

Perinatal Quality Collaborative of North Carolina

Antibiotic Stewardship / Neonatal Sepsis Charter (ASNS)



ASNS CHARTER

Problem Statement:

Sepsis in a newborn is a serious and potentially life threatening condition. Currently, there are varied approaches to identification and management of at-risk infants. These approaches differ in defining at risk infants, predictive value and timing of laboratory tests, antibiotics prescribed for treatment and duration of antibiotic administration. This variation introduces the potential for less than optimal quality of care, excess unnecessary exposure of newborns to antibiotics and higher costs of care.

Neonatal exposure to antibiotics is not without risk. The CDC estimates that nearly 50% of antibiotics are unnecessary or suboptimally effective as prescribed and multiple literature sources have demonstrated an increased risk of NEC, nosocomial infection and mortality with neonatal antibiotic exposure.

Mission:

Current literature suggests that Antibiotic Stewardship programs are beneficial in optimizing pharmacokinetics of medications, reducing adverse effects of antibiotic exposure and antibiotic resistance, enhancing successful treatment of infection and improving patient safety.

PQCNC Antibiotic Stewardship perinatal quality improvement teams (PQITs) will share strategies and lessons learned to develop potentially better practices and employ QI methodologies to establish a standard of care within North Carolina hospitals including:

- Providing the education and support necessary to develop standards of care for identification and management of infants at risk for early onset sepsis in NC hospitals
- Engaging families to further education on the necessity and use of antibiotics.

Aim:

Increase consistency in management of newborns at risk for early onset sepsis in NC hospitals with a focus on judicious use of antibiotics in this population when clearly indicated.

Scope:

Working with PQITs in participating centers, the initiative will focus on identifying and treating infants at risk for early onset sepsis within the first 3 postnatal days.

Method:

Invite teams from Newborn Nurseries and Neonatal Intensive Care Units to participate in the collaborative organized by PQCNC to include learning sessions, web conferencing and coaching to support PQITs to use quality improvement strategies to implement elements of the action plan.

Measurement Strategy:**Outcomes/Goal Statement:**

To implement an antibiotic stewardship program and a standard of care at PQCNC hospitals that:

- defines at risk criteria for neonatal early onset sepsis
- defines laboratory tests and timing to collect to aid in identifying values related to neonatal sepsis
- defines administration and duration of antibiotics to treat suspected or confirmed neonatal sepsis
- decreases the number of patients treated for sepsis past 3 days of life in the absence of positive blood or CSF cultures by 20%



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