MI AIM Maternal Sepsis Bundle Supplemental

Sepsis in obstetrics care is a new AIM patient safety bundle that the Michigan Alliance for Innovation on Maternal Health (MI AIM) collaborative adopted in January 2024. MI AIM historically created its own maternal sepsis bundle starting in January 2021. The collaborative sees value in the continued collection of Michigan's sepsis specific protocols, beyond what National AIM has requested. See below for Michigan-specific process measures being collected within KeyMetrics and contact the MHA Keystone Center team at help@miaim.org with questions.

Serious infection screening, formerly called a "sepsis screening," checks vital signs and/or a patient's white blood cell count. This is used to identify which patients need a bedside and laboratory evaluation to determine if there is an infection requiring treatment and/or end organ injury indicating sepsis. The screening name has been updated to avoid further confusion (it was being assumed that if the sepsis screening was positive, that patient had a diagnosis of sepsis). It is a two-step screening and evaluation process.

Sepsis: *Patients with confirmed sepsis have an infection with end organ injury. There is an incidence of maternal sepsis in 1:500 to 1:1000 patients with a mortality rate of 10-25%.*

For the purposes of this data collection, a patient with a positive serious infection screen is not considered to have sepsis (unless they also have end organ injury). Only patients with sepsis should be included in the denominator for antibiotics and fluids metrics. Labs should be sent on anyone with a positive serious infection screen to evaluate for sepsis (end organ injury).

MI AIM Maternal Sepsis Bundle Process Measure Questions

Screening – (NUM) # of patients screened for serious infection
(DENOM) # of patients audited

Review a list of maternal health OB patients and sample at least 20 cases to verify if a serious infection screening was completed.
    This list will account for all patients admitted to the Labor and Delivery unit.

Guideline: Was a serious infection screening completed upon admission? If yes, count in the numerator and denominator. If no, count only in denominator.

*__**The same patient may be abstracted for antibiotics, fluids, and labs**__*

Antibiotic –   (NUM) # of patients with appropriate antibiotics administered within one (1) hour of sepsis diagnosis (if more than one is ordered, all must be given within one hour)
(DENOM) # of patients audited

Review a list of maternal health OB patients who were diagnosed with sepsis and sample all cases (up to 20) for appropriate antibiotics within one hour of sepsis diagnosis.
        This list will account for only patients that were positive for sepsis.

Guideline: Were appropriate antibiotics administered within one (1) hour of sepsis diagnosis? If yes, count in the numerator and denominator. If no, count only in denominator.

Fluids –   (NUM) # of patients administered fluids at 30 ml/kg within three (3) hours of sepsis diagnosis
(DENOM) # of patients audited

Review a list of maternal health OB patients who were diagnosed with sepsis and sample all cases (up to 20) for appropriate fluids within three (3) hours of sepsis diagnosis.
        This list will account for only patients that were positive for sepsis.

Guideline: Were fluids administered at 30 ml/kg within three (3) hours of sepsis diagnosis? If yes, count in the numerator and denominator. If no, count only in denominator.

Labs –   (NUM) # of patients who had sepsis confirmation labs sent and resulted
(DENOM) # of patients audited

Review a list of maternal health OB patients who screened positive for infection and sample all cases (up to 20) for labs sent and resulted showing positive sepsis diagnosis.
        This list will account for only patients that were positive for sepsis.

Guideline: Were sepsis confirmation labs sent and resulted? If yes, count in the numerator and denominator. If no, count only in denominator.

Sepsis Codes ICD-10 codes–

Please reference the ICD-10 codes advised by National AIM.

Frequently Asked Questions –

Please visit the MI AIM Data Abstraction Page for FAQ resources.