



WellSpan Health: Maternal Sepsis Initiative



Problem Statement

Maternal Sepsis is a leading cause of Severe Maternal Morbidity (SMM)². At WellSpan Health, maternal sepsis screening, workflows and data were evaluated with multidisciplinary teams for process improvement.

Sepsis Obstetrics Scoring System			
Temperature (Centigrade) (°C) * 38.5 - 38.9 C (101.3 - 102 F)	1	SpO2% blood oxygen saturation 85 - 89%	3
Systolic blood pressure (mmHg) > 90	0	White blood count uL < 1	4
Heart Rate (beats per minute) 150 - 179	3	% Immature Neutrophils > 10%	2
Respiratory Rate (breaths per minute) 25 - 34	1	Lactic Acid (mmol/L) <= 4	2
Calculate Sepsis Obstetrics Score (S.O.S) 16			

Current screening utilizes Sepsis Obstetrics Scoring System to identify patients. If a patient meets criteria, a central alert team is notified. The central alert team assists OB providers in the management of the patient condition.

Measures

- Maternal Sepsis patient trends to include race, ethnicity, payor, hospital etc.
- Maternal Sepsis timing via a transparent system dashboard
- Response to maternal sepsis including time to treatment, time to blood culture, first antibiotic administered etc.

Focus Areas

Education

- OBGYN Grand Rounds: Management of OB Sepsis
- Required annual clinical team education OB Sepsis Module

Data

- OB Sepsis Dashboard development
- Individualized hospital reports that include patient level detail such as race, ethnicity, language and primary payor to identify potential disparities
- Reporting includes response to sepsis management (Blood culture timing, first antibiotic administration etc.)



Screening

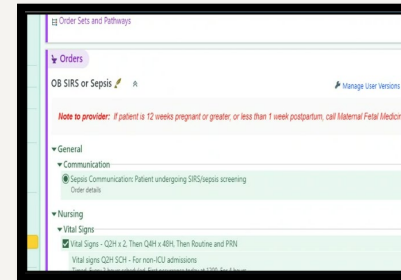
- Order set updates completed with multidisciplinary teams

Management

- Audit completed of OB Sepsis patients 2019-2024
- Identified that intervention often happened before central alert screening fired
- Opportunity noted to adjust to more "OB" friendly screening tool in EHR

Key Interventions

- Interdisciplinary team developed to revise Chorio Order Set and OB Sepsis Order set



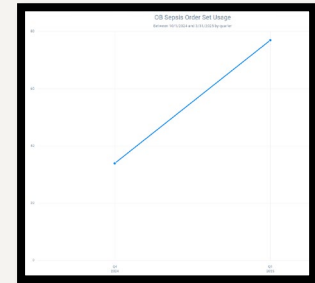
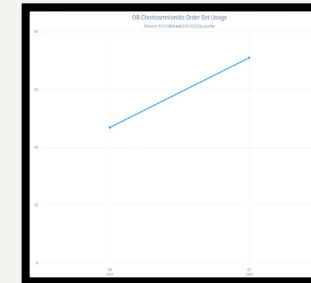
- OB Sepsis PowerBI data reporting adjusted to include pregnant or within 3 days postpartum.
- Mandatory OB Sepsis education for Providers, APP's and RNs within service line.
- Expanded education offering to include OBGYN Grand Rounds
- Quality Data shared and discussed with teams and senior leadership monthly at system meetings
- OB Sepsis cases reviewed for process improvement at entity Quality meetings with multidisciplinary teams
- OB Sepsis data reviewed at WCSL workgroup and Quality Management Councils

Status

Completed:

- Health Equity and Patient Voice Interventions
- Multidisciplinary reviews for process improvements
- Updated Order Sets
- Accessible data for teams via OB Sepsis Dashboard and Reports

Results



“On this topic, our team would most like to learn from our peers...”

Experiences with utilizing the Modified Early Obstetrics Warning Score (MEOWS) for Obstetric patients.

References

1. Applying an Equity Lens to Performance Improvement. Institute for Healthcare Improvement. <https://www.ihl.org/communities/blogs/applying-an-equity-lens-to-performance-improvement>. Accessed September 2024.
2. Sepsis in Obstetric Care. Alliance for Innovation on Maternal Health. <https://saferbirth.org/pubs/sepsis-in-obstetric-care/>. Accessed September 2024.
3. Gibbs R, Bauer M, Olvera L, Sakowski C, Cape V, Main E. Improving diagnosis and treatment of maternal sepsis: a quality improvement toolkit. Stanford, CA: California Maternal Quality Care Collaborative.
4. Sepsis in Obstetric Care: Element Implementation Details. Alliance for Innovation on Maternal Health. https://saferbirth.org/wpcontent/uploads/AIM_Bundle-EID_SOC_Final_V1_2022.pdf. Published online 2022.