

Objective

To reduce the occurrence of Nulliparous, Term, Singleton, Vertex (NTSV) cesarean rates to 20% or less by July 2022.

Background

Maternal morbidity and mortality rates in the US are greater than other developed countries and continue to be on the rise. The CDC estimates that 2/3 of pregnancy related deaths in the US are preventable. While many factors contribute to these rates, over use of cesarean deliveries is a key factor. Using this information as a driver, Sanford Sheldon Medical Center accepted an invitation to be a part of the Iowa Maternal Quality Care Collaborative to safely reduce primary cesarean rates. The 18 month collaborative began in May of 2021. Sanford Sheldon's NTSV rate was 25.6 at the start of the project.

Actions Taken

Our primary driver for this project was early recognition of arrest of dilation or descent. PDSA cycles were used through this phase of study while we introduced new documents and checklists to assist the LDR staff and physicians, allowing them to use the same criteria and verbiage.

June 2021- focused on initiating the use of the Shields algorithm and Spinning Babies moves. This was studied using PDSAs through November 2021 when we noted an abrupt decrease in our NTSV rates.

Because we had great success with our main driver, we added an additional piece which was Family Centered Care in the OR. With this, the pregnant person's labor support remains with her through the entire process in the OR suite with the exception of general anesthesia.

Spinning Down The Rates:

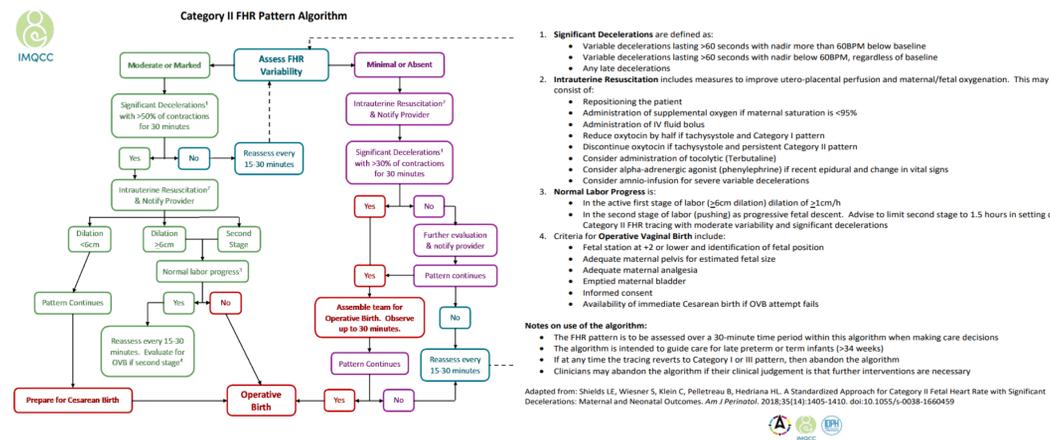
Safe reduction of Primary Cesareans

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Metrics

NTSV cesarean rate at the initiation of the collaborative (May 2021) was 25.6%.

Our goal was to reach 20% or less by July 2022.



ACOG/SMFM Consensus Guidelines for Non-Progressive Labor

Failed Induction of Labor (or arrest of latent phase labor):

- Current dilation is <6cm
- Membranes ruptured
- Oxytocin administered for at least 12-18 hours after membrane rupture, or longer if maternal and fetal status allow

Arrest of Dilation:

- Current dilation is 6cm or greater
- Oxytocin administration
- At least 4 hours of adequate uterine contractions (200 MVUs / strong to palpation) or at least 6 hours of inadequate uterine contractions (<200 MVUs)

Arrest of Descent:

- Full cervical dilation achieved (10cm)
- Membranes ruptured
- Active maternal pushing nulliparas for 4 hours with an epidural or 3 hours without an epidural. Active maternal pushing multiparas 3 hours with an epidural or 2 hours without an epidural
- Assessed or attempted operative vaginal delivery (if fetal station is +2 or lower)

Reference: American College of Obstetricians and Gynecologists (College); Society for Maternal-Fetal Medicine, Caughey AB, Cahill AG, Guise JM, Rouse DJ. Safe prevention of the primary cesarean delivery. Am J Obstet Gynecol. 2014;210(3):179-193. doi:10.1016/j.ajog.2014.01.026



Analysis

Over the 18 month period, our rates decreased with the new practices.

Key takeaways-

*Nursing staff developed confidence to interpret and present non-reassuring FHR tracing concerns to the PCP.

*Spinning Babies provided tools to assist with patient positioning and stretches through out fetal descent and delivery.

*Relias EFM course polished nursing skills for determining fetal events such as accelerations, decelerations and variables, thus allowing effective and timely use of the Shields algorithm.

*Utilizing the arrest of descent labor checklist assisted nurses and physicians to physically see whether continuous progress was present in the laboring process.

Next Steps

*New labor and delivery nurses will take an EFM course, attend a Spinning Babies workshop, learn the Shields algorithm.

*Discussing Category I, II, and III heart tracings has become normal verbiage at the bedside.

*Family friendly cesareans continue to be our standard of care.

*Monthly quality and case reviews are completed for NTSV cesareans and peer reviewed when necessary.

