NH AIM/ERASE Monthly Webinar
October 13, 2022

WELCOME!

- We will begin shortly
- **Please type your name and email into the chat box for attendance**
- Reminder, we will be recording this session
- Please mute your line upon entering and chat in your comments or questions
- Vicki Flanagan will monitor the chat box and call on you to unmute yourself
- If you have trouble connecting, please email **karen.g.lee@Hitchcock.org**

Next Steps for NH –AIM:
Bundle Metrics and the AIM Data Portal

NH AIM/ERASE Monthly Webinar
October 13th, 2022

Tim Fisher, MD, MHCDS
Daisy Goodman, DNP, MPH, CNM,
David Laflamme, PhD, MPH
Carolyn Nyamasege, PhD, MPH, MS

Agenda

- NH AIM Team introductions
- Maternal morbidity and Mortality in NH
- AIM bundle basics
  - Bundle Structure
  - Implementation resources
  - Measurement
  - AIM Data Portal
- Next steps for NH -AIM

Team Introductions

-Maggie Coleman, MPH
-Tim Fisher, MD, MHCDS
-Vicki Flanagan, RN, MS
-David Laflamme, PhD, MPH
-Carolyn Nyamasege, PhD, MPH, MS
-Daisy Goodman, DNP, MPH, CNM

AIM

Alliance for Innovation on Maternal Health

A quality improvement initiative to support best practices that make birth safer, improve maternal health outcomes and save lives.

https://saferbirth.org/

Underlying Causes of Pregnancy-Related Deaths in the United States (2017-2019)

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Table 4. Underlying causes of pregnancy-related deaths*, overall and by race or ethnicity[1], data from Maternal Mortality Review Committees in 36 US states, 2017–2019[1]
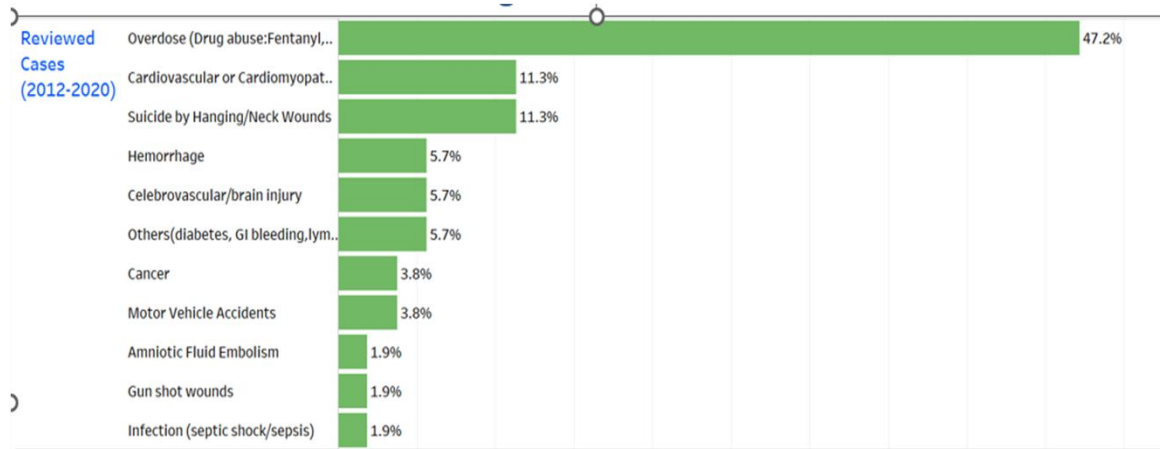
	Total		Hispanic		Non Hispanic									
					AIAN		Asian		Black		NHOPI		White	
	N	%	n	%	n	%	n	%	n	%	n	%	n	%
Mental health conditions[2]	224	22.7	34	24.1	2	-	1	3.1	21	7.0	0	-	159	34.8
Hemorrhage[3]	135	13.7	30	21.3	2	-	10	31.3	33	10.9	1	-	53	11.6
Cardiac and coronary conditions[4]	126	12.8	15	10.6	1	-	7	21.9	48	15.9	0	-	49	10.7
Infection	91	9.2	15	10.6	1	-	0	0.0	23	7.6	0	-	49	10.7
Embolism-thrombotic	86	8.7	9	6.4	0	-	2	6.3	36	11.9	0	-	34	7.4
Cardiomyopathy	84	8.5	5	3.6	0	-	2	6.3	42	13.9	0	-	33	7.2
Hypertensive disorders of pregnancy	64	6.5	7	5.0	0	-	1	3.1	30	9.9	1	-	22	4.8

October 13, 2022

Trost et al. 2022. Pregnancy-Related Deaths: Data from Maternal Mortality Review Committees in 36 US States, 2017–2019.
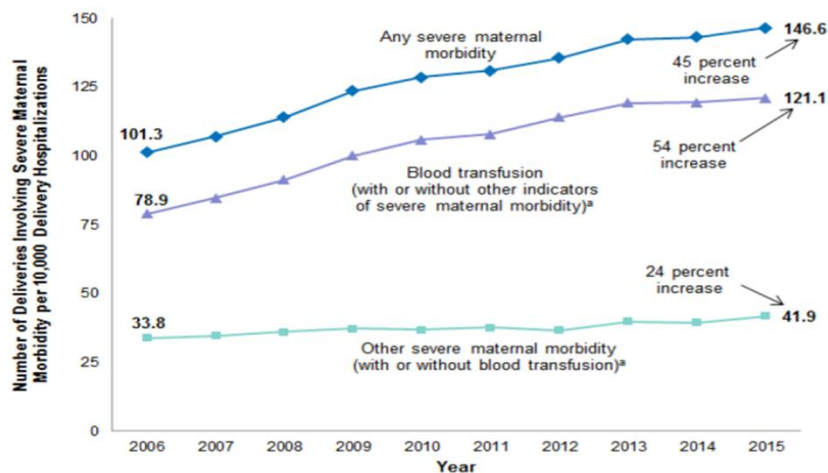
What Do NH Data Show Us About Maternal Mortality In Our State?

Maternal Mortality Review Committee Findings (2012-2020)

Reviewed Cases (2012-2020)		
Overdose (Drug abuse:Fentanyl,...		47.2%
Cardiovascular or Cardiomyopat..		11.3%
Suicide by Hanging/Neck Wounds		11.3%
Hemorrhage		5.7%
Celebrovascular/brain injury		5.7%
Others(diabetes, GI bleeding,lym..		5.7%
Cancer		3.8%
Motor Vehicle Accidents		3.8%
Amniotic Fluid Embolism		1.9%
Gun shot wounds		1.9%
Infection (septic shock/sepsis)		1.9%

Severe Maternal Morbidity (SMM) in the U.S.

Figure 1. Trends in delivery hospitalizations involving severe maternal morbidity, 2006-2015

Number of Deliveries Involving Severe Maternal Morbidity per 10,000 Delivery Hospitalizations

Any severe maternal morbidity — 101.3 ... 146.6 — 45 percent increase

Blood transfusion (with or without other indicators of severe maternal morbidity)[a] — 78.9 ... 121.1 — 54 percent increase

Other severe maternal morbidity (with or without blood transfusion)[a] — 33.8 ... 41.9 — 24 percent increase

Year: 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015

Fingar KR, etal; HCUP Statistical Brief #243, September 2018

Poll: Which drivers of maternal mortality (MM) and severe maternal morbidity (SMM) is your hospital working on now?

Indicator	We are actively working on improving care in this area	We do not have any current initiatives in this area	We do not have current initiatives in this area but want to start
Obstetric Hemorrhage			
Severe maternal hypertension			
Sepsis			
Maternal substance use			
Maternal cardiac conditions			
Safe prevention of primary Cesarean birth			
Perinatal mental health			

NH Severe Maternal Morbidity (SMM) And Blood Products Transfusion (BPT) (Annual Count)
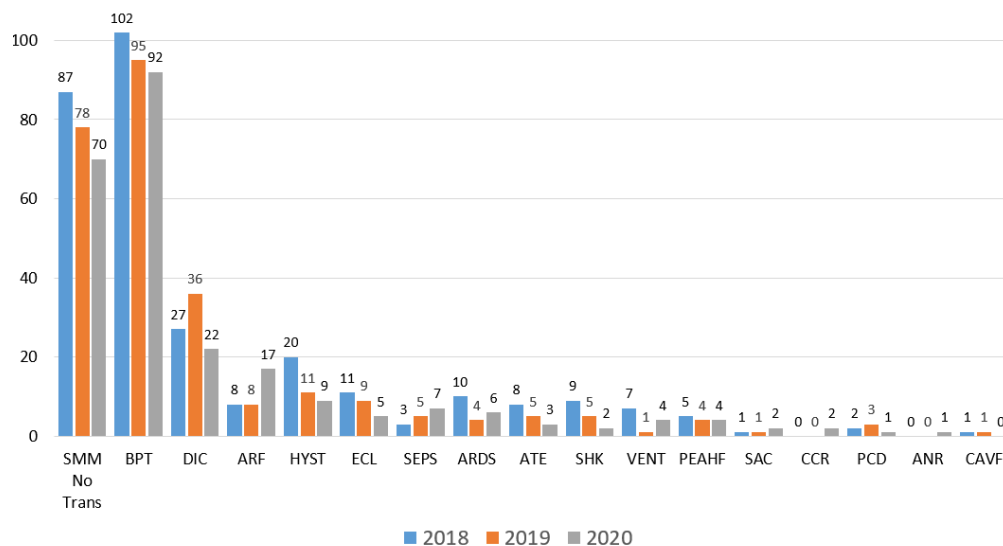
Count for AMI, TT,AFE,HFADSP, SCDWC was 0 in 2019 and 2020

Data Source: Hospital Discharge Data

**New Hampshire Rates of Severe Maternal Morbidity
with or without Blood Product Transfusions (BPT)
per 10,000 live births**

Year	SMM with BPT	SMM without BPT
2018	147.7	75.6
2019	145.2	69.1
2020	141.6	62.35

■ SMM with BPT ■ SMM without BPT
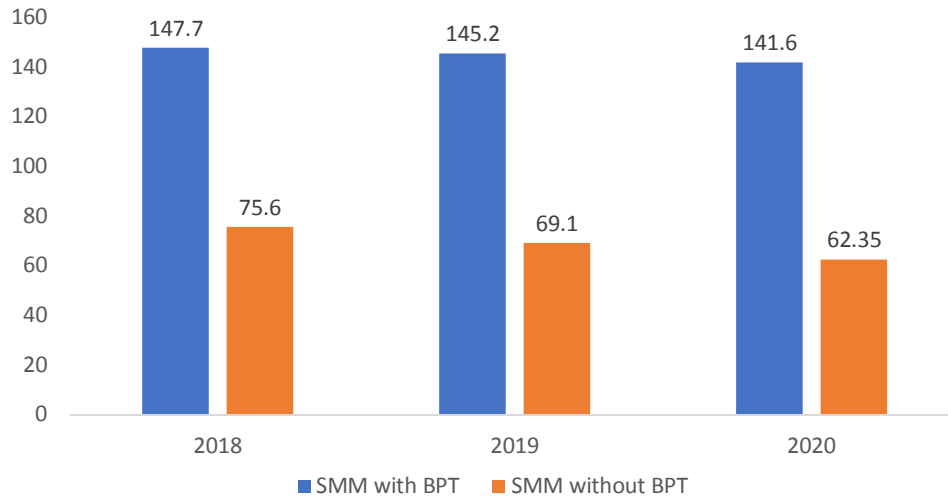
2018 data includes data from 3 hospitals which have since closed their
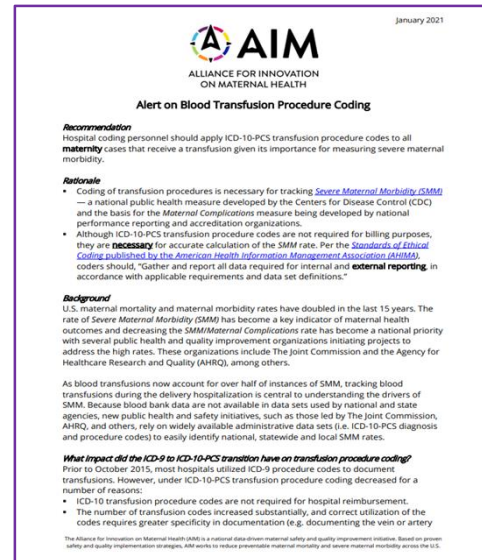birthing centers, 2019 has 2 more and 2020 data has 1 more hospital.

Which SMM Indicators Does AIM Track?

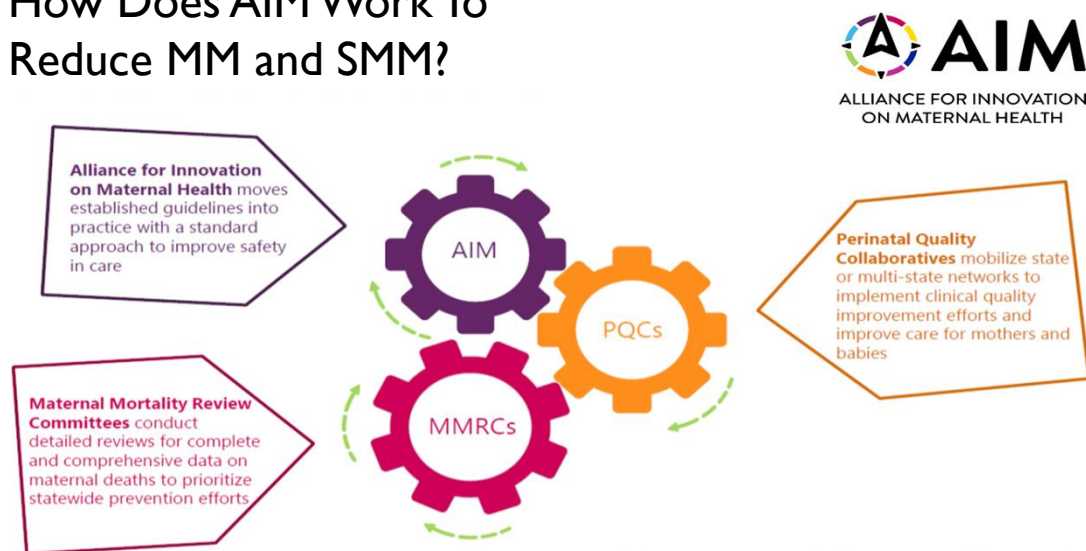| Diagnoses	Procedures
1: Acute myocardial infarction 2: Aneurysm 3: Acute renal failure 4: Adult respiratory distress syndrome 5: Amniotic fluid embolism 6: Cardiac arrest/ventricular fibrillation 7: Conversion of cardiac rhythm 8: Disseminated intravascular coagulation 9: Eclampsia 10: Heart failure/arrest during surgery or procedure 11: Puerperal cerebrovascular disorders 12: Pulmonary edema / Acute heart failure 13: Severe anesthesia complications 14: Sepsis 15: Shock 16: Sickle cell disease with crisis 17: Air and thrombotic embolism	18: Blood transfusion (excluded) 19: Hysterectomy 20: Temporary tracheostomy 21: Ventilation

AIM Resource On Optimizing Coding For Blood Transfusion Procedures

AIM-SMM-Data-Alert-Blood-Transfusions_January2021.pdf (saferbirth.org)

*Birth & Ethnicity Data Quality

How Does AIM Work To Reduce MM and SMM?

Obstetric Hemorrhage

Severe Hypertension in Pregnancy

Safe Reduction of Primary Cesarean Birth

Cardiac Conditions in Obstetrical Care

Care for Pregnant and Postpartum People with Substance Use Disorder

Perinatal Mental Health Conditions - in development

Postpartum Discharge Transition

Sepsis in Obstetrical Care – in development

Anatomy of a patient safety bundle

READINESS ⊕

RECOGNITION & PREVENTION ⊕

RESPONSE ⊕

REPORTING & SYSTEMS LEARNING ⊕

RESPECTFUL, EQUITABLE & SUPPORTIVE CARE ⊕

AIM Patient Safety Bundle Resources
Ex: *Care of pregnant and parenting people with substance use disorders*

https://saferbirth.org/psbs/care-for-pregnant-and-postpartum-people-with-substance-use-disorder/

Maternal Morbidity Structural Measure

- Does hospital or health system participate in a Statewide and/or National Perinatal Quality Improvement Collaborative Program aimed at improving maternal outcomes during labor, delivery and post-partum care, <u>and</u> has implemented patient safety practices or bundles related to maternal morbidity to address complications, including, but not limited to: hemorrhage, severe hypertension/preeclampsia or sepsis?

[response options: Yes, No, Does not Provide Maternity Care]

❖ CMS considering additional maternal care quality measures for future years

Inpatient PPS Final Rule for FY 2023

- In-patient Quality Reporting (IQR) Program:

<u>Birthing Friendly Designation.</u> In conjunction with Vice President Harris's Maternal Health Day of Action announcement in late 2021, CMS will establish a publicly reported designation indicating hospital quality and safety for maternity care. Beginning in the fall of 2023, CMS will award this designation to hospitals that attest positively to both questions in the IQR's previously adopted Maternal Morbidity Structural Measure. This measure asks whether a hospital (1) is currently participating in a structured state or national Perinatal Quality Improvement Collaborative and (2) implementing patient safety practices or bundles as part of these initiatives. CMS notes that it intends to propose in future rulemaking a more robust set of criteria for this designation

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Bundle Measurement

Image: https://southwestttrc.org/blog/2022/model-telehealth-improvement
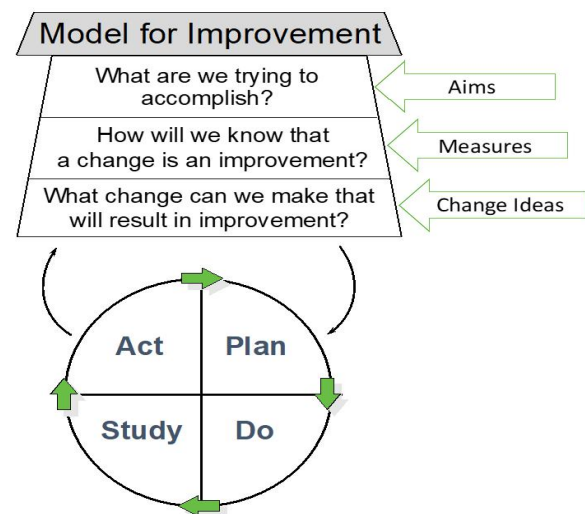
What kind of data are we uploading to the AIM Data Center?

- Hospital demographics, including
  - Name of hospital
  - Rurality
  - Number of deliveries
  - Contact person
- Bundle-specific measures
  - Structure
  - Process
  - Outcome
- Process and outcome data disaggregated by race/ethnicity
- SMM data
- All data aggregated, no PHI
- Each hospital will have access to its own data, but not that of other specific facilities

How Will Data Be Collected?

The NH-AIM team will work with each hospital to operationalize a data collection plan and will upload data to portal for all hospitals.

- **State surveillance measures:** From Vital Records, Maternal Mortality Review Committee, hospital discharge data

- **Structure measures:** used to assess whether standardized, evidence-based systems, protocols, and materials have been established to improve patient care. Through adoption and regular review of structures, facility teams improve their readiness to respond to an obstetric event and provide high quality care to every patient, every time.

- **Process measures:** Process measures are used to monitor the adoption and implementation of evidence-based practices.

- **Outcome measures:** can be used to examine changes that occur in the health of an individual, group of people, or population that can be attributed to the adoption of clinical best practices, including severe maternal morbidity and the rate of nulliparous, term, singleton, vertex Cesarean births.

Process and Outcome measures should be disaggregated by race, ethnicity, and other social and structural drivers of health to examine inequities.

Slide 1

Examples of Process Measures

Data sources:
-Vital records
-Hospital tracking (P4)
-Interview with hospital contacts (P5, 6)

Metric	Name	Description	Notes
P4	Percent of pregnant and postpartum people with SUD who received Naloxone **counseling**	**Report N/D** **Denominator:** Pregnant and postpartum people with a diagnosis of **substance use disorder** during their birth hospitalization **Numerator:** Among the denominator, those with documentation of **counseling** for Naloxone prenatally or during their birth admission *Refer to O4 for complementary measure*	Disaggregate by race/ethnicity
P5	Provider and Nursing Education – **Substance Use Disorders**	**Report proportion completed (estimated in 10% increments – round up)** At the end of this reporting period, what cumulative proportion of OB providers and nurses (including L&D and PP) has received within the last 2 years an education program on **care for pregnant and postpartum people with substance use disorders**?	
P6	Provider and Nursing Education – **Respectful and Equitable Care**	**Report proportion completed (estimated in 10% increments-round up)** At the end of this reporting period, what cumulative proportion of inpatient clinical OB providers and nursing staff has received within the last two years an education program on **respectful and equitable care**?	

Slide 2

How Will The NH AIM Team Report Process Measures In The AIM Data Center?

Structure Measures

Data source:

Interview with hospital contact

- Likert type scale

Structure

Metric	Name	Description	Notes
S1	Resource Mapping/ Identification of Community Resources	**Report Initial Completion Date** Has your hospital created a **comprehensive list of community resources**, customized to include resources relevant for pregnant and postpartum people, that will be shared with all postpartum inpatient nursing units and outpatient OB sites?	• Resource list should be updated annually. • Resource list should include OUD/SUD treatment resources as well as mental health resources and allow for customization based on patient population (e.g. BIPOC).
S2	Patient Event Debriefs	**Report Start Date** Has your department established a standardized process to conduct debriefs with patients after a severe event?	• Include patient support networks during patient event debriefs, as requested. • Severe events may include the TJC sentinel event definition, severe maternal morbidity, or fetal death.
S3	General Pain Management Guidelines	**Report Completion Date** Has your hospital implemented **post-delivery and discharge pain management prescribing guidelines for routine vaginal and cesarean births** focused on limiting opioid prescriptions?	
S4	OUD Pain Management Guidelines	**Report Completion Date** Has your hospital implemented specific **pain management and opioid prescribing guidelines for patients with a diagnosis of opioid use disorder**?	
S5	Validated Verbal Screening Tools and Resources Shared with Prenatal Care Sites	**Report Completion Date** Has your hospital shared with all its prenatal care sites **validated verbal screening and follow up tools for diagnosis of opioid use and substance use disorders**?	Follow up tools include Screening, Brief Intervention and Referral to Treatment (SBIRT) resources.

Reporting Structure Measures In The AIM Data Center

[AIM Structure Measure Update and Transition Packet (July 2022) (saferbirth.org)](saferbirth.org)

Example: SUD bundle metrics

State Surveillance Measures

Data sources:
-Vital records
-Hospital discharge data

State Surveillance

Metric	Name	Description	Notes
SS1	Substance use disorders among pregnant and postpartum people	**A. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages **Numerator:** Among the denominator, those with any a diagnosis of **substance use disorder** **B. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages **Numerator:** Among the denominator, those with a diagnosis of **opioid use disorder**	Disaggregate by race/ethnicity
SS2	Severe Maternal Morbidity (SMM) (including transfusion codes) among people with SUD	**A. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages, with **substance use disorder** **Numerator:** Among the denominator, those with any SMM code **B. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages, with **opioid use disorder** **Numerator:** Among the denominator, those with any SMM code	Disaggregate by race/ethnicity

https://saferbirth.org/wp-content/uploads/CPPSUD_DCP_Final_V1_2022.pdf

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Additional State Surveillance Measures

Data sources:
-Hospital discharge data
-Maternal Mortality Review Committee

Metric	Name	Description	Notes
SS3	Severe Maternal Morbidity (SMM) (excluding transfusion codes) among people with SUD	**A. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages, with **substance use disorder** **Numerator:** Among the denominator, all those with any non-transfusion SMM code **B. Denominator:** All people during their birth hospitalization, excluding those with ectopic pregnancies and miscarriages, with **opioid use disorder** **Numerator:** Among the denominator, those with any non-transfusion SMM code	Disaggregate by race/ethnicity
SS4	Proportion of pregnancy associated deaths due to overdose	**Denominator:** Total pregnancy-associated deaths **Numerator:** Pregnancy-associated deaths due to overdose	Disaggregate by race/ethnicity

Which SMM Indicators Does AIM Track?

Diagnoses	Procedures
1: Acute myocardial infarction 2: Aneurysm 3: Acute renal failure 4: Adult respiratory distress syndrome 5: Amniotic fluid embolism 6: Cardiac arrest/ventricular fibrillation 7: Conversion of cardiac rhythm 8: Disseminated intravascular coagulation 9: Eclampsia 10: Heart failure/arrest during surgery or procedure 11: Puerperal cerebrovascular disorders 12: Pulmonary edema / Acute heart failure 13: Severe anesthesia complications 14: Sepsis 15: Shock 16: Sickle cell disease with crisis 17: Air and thrombotic embolism	18: Blood transfusion (excluded) 19: Hysterectomy 20: Temporary tracheostomy 21: Ventilation

Obstetric Hemorrhage

Severe Hypertension in Pregnancy

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https://saferbirth.org/psbs/obstetric-hemorrhage/

OBSTETRIC HEMORRHAGE

READINESS	⊕
RECOGNITION & PREVENTION	⊕
RESPONSE	⊕
REPORTING & SYSTEMS LEARNING	⊕
RESPECTFUL, EQUITABLE & SUPPORTIVE CARE	⊕

QUICK LINKS

- Printable Bundle (2022) (PDF)
- Bundle Implementation Details (2022) (PDF)
- Bundle Implementation Resources (2022) (PDF)
- Obstetric Hemorrhage Implementation Webinar
- Obstetric Hemorrhage Data Collection Plan (2022)
- Obstetric Hemorrhage Change Package (2022) (PDF)

Activate Window

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https://saferbirth.org/psbs/cardiac-conditions-in-obstetrical-care/

CARDIAC CONDITIONS IN OBSTETRICAL CARE

For the purpose of this Bundle, cardiac conditions refer to disorders of the cardiovascular system which may impact maternal health. Such disorders may include congenital heart disease or acquired heart disease, including but not limited to cardiac valve disorders, cardiomyopathies, arrhythmias, coronary artery disease, pulmonary hypertension and aortic dissection.

READINESS	⊕
RECOGNITION & PREVENTION	⊕
RESPONSE	⊕
REPORTING & SYSTEMS LEARNING	⊕
RESPECTFUL, EQUITABLE & SUPPORTIVE CARE	⊕

QUICK LINKS

- Printable Bundle (PDF)
- Cardiac Conditions in Obstetrical Care Element Implementation Details (PDF)
- Cardiac Conditions in Obstetrical Care Bundle Implementation Resources (PDF)
- Cardiac Conditions in Obstetrical Care Implementation Webinar (Video)
- Cardiac Conditions in Obstetrical Care Core Data Collection Plan (PDF)
- Cardiac Conditions in Obstetrical Care Change Package (PDF)

Discussion: Next Steps For 2022-2023

(1) Continue to expand SUD bundle implementation and data collection?

(2) Select another bundle for statewide implementation?
  - Should this choice be based on NH SMM data?
  - Should this choice be based on NH MM data?

(3) Provide data collection and quality working sessions?
  - Learn with/from each other to solve challenges to bundle data collection
  - Ensure blood products transfusion coding is adequate
  - Improve accuracy of race and ethnicity data

NNEPQIN Fall Conference | November 17-18, 2022

Bringing Best Practices for Perinatal and Neonatal Care to Our Communities
Omni Mount Washington Resort, Bretton Woods NH

Join us November 16-18, 2022 at the Annual NNEPQIN Conference
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PERINATAL QUALITY IMPROVEMENT NETWORK

AIM
ALLIANCE FOR INNOVATION
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NH DIVISION OF
Public Health Services
Improving health, preventing disease, reducing costs for all