what were the specific and feasible actions that, if implemented or altered, might have changed the course of events?

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State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

Recommendations

MMRIA

REVIEW to ACTION

RECOMMENDATIONS OF THE COMMITTEE

If there was at least some chance that the death could have
feasible actions that, if implemented or altered, might have

RECOMMENDATIONS OF THE COMMITTEE
Obstetric provider should refer patients with a reported cardiac condition to cardiologist during prenatal care or between pregnancies.
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State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum

Recommendations

- Developed collaboratively with your whole committee
- Align with identified issues and contributing factors

Specific and Actionable Recommendations

______ should __________		__________.
(who?)	(do what?)	(when?)

Specific and Actionable Recommendations

Example 1*:*

- Medicaid should enable all providers to complete a presumptive eligibility form upon giving a patient notice of a positive pregnancy test result.

Specific and Actionable Recommendations

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Specific and Actionable Recommendations

Example 1:

- Medicaid should enable all providers to complete a presumptive eligibility form upon giving a patient notice of a positive pregnancy test result.

Specific and Actionable Recommendations

Example 2*:*

- Prenatal care providers should screen all patients for substance use disorder at their first prenatal visit.

Specific and Actionable Recommendations

Example 2*:*

- <u>Prenatal care providers </u>should screen all patients for substance use disorder at their first prenatal visit.

Specific and Actionable Recommendations

Example 2:

- Prenatal care providers should screen all patients for substance use disorder at their first prenatal visit.

Specific and Actionable Recommendations

Example 2*:*

- Prenatal care providers should screen all patients for substance use disorder <u>at their first prenatal visit</u>.

MMRIA

REVIEW to ACTION

COMMITTEE DETERMINATION OF PREVENTABILITY

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WAS THIS DEATH PREVENTABLE? ■ YES ☐ NO

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CONTRIBUTING FACTORS WORKSHEET

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RECOMMENDATIONS OF THE COMMITTEE

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State perinatal quality collaborative should consider an education campaign for prenatal care providers regarding resources available to victims of intimate partner violence during pregnancy and the postpartum	secondary	small

MMRIA REVIEW to ACTION

Why?

Help you prioritize your recommendations.

LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
primary	medium
secondary	small
secondary	small
secondary	small
secondary	small
primary	medium
primary	large
secondary	small

PREVENTION LEVEL

- **PRIMARY:** Prevents the contributing factor before it ever occurs
- **SECONDARY:** Reduces the impact of the contributing factor once it has occurred (i.e. treatment)
- **TERTIARY:** Reduces the impact or progression of an ongoing contributing factor once it has occurred (i.e. management of complications)

LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
primary	medium
secondary	small
secondary	small
secondary	small
secondary	small
primary	medium
primary	large
secondary	small

MMRIA

REVIEW to ACTION

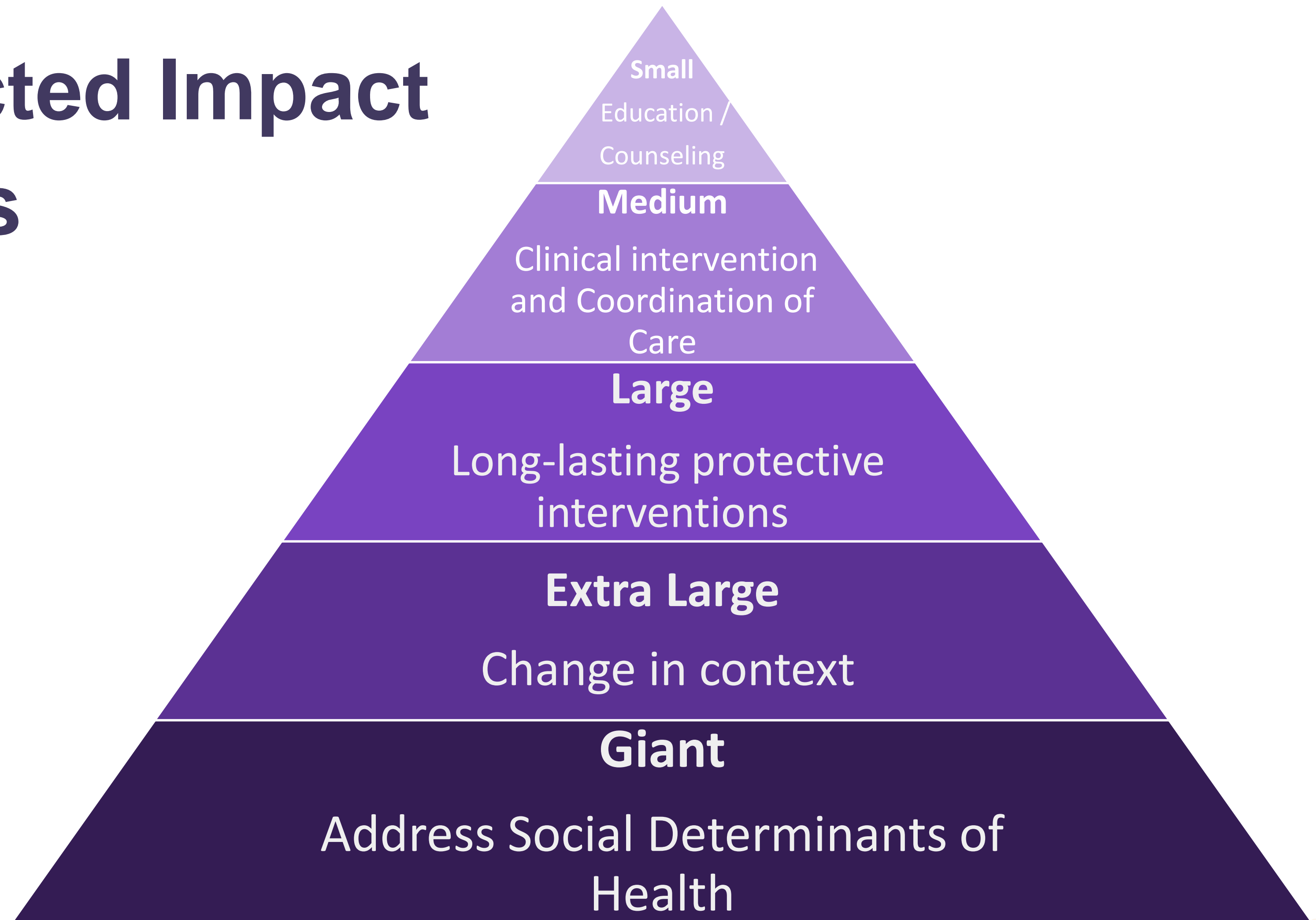
EXPECTED IMPACT LEVEL

- **SMALL:** Education/counseling (community- and/or provider-based health promotion and education activities)
- **MEDIUM:** Clinical intervention and coordination of care across continuum of well-woman visits through obstetrics (protocols, prescriptions)
- **LARGE:** Long-lasting protective intervention (improve readiness, recognition and response to obstetric emergencies/LARC)
- **EXTRA LARGE:** Change in context (promote environments that support healthy living/ensure available and accessible services)
- **GIANT:** Address social determinants of health (poverty, inequality, etc.)

LEVEL OF PREVENTION (SEE BELOW)	LEVEL OF IMPACT (SEE BELOW)
primary	medium
secondary	small
secondary	small
secondary	small
secondary	small
primary	medium
primary	large
secondary	small

MMRIA REVIEW to ACTION

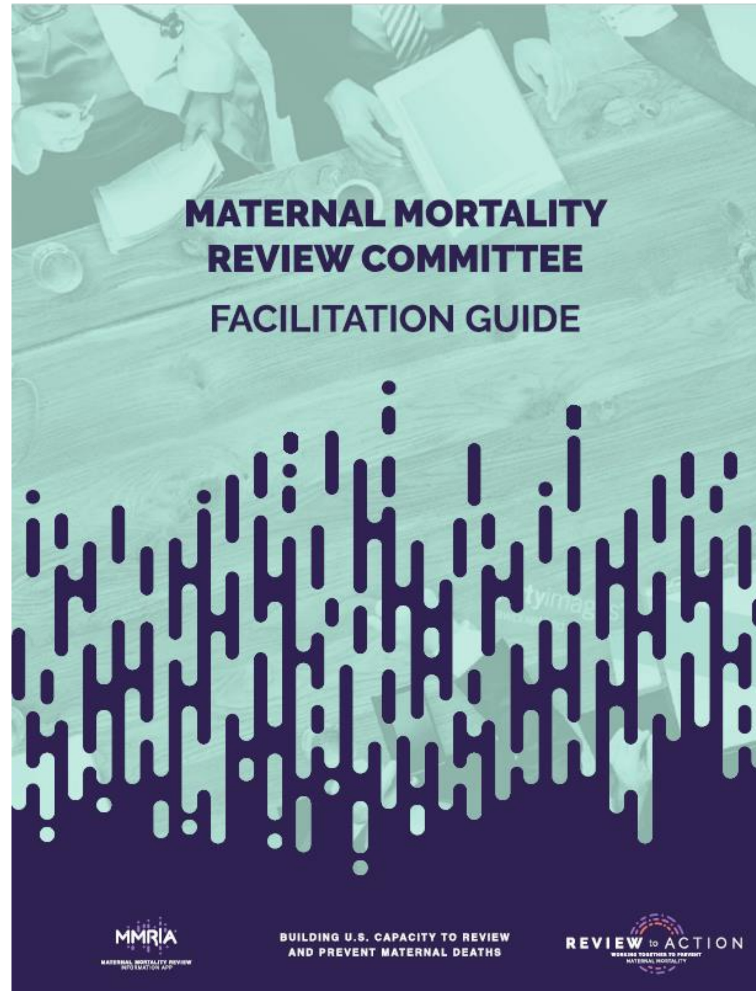
Expected Impact Levels



Adapted from: Frieden, T. A Framework for Public Health Action: The Health Impact Pyramid. American Journal of Public Health 2009.

Tips for Facilitating Decision-Making

Support Tools



http://reviewtoaction.org/content/committee-facilitation-guide

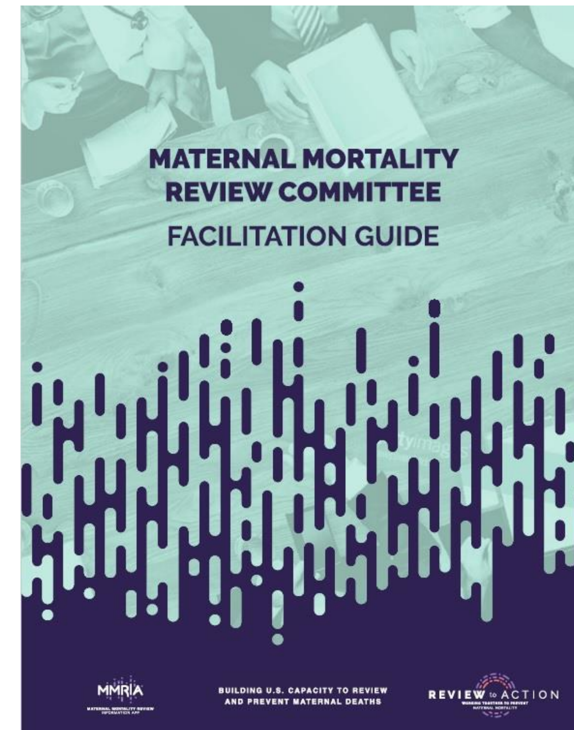
Support Tools

Experience a Maternal Mortality Review Committee In Action

http://reviewtoaction.org/mock-panel

Tips for Facilitating Decision-Making

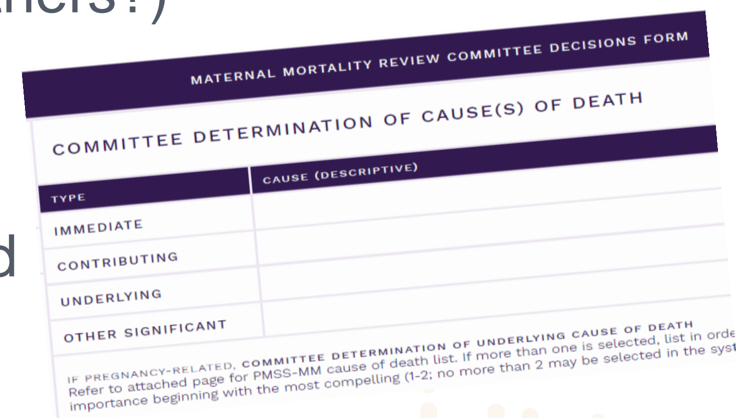
- Review the authority and protections under which your committee operates
- Review the scope, mission, vision and goals
- Review the case identification process
- Designate a facilitator
- Use a standard process



Tips for Facilitating Decision-Making

- Provide a summary of previous findings at beginning of each meeting (IL)
- Get everyone on the same page!

    Project the form (HI, DE and TN, others?)
- Assign multiple note takers
- Mix up the order of questions as needed


MATERNAL MORTALITY REVIEW COMMITTEE DECISIONS FORM

COMMITTEE DETERMINATION OF CAUSE(S) OF DEATH

TYPE	CAUSE (DESCRIPTIVE)
IMMEDIATE	
CONTRIBUTING	
UNDERLYING	
OTHER SIGNIFICANT	

IF PREGNANCY-RELATED, COMMITTEE DETERMINATION OF UNDERLYING CAUSE OF DEATH
Refer to attached page for PMSS-MM cause of death list. If more than one is selected, list in
importance beginning with the most compelling (1-2; no more than 2 may be selected in the

Tips for Facilitating Decision-Making

- Pregnancy-Relatedness question: “if she had not been pregnant, would she have died?”
- Use the preventability questions to move the conversation to contributing factors and recommendations
- Assign someone to keep time

Frequently Asked Questions

MMRIA

REVIEW to ACTION

Q: What does this third dropdown option for Pregnancy-Relatedness mean?!

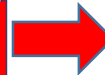
UNABLE TO DETERMINE IF PREGNANCY-RELATED OR PREGNANCY-ASSOCIATED, BUT NOT -RELATED

- A: After reviewing all the available information, your MMRC could not determine whether the case was pregnancy-related or not. A better way to say this is “Pregnancy-Associated but Unable to Determine Pregnancy-Relatedness.” This edited language will appear in a forthcoming v15 of the form and the next version of MMRIA.

v14

PREGNANCY-RELATEDNESS: SELECT ONE

- PREGNANCY-RELATED
  The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy
- PREGNANCY-ASSOCIATED, BUT NOT -RELATED
  The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy
- UNABLE TO DETERMINE IF PREGNANCY-RELATED OR PREGNANCY-ASSOCIATED, BUT NOT -RELATED
- NOT PREGNANCY-RELATED OR -ASSOCIATED
  (i.e. false positive, woman was not pregnant within one year of her death)



v15

PREGNANCY-RELATEDNESS: SELECT ONE

- PREGNANCY-RELATED
  The death of a woman during pregnancy or within one year of the end of pregnancy from a pregnancy complication, a chain of events initiated by pregnancy, or the aggravation of an unrelated condition by the physiologic effects of pregnancy
- PREGNANCY-ASSOCIATED, BUT NOT -RELATED
  The death of a woman during pregnancy or within one year of the end of pregnancy from a cause that is not related to pregnancy
- PREGNANCY-ASSOCIATED BUT UNABLE TO DETERMINE PREGNANCY-RELATEDNESS
- NOT PREGNANCY-RELATED OR -ASSOCIATED
  (i.e. false positive, woman was not pregnant within one year of her death)

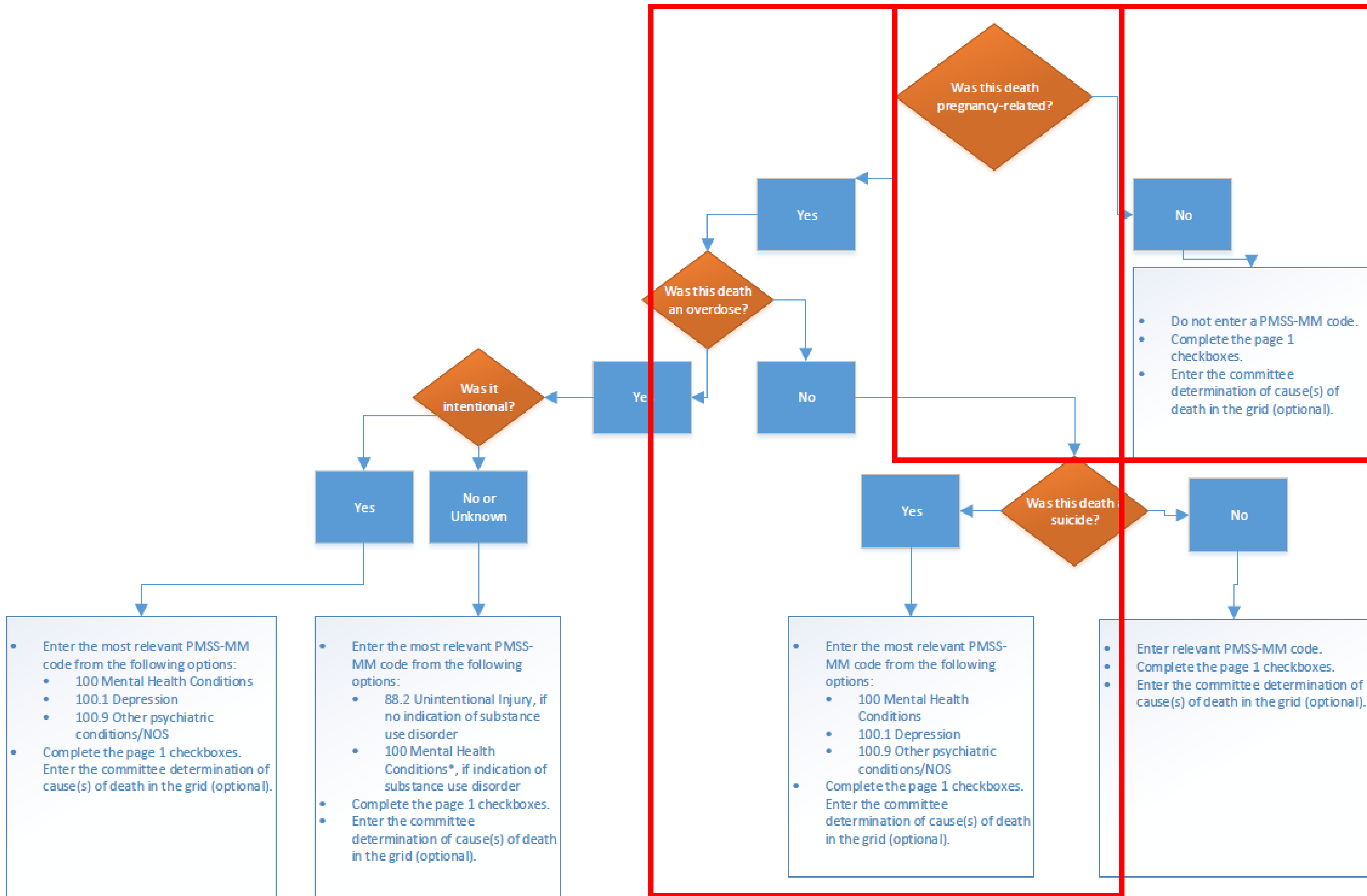
MMRIA REVIEW to ACTION

Q: How do we capture suicides?

- A: It depends.
  - If not pregnancy-related, complete the checkboxes on page 1.
  - If pregnancy-related, complete the checkboxes on page 1 AND assign a PMSS-MM code. Most of these will fall under one of the following PMSS-MM codes:
    - 100 Mental Health Conditions
    - 100.1 Depression
    - 100.9 Other psychiatric conditions/NOS

DID OBESITY CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID MENTAL HEALTH CONDITIONS CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID SUBSTANCE USE DISORDER CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A SUICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A HOMICIDE?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE MEANS OF FATAL INJURY	☐ FIREARM ☐ SHARP INSTRUMENT ☐ BLUNT INSTRUMENT ☐ POISONING/ OVERDOSE ☐ HANGING/ STRANGULATION/ SUFFOCATION	☐ FALL ☐ PUNCHING/ KICKING/BEATING ☐ EXPLOSIVE ☐ DROWNING ☐ FIRE OR BURNS ☐ MOTOR VEHICLE	☐ INTENTIONAL NEGLECT ☐ OTHER, SPECIFY: ☐ UNKNOWN ☐ NOT APPLICABLE
IF HOMICIDE, WHAT WAS THE RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT?	☐ NO RELATIONSHIP ☐ PARTNER ☐ EX-PARTNER ☐ OTHER RELATIVE	☐ OTHER ACQUAINTANCE ☐ OTHER, SPECIFY:	☐ UNKNOWN ☐ NOT APPLICABLE

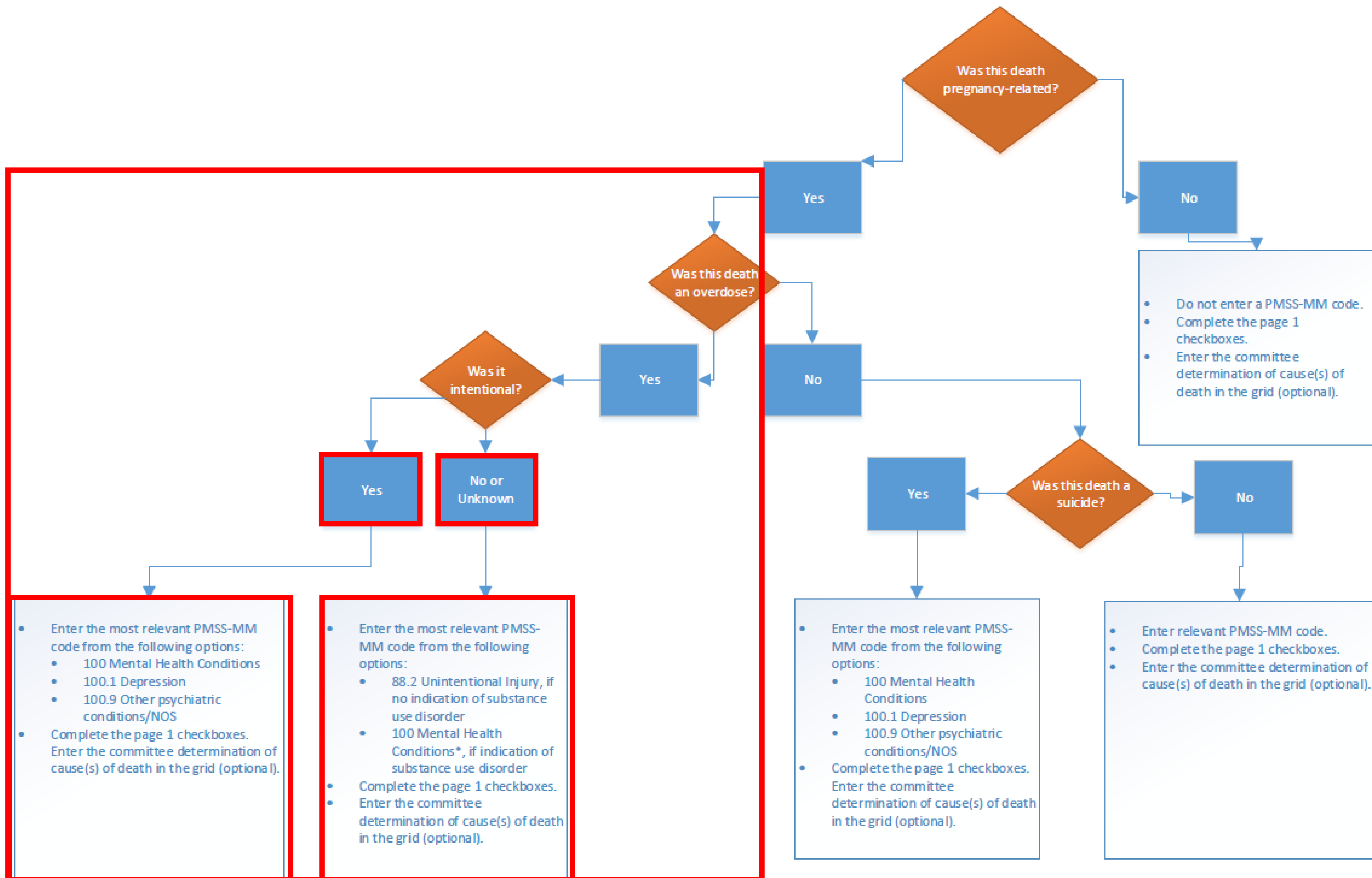

Was this death pregnancy-related?
Yes
No
Do not enter a PMSS-MM code.
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Was this death an overdose?
Ye
No
Was it intentional?
Yes
No or Unknown
Was this death a suicide?
Yes
No
Enter the most relevant PMSS-MM code from the following options:
100 Mental Health Conditions
100.1 Depression
100.9 Other psychiatric conditions/NOS
Complete the page 1 checkboxes. Enter the committee determination of cause(s) of death in the grid (optional).
Enter the most relevant PMSS-MM code from the following options:
88.2 Unintentional Injury, if no indication of substance use disorder
100 Mental Health Conditions*, if indication of substance use disorder
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Enter the most relevant PMSS-MM code from the following options:
100 Mental Health Conditions
100.1 Depression
100.9 Other psychiatric conditions/NOS
Complete the page 1 checkboxes. Enter the committee determination of cause(s) of death in the grid (optional).
Enter relevant PMSS-MM code.
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).

Q: How do we capture overdoses?

- A: It depends.
  - If not pregnancy-related, complete the checkboxes on page 1.
  - If pregnancy-related, complete the checkboxes on page 1 AND assign a PMSS-MM code using decision tree. Overdoses will fall under one of the following PMSS-MM codes:
    - 100 Mental Health Conditions
    - 100.1 Depression
    - 100.9 Other psychiatric conditions/NOS
    - 88.2 Unintentional Injury

DID **OBESITY** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **MENTAL HEALTH CONDITIONS** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
DID **SUBSTANCE USE DISORDER** CONTRIBUTE TO THE DEATH?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A **SUICIDE**?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN
WAS THIS DEATH A **HOMICIDE**?	☐ YES	☐ PROBABLY	☐ NO	☐ UNKNOWN

IF HOMICIDE, SUICIDE, OR ACCIDENTAL DEATH, LIST THE **MEANS OF FATAL INJURY**	☐ FIREARM ☐ SHARP INSTRUMENT ☐ BLUNT INSTRUMENT ☐ POISONING/ OVERDOSE ☐ HANGING/ STRANGULATION/ SUFFOCATION	☐ FALL ☐ PUNCHING/ KICKING/BEATING ☐ EXPLOSIVE ☐ DROWNING ☐ FIRE OR BURNS ☐ MOTOR VEHICLE	☐ INTENTIONAL NEGLECT ☐ OTHER, SPECIFY: ☐ UNKNOWN ☐ NOT APPLICABLE
IF HOMICIDE, WHAT WAS THE **RELATIONSHIP OF THE PERPETRATOR TO THE DECEDENT**?	☐ NO RELATIONSHIP ☐ PARTNER ☐ EX-PARTNER ☐ OTHER RELATIVE	☐ OTHER ACQUAINTANCE ☐ OTHER, SPECIFY:	☐ UNKNOWN ☐ NOT APPLICABLE


Was this death pregnancy-related?
Yes
No
Do not enter a PMSS-MM code.
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Was this death an overdose?
Yes
No
Was it intentional?
Yes
No or Unknown
Enter the most relevant PMSS-MM code from the following options:
100 Mental Health Conditions
100.1 Depression
100.9 Other psychiatric conditions/NOS
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Enter the most relevant PMSS-MM code from the following options:
88.2 Unintentional Injury, if no indication of substance use disorder
100 Mental Health Conditions*, if indication of substance use disorder
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Was this death a suicide?
Yes
No
Enter the most relevant PMSS-MM code from the following options:
100 Mental Health Conditions
100.1 Depression
100.9 Other psychiatric conditions/NOS
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).
Enter relevant PMSS-MM code.
Complete the page 1 checkboxes.
Enter the committee determination of cause(s) of death in the grid (optional).

MMRIA REVIEW to ACTION

Q: We're a small state; what can we really report on?

- A: Important information!
  - Aggregate over multiple years as needed
  - Descriptive analyses (don't report %'s if denominator < 10)
  - Use Fisher's Exact test when testing for statistical significance
  - Recommendations!

Q: How can we contribute to a 2019 report?

- A: Start conversations with your committee and other stakeholders now
  - Data use agreement needed?
  - Conversations with Legal team? Leadership? Others?
- Call for data summer 2018

MMRIA

REVIEW to ACTION

Discussion

Discussion

MMRIA

REVIEW to ACTION

Upcoming Events

- ACOG-CDC Maternal Mortality and Maternal Safety Meeting – April 29 in Austin, TX
- American College of Nurse Midwives – May 22 in Savannah, GA
- Call for Data for 2019 Report: summer 2018

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