Impact of a Physician Dashboard on Episiotomy Utilization at William P. Clements Jr. University Hospital
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Background
Severe (third and fourth degree) perineal lacerations:
- Markers for pelvic floor dysfunction
- Associated with anal incontinence and pain during intercourse
- Obstetric quality measure (TJC)

Episiotomy is a major risk factor
- Routine use associated with 2x as many severe perineal lacerations compared to selective episiotomy use (Rodriguez 2008)
- Restricted use of episiotomies is recommended by ACOG

Episiotomy utilization in routine delivery should be <5.5% by national benchmarks (AHRQ)
- High amount of variation of utilization among providers is reported (Low 2000)
- Physician-specific factors like local professional norms, experiences in training, and personal provider preference drive variation (Viswanathan 2005)

Problem
Currently, individual providers do not receive reports on personal and group performance of obstetric benchmarks including episiotomy utilization from Clements University Hospital.

Aim Statement
The aim of this project is to create a dashboard that reports physicians’ performances of selected obstetric interventions.

Goal
To reduce the episiotomy utilization by individual providers who are outside of the national benchmark by 10% and reduce the current institutional rate by 25% in 6 months

Methods and Intervention
Create and distribute a physician-specific dashboard to the Ob/Gyn physicians and CUH Labor & Delivery staff
- Report to physicians using personal letters and email notifications
- Post dashboards in physician lounge, nurses’ lounge, and midwives’ call rooms
- Dashboard distributed July 16, 2015

Project measures episiotomy utilization by specific providers in operative and spontaneous deliveries without shoulder dystocia.
- Baseline data (January-July 2015) collected via a review of EPIC records to identify providers, types of deliveries, and episiotomy performance.
- Collect and analyze post-intervention data from August 2015-January 2016

Quality Improvement Tools

Results and Conclusions

<table>
<thead>
<tr>
<th>Risk of 3rd/4th Laceration: Pre-Intervention</th>
<th>With Episiotomy</th>
<th>Without Episiotomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deliveries with 3rd/4th Lacerations</td>
<td>4</td>
<td>9</td>
</tr>
<tr>
<td>Total # of Deliveries</td>
<td>52</td>
<td>458</td>
</tr>
<tr>
<td>Rate of 3rd/4th Lacerations</td>
<td>7.69%</td>
<td>1.97%</td>
</tr>
<tr>
<td>P Value = 0.01; Odds Ratio (95% CI):</td>
<td>4.1 (1.2, 14.0)</td>
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</tbody>
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1. Our data shows the risk of 3rd or 4th degree laceration was approximately 4-fold higher when an episiotomy was cut.

<table>
<thead>
<tr>
<th>Incidence of 3rd/4th Lacerations</th>
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<tbody>
<tr>
<td>Pre-Intervention</td>
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<tr>
<td>Post-Intervention</td>
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<tr>
<td>P Value = 0.48</td>
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2. Our results demonstrate that utilization of a dashboard can result in significant improvement in modifiable physician behaviors such as episiotomy utilization.

3. The overall incidence of severe lacerations did not decrease with a fall in episiotomy utilization, suggesting that multiple obstetric factors contribute to severe perineal lacerations.

Next Steps
- Continue collecting post-implementation data with patient-specific information for providers.
- Update and distribute dashboard on a quarterly interval.
- Plan the addition of other quality measures in the dashboard that reflect modifiable behaviors by providers, specifically primary cesarean section rates in nulliparous, singleton, vertex, term gestations.