



Optimizing Maternal Outcomes: Reducing Perineal Lacerations with Evidence Based Second Stage Labor Management

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BACKGROUND:

Third and fourth degree lacerations are a serious and potentially preventable adverse outcome of vaginal delivery, which can lead to lifelong health consequences such as chronic pain, urinary or bowel disturbances, and sexual dysfunction.

The Agency for Healthcare Research and Quality (AHRQ) Patient Safety Indicator #19 indicates a national expected rate of 23.665 for obstetric trauma without instrumentation.

PROBLEM:

The rate of third and fourth degree lacerations at Sentara Princess Anne Hospital (SPAH) hit an all time high rate of 32.577 in 2013.

Current practice management of second stage was inconsistent amongst physicians and nurses, and not evidence based.

PURPOSE:

The purpose of this performance improvement activity was to evaluate whether an interdisciplinary, evidence based second stage labor management strategy affects the incidence of third and fourth degree perineal lacerations during delivery.

METHODS:

MD BUY-IN: April-June 2014

- Evidence based practice reviewed and discussed with physician team.
- Physician champion identified to support initiative.

SURVEY OF NURSING: June 2014

- Variations in practice, including perineal massage use/techniques, positioning, assessment of fetal station/position.
- Potential barriers of change, including MD support and concerns that new techniques will not prove beneficial.

AWARENESS OF NURSING: June-September 2014

- Staff unaware of high incidence of 3rd and 4th degree lacerations until data shared at meetings and Unit Partnership Council.
- Nurse champions identified.

METHODS CONTINUED:

EDUCATION: July-September 2014

- July 2014 Purposeful Positioning during Active and Second Stage Labor Exercise to:
 - Identify the importance of positioning in labor.
 - Demonstrate the various positioning options using the Affinity 4 Birthing Bed.
 - Demonstrate competence in installing, utilizing, and removing the squat bar.
 - Improve recognition of fetal cephalic positions.
- September 2014 Key Points Reviewed at L&D Staff Meeting:
 - No evidence to support perineal massage in 2nd stage.
 - No evidence to support use of mineral oil; water soluble lubricant sufficient.
 - Evidence to support open glottis, or closed glottis, 6-8 second bearing down efforts following instinct with guidance as needed.

IMPLEMENTATION: July-September 2014

- Staff reluctant for additional paperwork, algorithm and worksheet available as reference.
- New equipment obtained: squat bar and peanut balls.

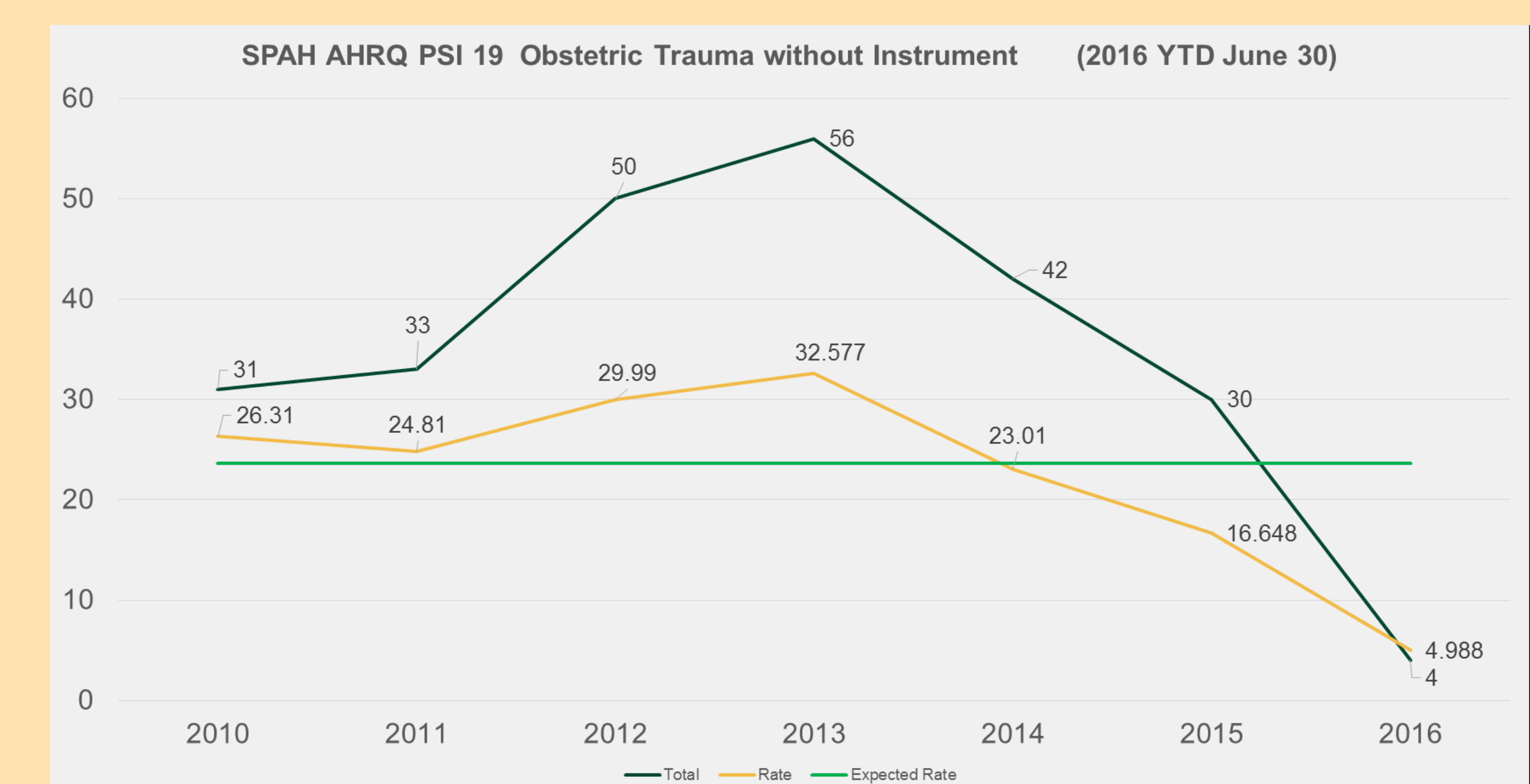
DATA REVIEW: Ongoing

- Data shared with nursing staff and physicians to encourage continued practice changes.
- Ongoing unit focus to maintain culture change.



OUTCOMES:

SPAH saw a significant decrease in AHRQ PSI #19 following an interdisciplinary, evidence based approach to managing the second stage of labor.



SIGNIFICANCE:

Through improvement in the management of second stage of labor, we are preventing complications related to complex pelvic floor dysfunction in later years. Further research is indicated to determine if the actual interventions were correlated to an improvement in the rate, or if the interdisciplinary attention to the problem alone produced the significant decrease in third and fourth degree lacerations.

ACKNOWLEDGEMENTS:

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