PROVIDE 2.0 Data Webinar:
Baseline Data Report &
New Web-Based Reporting System

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Partnering to Improve Health Care Quality
for Mothers and Babies
Agenda

- Understand your report
- How to use your baseline report to choose your focus area(s)
- New Online Reporting System
- Changes to the chart audit sheet for prospective data collection
Understand your Report
How does your hospital compare to others?

OLD Format

Box-Plots

Percentage of NTSS Cesarean Deliveries

Fixed Y-axis
How does your hospital compare to others?

NEW Format

% NTSV cesareans - Compare your hospital with others

Color-coded quartiles

Dynamic y-axis
The following is included in the baseline report:

### NTSV cesarean rate report
- Monthly NTSV cesarean rate  pg. 3
- 2018 NTSV cesarean rate and benchmarks  pg. 4

### Balancing Measures
- Low 5 minute APGAR score  pg. 5
- Complications of the term newborn  pg. 6

### Chart Audit Report
- All categories  pg. 8
- Induction  pg. 11
- Labor Dystocia/ Failure to progress  pg. 21
- Fetal Heart Rate Concerns  pg. 28
How does your hospital compare to others?
How does your hospital compare to others?

% NTSV cesareans - Compare your hospital with others

- Your hospital % NTSV cesarean
- The highest 25% of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

Percentage of NTSV cesareans over quaters:
- Qtr 1 2018: 31%
- Qtr 2 2018: 30%
- Qtr 3 2018: 32%
- Qtr 4 2018: 30%
- Qtr 1 2019: 29%
- Qtr 2 2019: 29%
- Qtr 3 2019: 25%
- Qtr 4 2019: 22%
How does your hospital compare to others?

NEW Format

% NTSV cesareans - Compare your hospital with others

- Your hospital % NTSV cesarean
- The highest 25% of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

<table>
<thead>
<tr>
<th>Qtr 1</th>
<th>Qtr 2</th>
<th>Qtr 3</th>
<th>Qtr 4</th>
<th>Qtr 1</th>
<th>Qtr 2</th>
<th>Qtr 3</th>
<th>Qtr 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>31%</td>
<td>30%</td>
<td>32%</td>
<td>30%</td>
<td>29%</td>
<td>29%</td>
<td>25%</td>
<td>22%</td>
</tr>
</tbody>
</table>

Partnersing to Improve Health Care Quality for Mothers and Babies
How does your hospital compare to others?

NEW Format

% NTSV cesareans - Compare your hospital with others

- Your hospital % NTSV cesarean
- The highest 25% of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

Qtr 1  Qtr 2  Qtr 3  Qtr 4  Qtr 1  Qtr 2  Qtr 3  Qtr 4
2018  2019
31%  30%  32%  30%  29%  29%  25%  22%
How does your hospital compare to others?
NEW Format

% NTSV cesareans - Compare your hospital with others

- Your hospital % NTSV cesarean
- The highest 25% of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

Quarterly data from 2018 to 2019.
How does your hospital compare to others? NEW Format

2018 Low-Risk First-Birth NTSV (Nulliparous Term Singleton Vertex) Cesarean Rate, Compare your hospital (in blue) to other PROVIDE Hospitals

Joint Commission Reporting $>$ 30.0%

National Target $=$ 23.9%

SOURCE: Birth Certificate
How does your hospital compare to others?
Only during Baseline

%NTSV Cesarean Deliveries with Induction that Met ACOG/SMFM Criteria

- Hospital 3BV
- Max. Value
- 75th Percentile
- Median
- 25th Percentile
- Min. Value

- Your hospital % met criteria
- The highest 25 % of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

Quarter 3 2019
How does your hospital compare to others?

Only during Baseline

To compare your hospital to others:
Look at the line **over** your hospital % and refer to the legend

- **Your hospital % met criteria**
- The highest 25% of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

e.g. This hospital met criteria for NTSV cesareans with induction for 50% of its cases. Their rate is among the highest 50% of hospitals.
To compare your hospital to others:
Look at the line over your hospital % and refer to the legend.

- Your hospital % met criteria
- The highest 25 % of hospitals
- The highest 50% of hospitals
- The lowest 50% of hospitals
- The lowest 25% of hospitals

13%
Qtr 3
2019

e.g. This hospital met criteria for NTSV cesareans with induction for 13% of its cases. Their rate is among the lowest 25% of hospitals.
How to use your report to choose your hospital’s focus area?

A tale of one PROVIDE hospital
Which category captures the most NTSV cesareans cases in your hospital?

-> Induction (38%) followed by FHRC (33%)
Overall 2: Percent of All Cesarean Deliveries Performed that Met Criteria During Baseline

Cs category: “Other” excluded as it cannot be assessed

What percent of all NSTV cesareans met criteria? -> 63%
Overall 3: Percent of Cesarean Deliveries Performed NOT Meeting Criteria by Category during Baseline

- Cs category: “Other” excluded as it cannot be assessed

Cases in which category fail the most to meet criteria? --> Induction (68%)
For the Induction category, which group by cervical dilation at delivery fails the most to meet criteria? -> NTSV cs with a cervical dilation <6 cm at delivery (37%)
% NTSV Cesarean Deliveries with Induction

<table>
<thead>
<tr>
<th>Cervix Dilation at Delivery</th>
<th>Did NOT meet Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>80%</td>
<td>80%</td>
</tr>
<tr>
<td>60%</td>
<td>60%</td>
</tr>
<tr>
<td>40%</td>
<td>40%</td>
</tr>
<tr>
<td>20%</td>
<td>20%</td>
</tr>
<tr>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

Cervix Dilation at Delivery:
- Qtr 3 2019: 16% <6 cm, 34% 6-9 cm, 46% 10 cm

Did NOT meet Criteria:
- Qtr 3 2019: 43% Unknown, 43% <6cm NOT Met, 8% 6-9 cm NOT Met, 7% 10 cm NOT Met

Met Criteria:
- Qtr 3 2019: 37%
Most of the NTSV cesareans with Induction that were < 6cm at the time of delivery failed to meet criteria! What % met criteria and how does it compare to others? -> Only 23% of this cases met criteria. 25% of hospitals have higher rates.
Is a cervical ripening agent used when bishop score is < 8?

-> Only for 50% of induction cases. 75% of hospitals have higher rates.
For the labor dystocia category, which group by cervical dilation at delivery fails the most to meet criteria? -> NTSV cs with a cervical dilation of 10 cm (38%)
-> 63% of Labor Dystocia cases met criteria. The hospital rate is higher than 75% of hospitals.
% NTSV Cesareans with FHRC
Only 56% of this FHRC cases met criteria. 75% of hospitals have higher rates.
Sample Hospital Baseline Conclusions

**Induction** 43% NTSV c/s with Induction met ACOG/SFMFM criteria

- In patients <6 cm, only 23% met criteria (25% of hospitals are doing better)
- Bishops scores unfavorable for the majority of Inductions. Cervical ripening agent is only being used in 50% of cases

**Dystocia/ FTP (Past Focus Area)**

- 63% NTSV c/s with Dystocia that met ACOG/SFMFM Criteria

**FHT Concerns**

- 56% NTSV c/s with FHR Concerns met FPQC Criteria for Corrective Measures. 75% of hospitals meet criteria at higher rates.
Context Conclusions

Our hospital has significantly increased the number of inductions this year.

General lack of understanding regarding ACOG/SFMFM guidelines

- “6” is the new “4”

- Two areas of opportunity identified in the report: Induction and FHRC – now ADD your hospital context: culture, potential barriers and limitations.
Plan your work

Pick the focus area that you feel will be cultural acceptable to your unit

Perhaps pick your first PDSA cycle?

Have some early wins

Build on work already in progress

Use your 30-60-90 day plan and keep each other accountable
CHANGES ON ACCESSING REPORTS
Online Reporting System

Access your reports the next day after you submit your data

Study your NTSV cesarean rates by race-ethnicity, payer source

Compare your rates to comparable hospitals (e.g. NICU level, birth volume)
Online Reporting System

To access the system we need to create an individual password protected “USF account”

You can set up a PROVIDE account for up to 2 people

Submit your information ASAP and complete registration

Once your account is established: access and interact with your reports directly

We will continue to send PDF reports to hospitals that choose not to create an account
Online Reporting System

氅 Please report changes in your PROVIDE team, specially for those who have access to the online system.

氅 We need to remove their permission to access the report online

氅 We will ask you if there is a change to your team in the monthly structural measure
QUESTIONS?
Reports

• Baseline reports will be longer than monthly reports because it addresses all 3 focus areas. Once you have a focus area, only that data will be provided.

• Your monthly reports will have colored-quartile areas instead of the bar on top your hospital percent – easier to read
Prospective Data

❖ You may choose 1, 2, or all 3 to work on at once
❖ We strongly suggest working on one and moving to another focus area later.
❖ Complete audit form for up to 20 NTSV C-sections per month for each focus area(s) you have chosen
❖ Follow the same REDCap hyperlink
❖ Complete the REDCap form in the same manner as the baseline
CHANGES TO THE CHART
AUDIT SHEET
Induction Case Audit

- No longer reporting all elements of the cervical exam (effacement, station, consistency, position)
- Only report cervical dilation
Induction Case Audit

**INDUCTION CASE AUDIT**

Sample of cases that are NTSV per TJC and were induced labor and delivery.

ICD-10 codes for: *Fetal heart rate concern* or *Medical indication*

<table>
<thead>
<tr>
<th>Dilation at start of induction:</th>
<th>Dilation at last exam before c/s:</th>
<th>Bishop Score (calculate if necessary):</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unknown</td>
<td>Unknown</td>
<td></td>
</tr>
</tbody>
</table>

- As noted on chart, if not available:
- Calculate from cervical exam

**How to Calculate a Bishop Score:**

<table>
<thead>
<tr>
<th></th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Cervical Exam</td>
<td>0-1</td>
</tr>
<tr>
<td>Dilation</td>
<td>Closed</td>
</tr>
<tr>
<td>Effacement</td>
<td>0-30%</td>
</tr>
<tr>
<td>Station</td>
<td>-3</td>
</tr>
<tr>
<td>Consistency</td>
<td>Firm</td>
</tr>
<tr>
<td>Position</td>
<td>Posterior</td>
</tr>
</tbody>
</table>

Bishop’s Score =
## Induction Case Audit

### Induction Case Audit

Sample of cases that are NTSV per TJC and were induced labor and ICD-10 codes for: •Fetal heart rate concern or •Medical indication

<table>
<thead>
<tr>
<th>Dilation at start of induction:</th>
<th>Dilation at last exam before c/s:</th>
<th>Bishop Score as noted on chart:</th>
</tr>
</thead>
<tbody>
<tr>
<td>_______</td>
<td>_______</td>
<td>_______</td>
</tr>
<tr>
<td>□ Unknown</td>
<td>□ Unknown</td>
<td>□ Unknown</td>
</tr>
</tbody>
</table>

Was Cervix 6 cm or greater at time of Cesarean?

- □ If No, go to A.
- □ If Yes, go to B. □ Unknown

Completed labor dystocia checklist by nurse and doctor

□ Yes
□ No
# Labor Dystocia/Failure to Progress Case Audit

## LABOR DYSTOCIA/FAILURE TO PROGRESS CASE AUDIT

*Sample of cases that are NTSV per TJC and were spontaneous labor and had a cesarean for labor and delivery.*

**ICD-10 codes for:**
- Fetal heart rate concern
- Medical indication for cesarean section

<table>
<thead>
<tr>
<th>Dilation at time of admission:</th>
<th>Dilation at time of cesarean:</th>
<th>Was cervix 6 cm or greater at time of cesarean?</th>
</tr>
</thead>
<tbody>
<tr>
<td>_____</td>
<td>_____</td>
<td>□ Yes  →  □ No</td>
</tr>
<tr>
<td>□ Unknown</td>
<td>□ Unknown</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Completely dilated at time of cesarean?</th>
<th>Were there 3+hrs of pushing (4hrs with epidural?)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>□ No</td>
<td>□ Yes  →  □ No</td>
<td></td>
</tr>
<tr>
<td>□ If Yes  →</td>
<td>□ No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>□ Unknown</td>
<td></td>
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</tbody>
</table>

- Completed labor dystocia checklist by nurse and doctor  □ Yes  □ No
## Situational awareness

Discuss patient care and develop plans

Several members of the team act as “fresh pair of eyes”

“Second opinion” may safely avert an unnecessary cesarean

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### CMQCC Labor Dystocia Checklist (ACOG/SMFM Criteria)

1. **Diagnosis of Dystocia/Arrest Disorder (all 3 should be present)**
   - Cervix 6 cm or greater
   - Membranes ruptured, then
   - No cervical change after at least 4 hours of adequate uterine activity (e.g. strong palpation or MVUs > 200), or at least 6 hours of oxytocin administration with inadequate uterine activity

2. **Diagnosis of Second Stage Arrest (only one needed)**
   - No descent or rotation for:
     - At least 4 hours of pushing in nulliparous woman with epidural
     - At least 3 hours of pushing in nulliparous woman without epidural
     - At least 3 hours of pushing in multiparous woman with epidural
     - At least 2 hours of pushing in multiparous woman without epidural

3. **Diagnosis of Failed Induction (both needed)**
   - Bishop score ≥6 for multiparous women and ≥8 for nulliparous women, before the start of induction (for non-medically indicated/elective induction of labor only)
   - Oxytocin administered for at least 12-18 hours after membrane rupture, without achieving cervical change and regular contractions. *Note: At least 24 hours of oxytocin administration after membrane rupture is preferable if maternal and fetal statuses permit

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**CMQCC Labor Dystocia Checklist (ACOG/SMFM Criteria)**

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| □ Cervix 6 cm or greater  
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<th>2. Diagnosis of Second Stage Arrest (only one needed)</th>
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<tbody>
<tr>
<td>No descent or rotation for:</td>
</tr>
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<tr>
<td>□ At least 3 hours of pushing in nulliparous woman without epidural</td>
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<tr>
<td>□ At least 2 hours of pushing in multiparous woman without epidural</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>3. Diagnosis of Failed Induction (both needed)</th>
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<tbody>
<tr>
<td>□ Bishop score ≥6 for multiparous women and ≥8 for nulliparous women, before the start of induction (for non-medically indicated/elective induction of labor only)</td>
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<tr>
<td>□ Oxytocin administered for at least 12-18 hours after membrane rupture, without achieving cervical change and regular contractions. *Note: At least 24 hours of oxytocin administration after membrane rupture is preferable if maternal and fetal statuses permit</td>
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</table>
What do I do with the Study ID#?

Study ID #: continue adding sequentially

Every patient chart that you include for PROVIDE data submission should get a hospital assigned Study ID number.

Keep an on-site log of the study ID number and the medical chart number and/or identifiable patient information for data verification.
Which C/S Category to Choose?

Continue using the hierarchy:

 وإذا كانت الحالة المخبرية هي مخاوف معدل معدل القلب胎儿، فراجع جميع الحالات ذات "مخاوف معدل معدل القلب胎儿".

إذا كانت الحالة المخبرية هي诱导، فراجع جميع الحالات ذات "诱导" باستثناء الحالات ذات FHRC.

إذا كانت الحالة المخبرية هي مرض التحقق أو عدم التقدم في المراحل، فراجع جميع الحالات ذات "مرض التحقق/FTP" باستثناء الحالات ذات FHRC أو إذا كان الأم诱导.
Structural Measures
Collected Every Month by Survey

🔗 A link will be sent to the project lead

🔍 Report on:

- Labor guidelines, policy & procedures
- EHR Integration
- Multidisciplinary Case Review
- Staff Education on ACOG/SMFM labor management guidelines and techniques to promote vaginal birth (Providers, Nurses)
The FPQC team
Thank you!

Please don’t hesitate to contact us if you have questions fpqc@usf.edu or

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