

Golden Hour Impact: Revolutionizing Maternal Sepsis Response through Quality Improvement

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INTRODUCTION/BACKGROUND

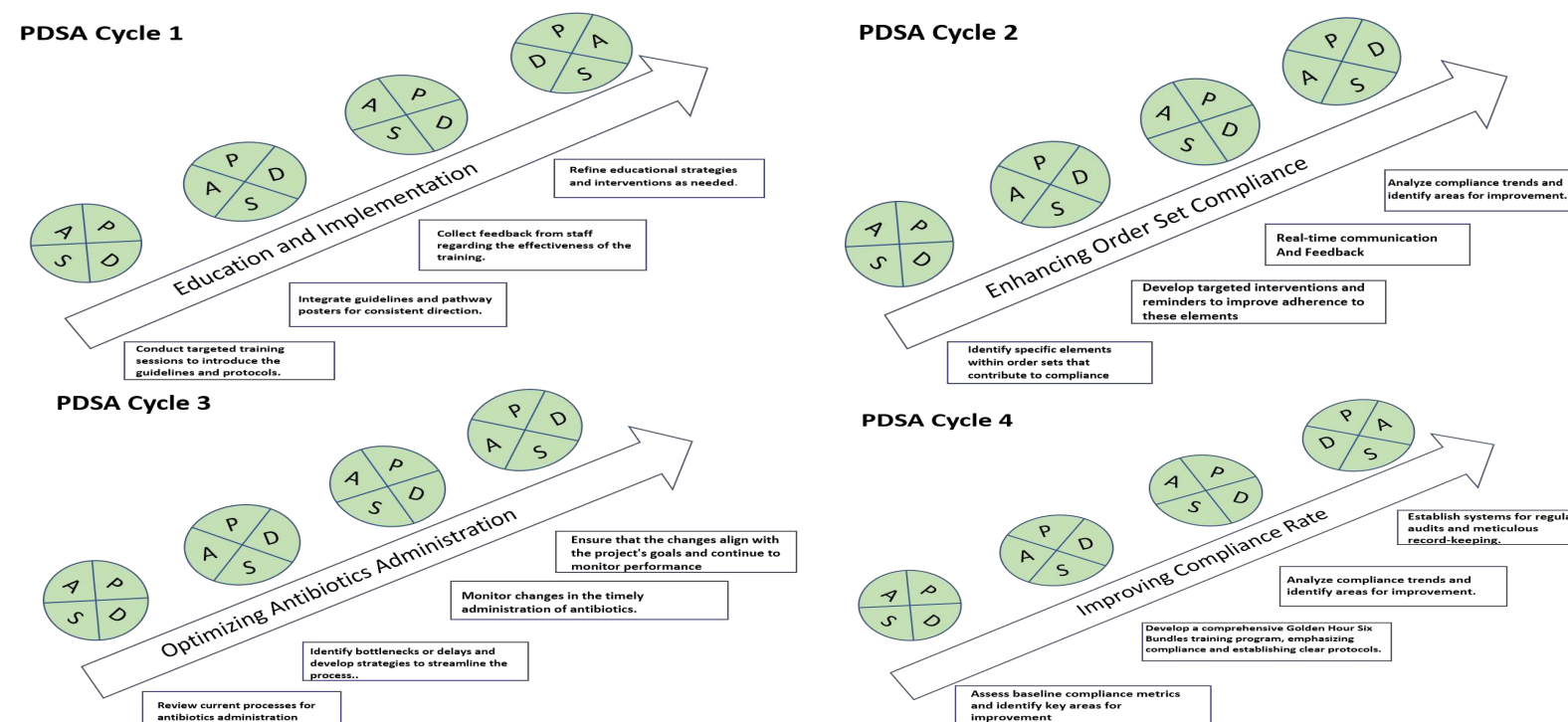
Maternal sepsis is a significant cause of maternal mortality globally, with one-third of HMC deaths in 2016 attributed to this condition. The National Patient Safety Collaborative (NPSC) has identified sepsis as a major public health concern and includes monitoring of suspected maternal sepsis in their program. Pregnant women, who are more vulnerable to infections, can rapidly progress from systemic inflammatory response syndrome (SIRS) to severe sepsis, underscoring the need for early recognition and management.

OBJECTIVE

The primary objective is to comprehensively investigate and enhance patient safety within the OB/GYN ED by implementing personalised interventions to facilitate early detection and response to sepsis through achieving and sustaining 100% compliance with sepsis six bundles.

METHODS :

From January 2019 to December 2023, the initiative to enhance maternal sepsis care in the OB/GYN ED followed the PDSA Model. The project began with baseline data collection in 2019 to establish historical benchmarks for maternal sepsis-related mortality and morbidity. Interventions were then implemented based on the findings from the baseline data, with continuous monitoring and assessment of compliance with the Golden Hour Six Bundles. Adjustments and improvements were made based on ongoing evaluation, culminating in the final year of the project (2023) with the aim of achieving and sustaining 100% compliance. The project employed a strategic approach, establishing clear objectives and implementing customised interventions to detect and respond to sepsis early.



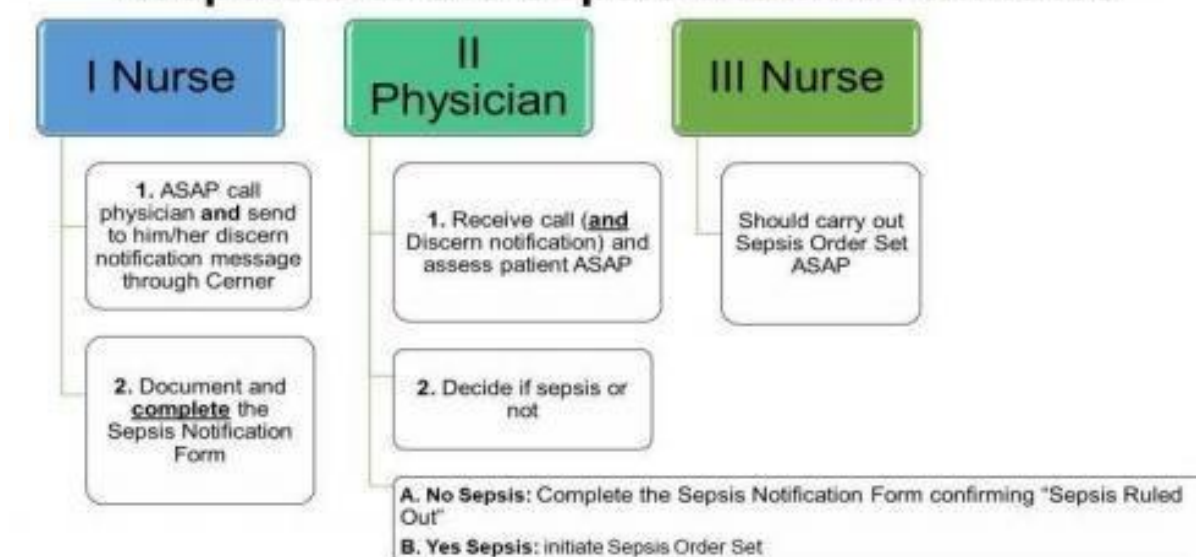
CONCLUSIONS: The project's structured approach to maternal sepsis care has resulted in sustained compliance rates, improved staff readiness, and enhanced resources and guidelines. These achievements have significantly enhanced the delivery of maternal sepsis care within our department, leading to better patient outcomes, increased patient safety, and the establishment of a culture of excellence in healthcare provision.

RESULTS:

The implemented interventions, resulting in a significant reduction in maternal sepsis-related morbidity, as well as consistent adherence to sepsis order sets

- Achieved 100% compliance rate with Golden Hour Six Bundles, meeting initial project objective.
- Sustained 100% compliance over two years through meticulous approach and staff training.
- Order set compliance increased from 51% (2019) to sustained 100% (2022-2023), enhancing care quality.
- Timely antibiotics administration improved from 87% (2021) to sustained 100% (2022-2023) for maternal sepsis.
- Morbidity rate reduced from 1.5% (2019) to sustained 0% (2021-2023), highlighting profound impact on patient outcomes.
- Maternal sepsis kits integrated into Pyxis machines across all departments, ensuring accessible resources for improved care.

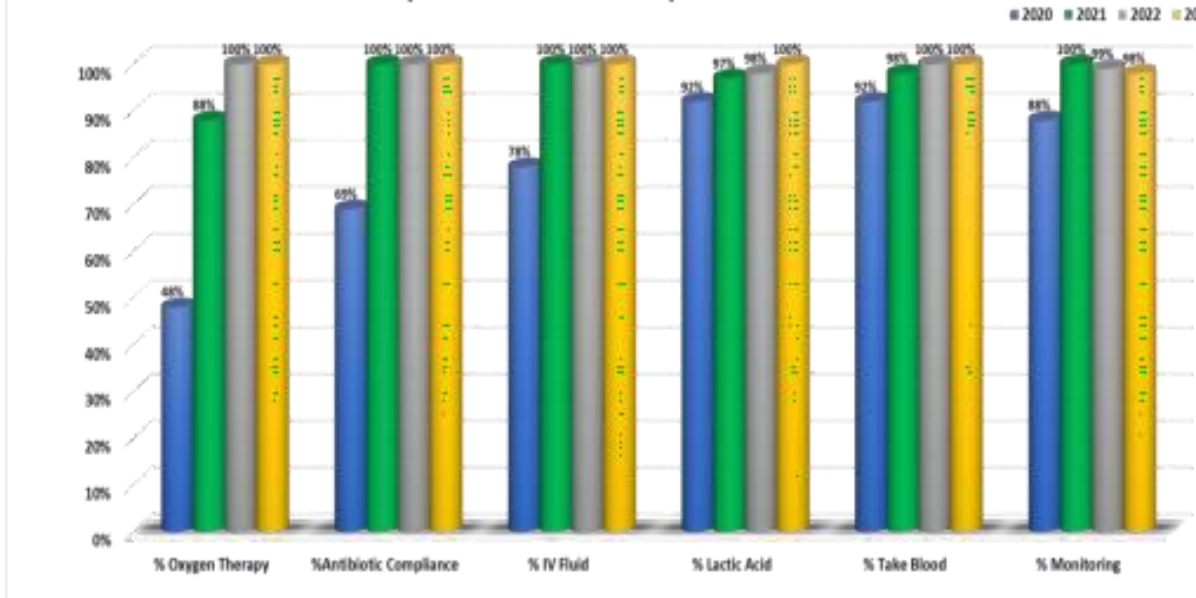
Response to the Sepsis within 60 minutes



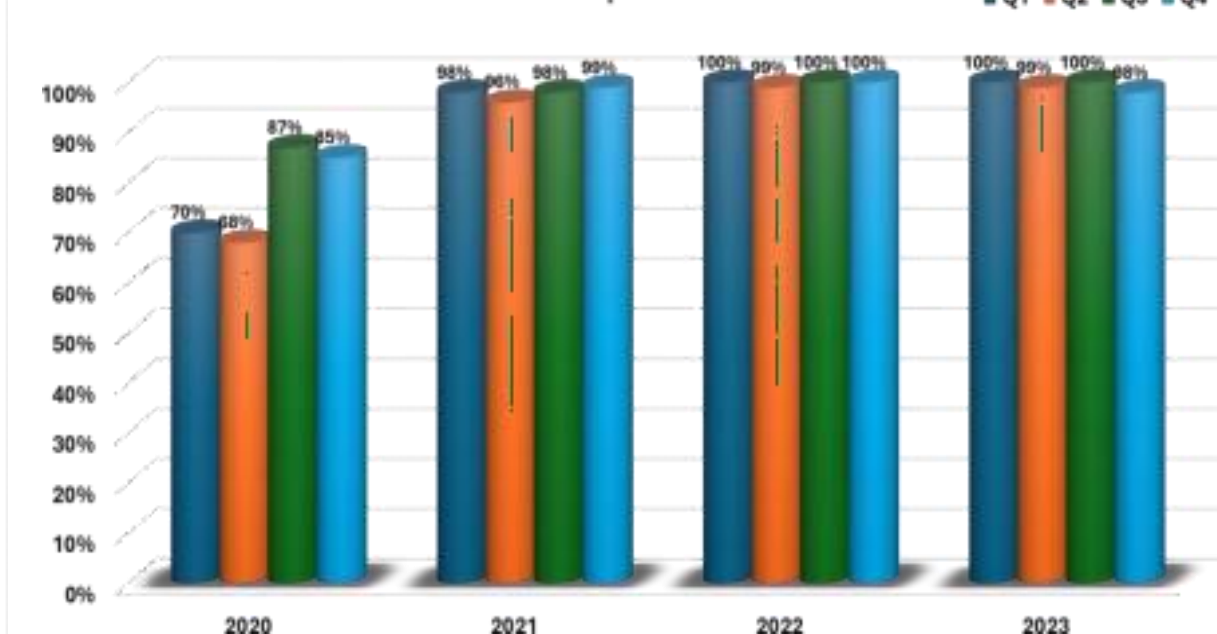
Expected Improvements



Maternal Sepsis Six Bundles Compliance 2020-2023



Order Set Compliance 2020-2023



REFERENCES

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