

Saint Luke's Care

Of Saint Luke's Health System of Kansas City Missouri

Obstetrics Evidence-based Practice Team

Dr. George Lu, Physician Chair

Prophylaxis of Maternal Group B Strep: An Evidence- based Approach

A White Paper
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Saint Luke's Health System

*The Best Place to Get Care
The Best Place to Give Care*



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Background

The management of maternal Group B Strep prophylaxis is well documented in the literature. The Center for Disease Control (CDC) has published guidelines on the care and treatment of maternal group B Strep since 2002. However, many practicing physicians do not adhere to these published guidelines of "evidence-based practice". Defining and implementing evidence-based practices can meet many challenges. The Saint Luke's Care OB Evidence-based Practice Team (EPT) sought to overcome some challenges of change and implement consistent prophylaxis for GBS in the laboring patient.

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Goal of Initiative:

Align care delivery and management of Group B strep disease for the OB population within Saint Luke's Health System.

Challenges

- Acceptance of the need to replace “time honored” practices with evidenced based, best practices.
- Education of all physicians regardless of Saint Luke's Care (SLC) membership
- Variances in availability of 24 hour pharmacy coverage.
- Objection to increased cost of drug delivery product

Proposed Solutions

- The Evidence-based Practice Team (EPT) met as a group to define the standard for care. A literature search revealed the CDC recommendations for treatment.
- Cost analysis, review of current practices within the system, and survey of practices around the country were done.
- An order set was developed reflecting CDC recommendations. Existing admission orders were revised, referring to the GBS orders when appropriate.
- Pharmacy representation researched options for timely antibiotic availability within appropriate standards established for dispensing and mixing medications. The standard within the system is that all medication is mixed and dispensed by the pharmacy. A vendor meeting these expectations was located.
- Pharmacy representation contacted each of the facility pharmacies to address issues related to the availability and need for penicillin as a first line drug therapy.

Application of Solutions

- Physician education:
 - CME on order set based on CDC guidelines was developed and made available to all physicians.

Nursing education included:

- SLC nursing representatives provided information regarding practice changes and new drug delivery products for all staff. Educational “fact sheets” and process diagram for drug delivery product were developed and distributed to all SLC nursing reps and educators for each nursing unit. These materials were implemented through personal demonstration, poster presentation, and in-servicing through staff meetings.

Pharmacy education included:

- Pharmacy representative announced the changes regarding Penicillin preparation and dispensing at staff meetings throughout health system. Email notification of the changes was also distributed to all staff. One-on-one demonstrations with process steps occurred specifically with lead technicians and midnight technicians.

Monitoring Outcomes

Saint Luke's Care is now monitoring the use of Penicillin for this population. They will also be monitoring the use of the order set and bring these utilization reports back to the OB EPT on a regular basis.

Results / Conclusion

All of the system hospitals now have an evidence-based order set for this patient population. They also have a mechanism within their pharmacy to obtain and distribute the Penicillin. The nursing staff has had specific education about ordering the drug from the pharmacy as well as how to administer to the patient. Pretest versus post test scores in CME demonstrate an anticipated change in physician's treatment practices.

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References

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