

Promoting Primary Vaginal Deliveries Initiative

Lessons Learned from Implementing an Induction Policy

PROVIDE Collaborative Session Webinar

Partnering to Improve Health Care Quality for Mothers and Babies

Welcome!

- Please join by telephone to enter your Audio PIN on your phone or we will be unable to un-mute you for discussion.
- If you have a question, please enter it in the Question box or Raise your hand to be unmuted.
- This webinar is being recorded.
- Please provide feedback on our post-webinar survey.



Webinar Agenda

February 8, 2018

PROVIDE Announcements

- Lessons Learned from Implementing an Induction Policy
 - The Team at Tampa General Hospital
 - The Team at Sacred Heart Hospital Pensacola
- Questions/Comments



Reminders

- Data Collection or Submission Questions?
 - Estefania Rubio, Data Analyst erubio 1 @ health.usf.edu
- Clinical Questions? Interested in a Grand Rounds presentation or on-site consultation?
 - Annette Phelps <u>annettephelps.ap@gmail.com</u>
- Not sure where to send your question?
 - FPQC@health.usf.edu!



April 19-20, 2018

Florida Perinatal Quality Collaborative

ANNUAL CONFERENCE

Holiday Inn Tampa Westshore Tampa, FL



Session Topics

- State of the FPQC
- Reducing Health Disparities through Shared Decision Making
- Optimizing Physician Engagement
- Partnering with Patients and Families
- Neonatal Abstinence Syndrome
- Customization vs. Standardization of Care
- The Cesarean Epidemic

- Optimizing Enteral Nutrition for Preterm Infants
- Contraceptive Choice Counseling
- The ARRIVE Trial (39 Week Inductions study)
- Healthy Start Coalitions and Hospital QI
- Birth Certificate Accuracy and Perinatal Indicators
- PROVIDE



Early Bird
Registration
ends
March 31!



Neel Shah, MD, MPP Harvard's Ariadne Labs System Complexity and the Cesarean Epidemic



Heather Kaplan, MD, MSCE
Ohio Perinatal Quality
Collaborative
Neonatal Abstinence
Syndrome



Tara Bristol Rouse, MA
Perinatal Quality Collaborative
of North Carolina
Partnering with Patients &
Families to Transform QI



Ann Borders, MD
Illinois Perinatal Quality
Collaborative
Optimizing Physician
Engagement in QI



Maya Balakrishnan, MD, CSSBB Florida Perinatal Quality Collaborative Customization Versus Standardization of Care



Karen Harris, MD
ACOG District XII
Reducing Health
Disparities through Shared
Decision Making



Lessons Learned from Implementing an Induction Policy

Tampa General Hospital PROVIDE Team

Karen Bruder
Sherri Badia
Pat Barry
Frances Manali

Partnering to Improve Health Care Quality for Mothers and Babies

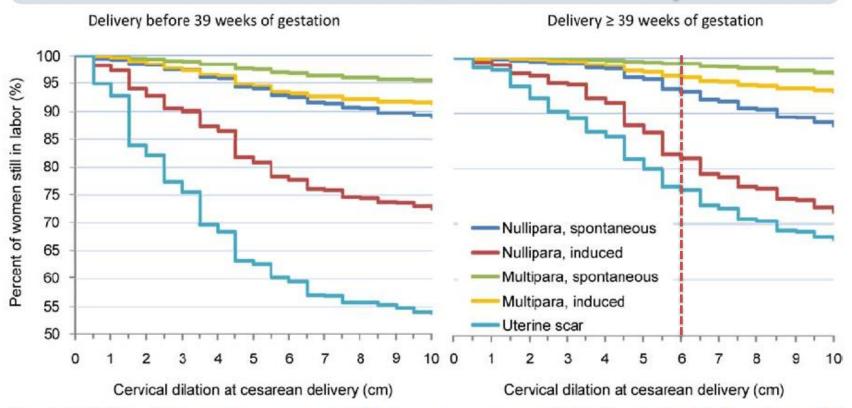
ACOG Standard Definitions

LABOR	Uterine contractions resulting in cervical change (dilation and/or effacement) Phases: • Latent phase – from the onset of labor to the onset of the active phase • Active phase – accelerated cervical dilation typically beginning at 6 cm
AUGMENTATION OF LABOR	The stimulation of uterine contractions using pharmacologic methods or artificial rupture of membranes to increase their frequency and/or strength following the onset of spontaneous labor or contractions following spontaneous rupture of membranes. If labor has been started using any method of induction described below (including cervical ripening agents), then the term, Augmentation of Labor, should not be used.
INDUCTION OF LABOR	The use of pharmacological and/or mechanical methods to initiate labor (Examples of methods include but are not limited to: artificial rupture of membranes, balloons, oxytocin, prostaglandin, Laminaria, or other cervical ripening agents) Still applies even if any of the following are performed: • Unsuccessful attempts at initiating labor • Initiation of labor following spontaneous ruptured membranes without contractions



FIGURE 2

Cervical dilation at cesarean delivery



Cervical dilation at intrapartum cesarean delivery among women attempting vaginal delivery by parity, onset of labor (induced vs spontaneous onset), previous uterine scar in singleton gestations.

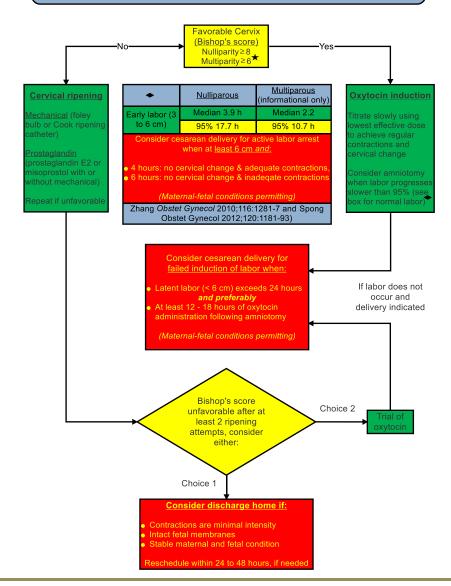
Zhang. Contemporary cesarean delivery practice in the US. Am J Obstet Gynecol 2010.

Finding: More than 50% of induced nullips are <6cm at CS

Induction of labor algorithm

(adapted from Obstetric Care Consensus. Safe Prevention of the Primary Cesarean Delivery.

March, 2014. Number 1)



Bishop's Score Calculation						
Parameter	0	1	2	3		
Dilation (cm)	0	1 - 2	3 - 4	5 - 6		
Effacement, %	0 - 30	40 - 50	60 - 70	≥80		
Station (-3 to +3)	- 3	-2	-1, 0	≥+1		
Consistency	Firm	Medium	Soft			
Position	Posterior	Middle	Anterior			
ACOG Patient Safety Checklist No. 5; December, 2011						

Maternal or fetal indications for delivery (ACOG Committee Opinion,

No. 560, 2013)

As per ACOG recommendations, perform induction of labor before 41 weeks when a maternal or fetal indication exists. When none exists, proceed with a favorable cervical exam.

Obstetric Issues

- Premature rupture of membranes
- Pregnancy at or heyond 41 weeks
- Pregnancy between 39 and 41 weeks

Maternal Issues

Essential hypertension

with favorable cervix

Gestational Hypertension

Fetal Issues

- Growth restriction, singleton or multiple
- Multiple gestation
- Oligohydramnios

This is a simplified table adapted for this algorithm. Please see accompanying companion checklist for additional indications for delivery.

★ Informational only, focus is nulliparous patient

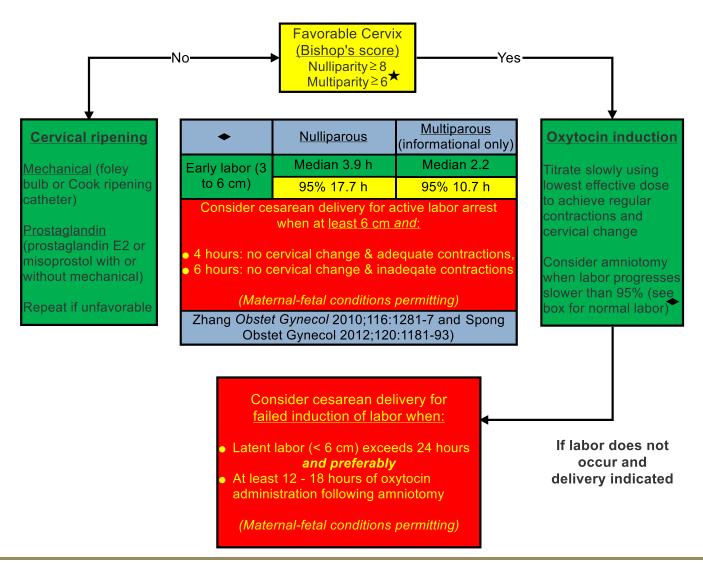




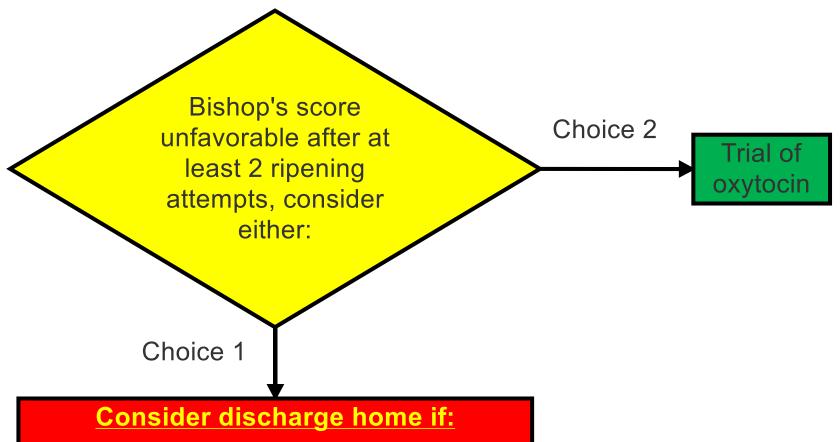
Bishop's Score Calculation						
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Consistency	Firm	Medium	Soft			
Position	Posterior	Middle Anterior				
ACOG Patient Safety Checklist No. 5; December, 2011						



According to the ACOG, induce labor prior to 41 weeks when a maternal-fetal indication exists. When none exists, proceed with a favorable cervical exam.







- Contractions are minimal intensity
- Intact fetal membranes
- Stable maternal and fetal condition

Reschedule within 24 to 48 hours, if needed







PROVIDE

(Promoting Primary Vaginal Deliveries)

Baseline Report

Initiative-wide

Data Source: NTSV Cesarean Audits

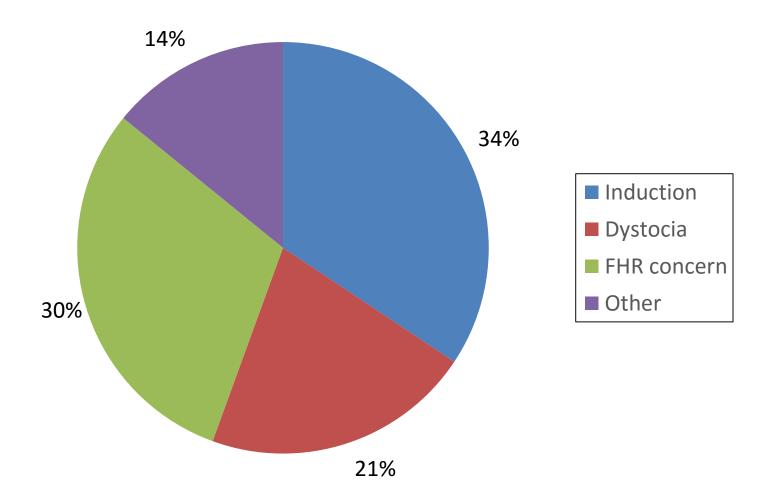
Partnering to Improve Health Care Quality for Mothers and Babies



Partnering to Improve Health Care Quality for Mothers and Babies

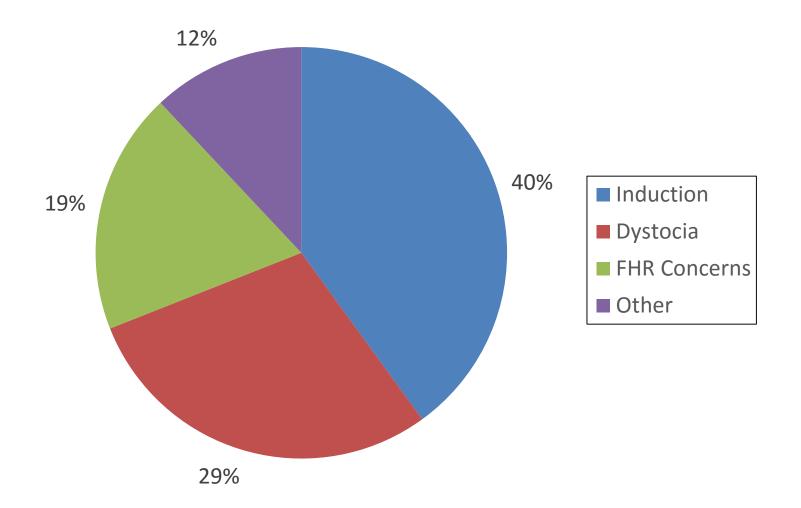
OVERALL ASSESSMENT 45 HOSPITALS

Overall 1: Percent of All NTSV Cesarean Deliveries Performed by Category During Baseline





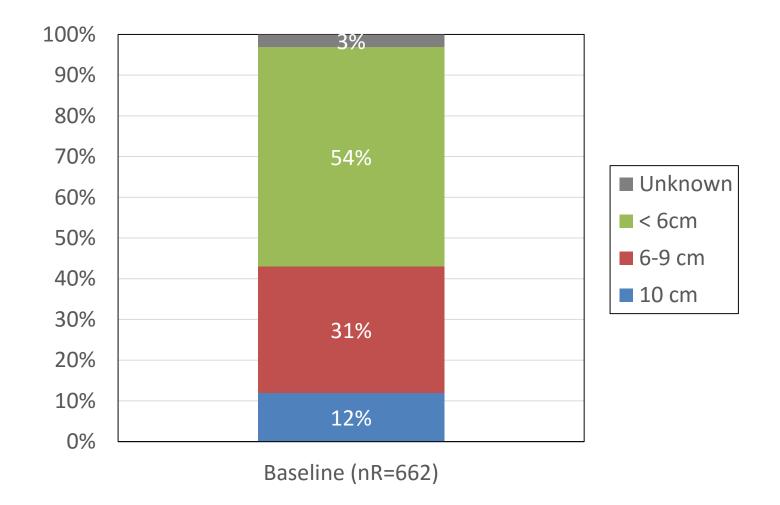
Overall 3: Percent of NTSV Cesarean Deliveries Performed Not Meeting Criteria by Category during Baseline







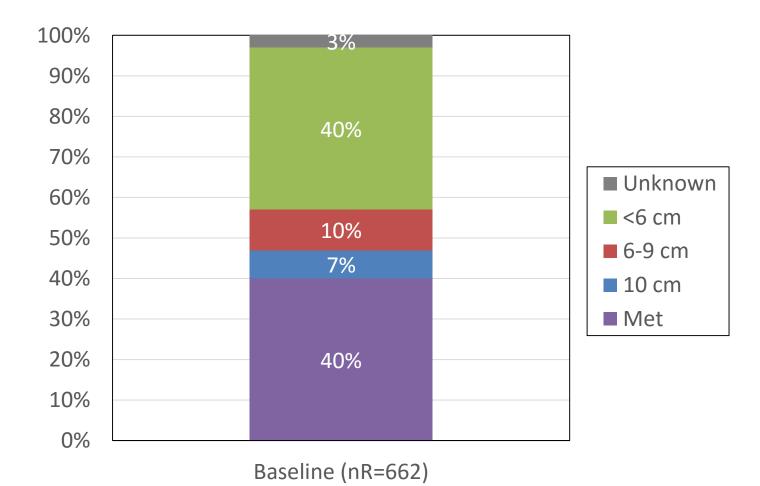
I-3a. Percent of NTSV Cesarean Deliveries with Induction by Cervix Dilation at Delivery







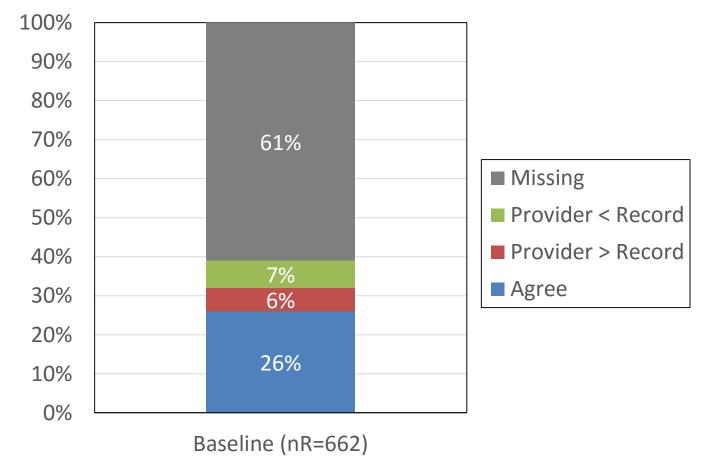
I-4: Percent of Cesarean Deliveries with Induction that Did Not Meet ACOG/SMFM Criteria by Cervical Dilatation





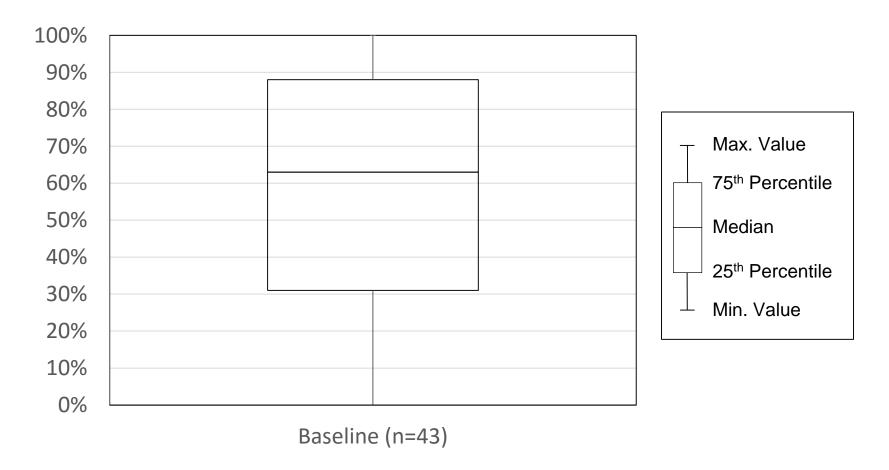


I-8: Percent of NTSV Cesarean Deliveries with Induction by Bishop Score Agreement at Time of Induction between Provider and Hospital Record





I-10: Percent of All NTSV Cesarean Deliveries with Induction and a Bishop Score <8 with Cervical Ripening Agent Used





Labor Induction Checklist

For Obstetrical and Medically Necessary Induction of Labor:

Confirm one of the following indications

- Confirm gestational age (The need to deliver at a gestational age less than 39 weeks is dependent on severity of condition)
 - □41+0 weeks ☐ Abruptio placentae ☐ Heart disease □Preeclampsia ☐ Liver disease (e.g. cholestasis of pregnancy.) ☐ Gestational HTN ☐ Chronic HTN \Box GDM ☐ Diabetes (Type I or II) □Renal disease \Box PROM □Oligohydramnios ☐ Fetal Demise □ Coagulopathy/Thrombophilia □Pulmonary disease □ Chorioamnionitis ☐Unstable Lie ☐ Other Fetal compromise □IUGR ☐Isoimmunization ☐ Fetal malformation ☐ Multiples w/ complications ☐ Twins w/o complication
- If other indication, confirm necessity for induction with perinatology:

☐Other: Perinatology consult obtained and agrees with plan:	
(consultant name)	



Labor Induction Checklist

For Elective Induction of Labor

- Ensure patient will be 39 weeks gestation or greater at time of induction
- Confirm gravity and parity of patient
- Be aware of reason that elective induction is planned
 - □ Patient or obstetrician choice
 - ☐Risk of rapid labor
 - □Distance from hospital
 - □Psychosocial indications
- Confirm favorable cervix by Bishops score (See table)
 - ☐Bishop's score >/= 8 for nullipara
 - ☐Bishop's score >/= 6 for multipara

Bishop's Score Calculation						
Parameter	0	0 1 2		3		
Dilation (cm)	0	1 - 2	3 - 4	5 - 6		
Effacement, %	0 - 30	40 - 50	60 - 70	≥80		
Station (-3 to +3)	- 3	-2	-1, 0	≥+1		
Consistency	Firm	Medium	Soft			
Position	Posterior	Middle	Anterior			
ACOG Patient Safety Checklist No. 5; December, 2011						



Labor Induction Checklist

For all Inductions:

- Provide patient with written educational material on induction of labor
- Obtain signed induction of labor education form
- Remind patient to call Labor and Delivery (or designee) prior to leaving home on the day of the induction

References:

ACOG Committee Opinion, No.560, 2013

ACOG Patient Safety Checklist No 2. Inpatient Induction of Labor December 2011, reaffirmed 2014





Induction of Labor

Tampa General Hospital
Sherri Badia, Nurse Manager Labor and Delivery
Frances Manali, Nurse Clinician Labor and Delivery
Karen Bruder, MD, Physician Champion, former Chief of
OB/GYN

Partnering to Improve Health Care Quality for Mothers and Babies



Tampa General Hospital

5,875 Deliveries Level III NICU Tampa, Florida





Induction of Labor Team Formed in 2010

- Team members
 - Labor and Delivery Nurse Manager
 - Labor and Delivery Nurse Clinicians (similar to assistant nurse manager role)
 - Private practice MDs
 - Residency service MDs
 - CNM
 - Perinatal CNS





Why was the team formed?

- FHR Tracing issues were often associated with use of oxytocin
- Perception of Nurses and Providers that there were ongoing "Pit wars"
- Desire to improve communication and standardization, and decrease risk associated with use of oxytocin
- Desire to develop protocols that were evidence based





Initial Steps

- Reviewed what we had in place
- Performed a Literature search
- Reviewed ACOG and AWHONN Resources
- Surveyed area hospitals for community practice
- Review of TGH data reflected we were meeting the Elective Delivery at 39 weeks or greater at least 95% of the time





What we accomplished related to Induction/Augmentation of Labor

- © Cervical Ripening, Induction/Augmentation of Labor policy and order set developed by Interdisciplinary Committee and approved by TGH OB/Gyn Department
- Education of all Providers and Staff related to policy and management of oxytocin
- Decreased number of elective deliveries less than 39 weeks gestation to 0%





Induction of Labor Booking Process in Place Prior to Revisions

- Paper Calendar was used to schedule inductions
- Inductions were booked by L&D Unit Coordinators
- Set time slots were available
- No oversite for Gestational age or indication
- Elective inductions did not require ripe bishop score
- Providers would occasionally send patients in without an induction appointment





First Induction Booking Form

TGH Induction of Labor Booking Form

Patient Name:	
DOB:	
Pt. Phone:	
Provider	
Provider office CONTACT number:	
Provider office FAX number:	
Requested date/week for induction:	
Gestational age now:	
EDC:	
200.	
Indication for induction	
Medical	Elective
☐ Abruptio placentae	39 weeks or more at time of induction
☐ Chorioamnionitis	OR
☐ Fetal demise	☐ Fetal lung maturity established (Amnio)
☐ Hypertension	
Premature rupture of membranes	Indications
□ Postterm pregnancy	☐ Risk of rapid labor
□ Diabetes mellitus	☐ Distance from hospital
□ Renal disease	☐ Psychosocial indications
☐ Chronic pulmonary disease	☐ Other:
☐ Chronic hypertension	
☐ Fetal compromise:	
□ Preeclampsia/eclampsia	

Please fax this completed form along with the prenatal records to 813 844-1668.

This completed form and the prenatal records will be reviewed by a Labor and Delivery Staff Member. Your office will be notified of the scheduled induction date and time.

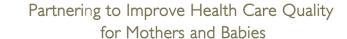
Induction Date: Time to arrive at hospital: Scheduled by:

Please remind the patient to call 813-844-7122 prior to leaving home on the day of the scheduled









Elective Induction Had to be at least 39 weeks

Elective
39 weeks or more at time of induction
OR
☐ Fetal lung maturity established (Amnio)
Indications
☐ Risk of rapid labor
□ Distance from hospital
☐ Psychosocial indications
Other:





Areas of policy that were of concern with this form/process

- Booking of Inductions using Booking form #L2004 not consistently used
- Elective Induction Scheduling
 - Could be scheduled weeks ahead, possibly taking up needed slots for medically indicated inductions
 - Bishop Score not required





Evolving Process: Revised Booking Form

Bishop Score greater than 6 one of the indications, but not required

	Elective
	39 weeks or more at time of induction
	OR
	☐ Fetal lung maturity established (Amnio)
	Indications:
	Risk of rapid labor
Ì	☐ Distance from hospital
	Psychosocial indications
	☐ Other:
	Bishop Score greater than 6
١	Evaluation for induction
Ì	





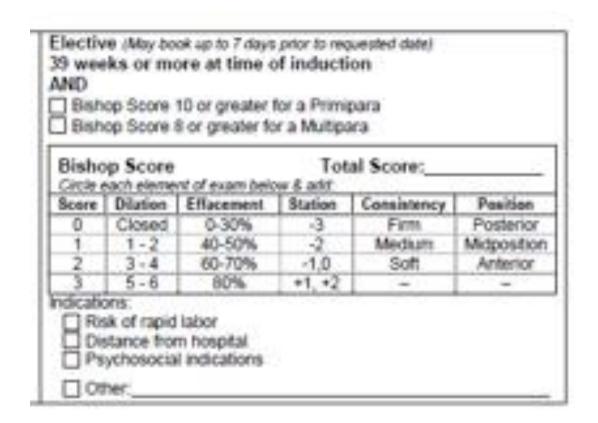
Latest Version of Booking Form

Tampa General Induction of Labor Booking Form						
Patient Name:			DOB:			
Pt. Phone:						
Provider:						_
Provider office CONTACT number:						
Provider office FAX number:						
Requested date/week for induction:				al age now	r.	
EDC:						
Patient has received written material on Induction Patient has signed consent for Induction of Labor						
Indication for induction						
Medication for induction						
Please fax this completed form along with the prenatal records to (813) 844-1668, if prenatal records not available in Epic. This completed form and the prenatal records will be reviewed by a Labor and Delivery Staff Member. Your office will be notified of the scheduled induction date and time. If the patient needs to be informed of the date and time during this visit, please call the L&D Scheduling Line at (813) 844-8527.						
	Induction date: Time to arrive at hospital: Scheduled by: Referred to Dept. Chain/Chief:					
Please remind patient to call (813) 844-7122 prior to leaving home on day of scheduled induction.						





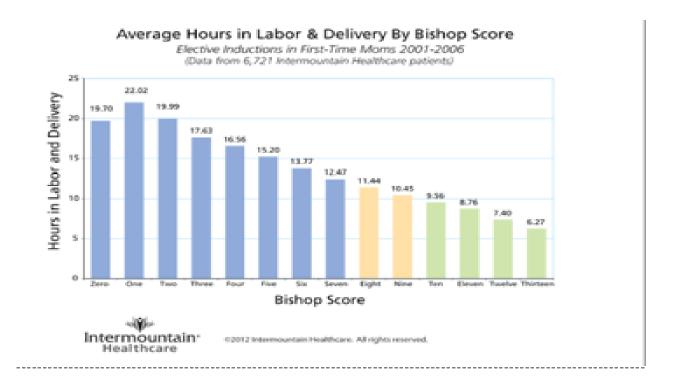
Elective Induction Requirements: Hard Stop







Why require a Bishop Score of 8 for Elective Inductions?



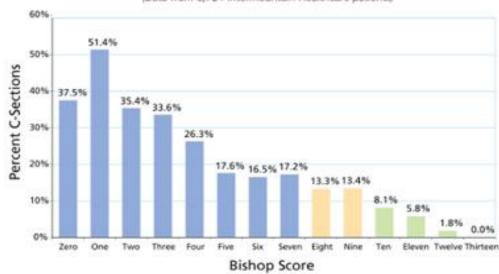




Intermountain Health Care CS Rates by Bishop Score

Cesarean Section Rates By Bishop Score

Elective Inductions in First-Time Morns 2001-2006 (Data from 6,721 Intermountain Healthcare patients)





62012 Intermountain Healthcare. All rights reserved.





Elective Induction Risk with Unripe Bishop Score

Concerns

- Increased risk of morbidity
- Decreased patient satisfaction
- Increased length of stay
- Increased utilization of beds, nursing staff and providers in postpartum





Concerns Related to Stricter Guidelines

- Patient, family pressure to be induced at 39 weeks (or on a specific date)
- Fairness in scheduling process-providers concerned that individual providers would take all the slots
- Concern that patients may want to deliver at a facility with less strict guidelines





Getting Buy In

- Physician Champions presented recommendations at monthly Perinatal Best Practice committee
 - Presented revised policy, induction booking form and patient education booklet
 - Obtained feedback
 - Received Maternal Fetal Medicine Physician support and approval
 - Provider to provider education about best practices
 - Nursing and Administration support for best practices
- Final plan taken to TGH OB/Gyn Department meeting
 - Approval obtained to make this TGH policy





LABOR Day Party Held to Kick Off New Process September 2012







Initial Induction Booking Process

- Prenatal care site given booking forms and patient education booklets
- Site would fill out information on form
- PNC site would Fax form and Prenatal Record to dedicated line in Nurse clinician office
- Clinician would review information, select date and time, fax info back to PNC site.





Process Evaluation

- Process was time consuming for Nurse Clinicians, who had additional clinical and administrative duties
- PNC sites complained about not getting quick responses to inform patients with a 24 hour turn around time.
- Decision made to assign task to trained OB Data abstractors (non-nurses)
- List of approved indications approved by MFM utilized
- If there was a question about whether an indication was appropriate-referred to MFM for final decision





Developed Labor Induction
Patient Education Booklet
To Be Given to all Scheduled
Inductions

Obtained written permission from Intermountain Health to use their graphs in our booklet







How Has This Process Worked?

- Many Providers felt that it took the pressure off of them from the patient perspective since it was a TGH policy.
- Data abstractors call or email Nurse Clinicians if a provider is asking to induce a patient without meeting the criteria.
- MFM contacted if indicated to obtain final decision.







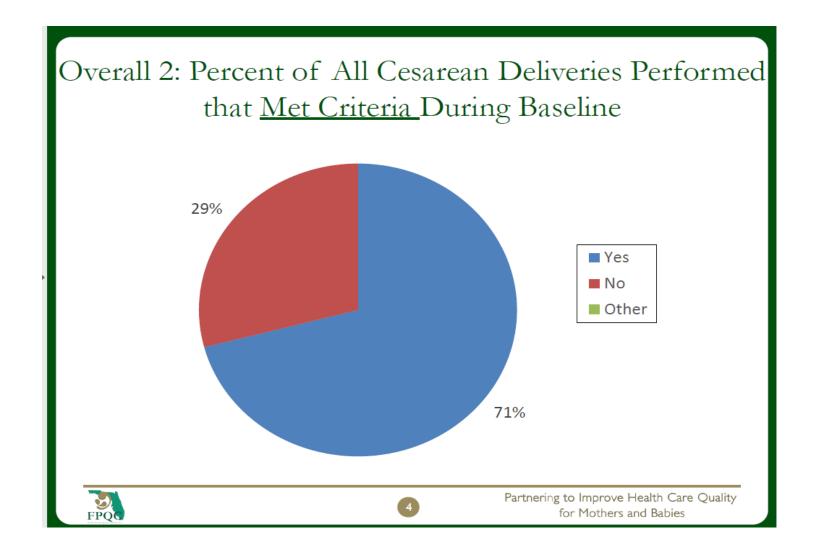
PROVIDE (Promoting Primary vaginal Deliveries)

TGH Baseline Report

Overall 1: Percent of All Cesarean Deliveries Performed by Category During Baseline 8% 17% ■ Induction Dystocia 15% ■ FHR Concerns Other 60% Partnering to Improve Health Care Quality for Mothers and Babies

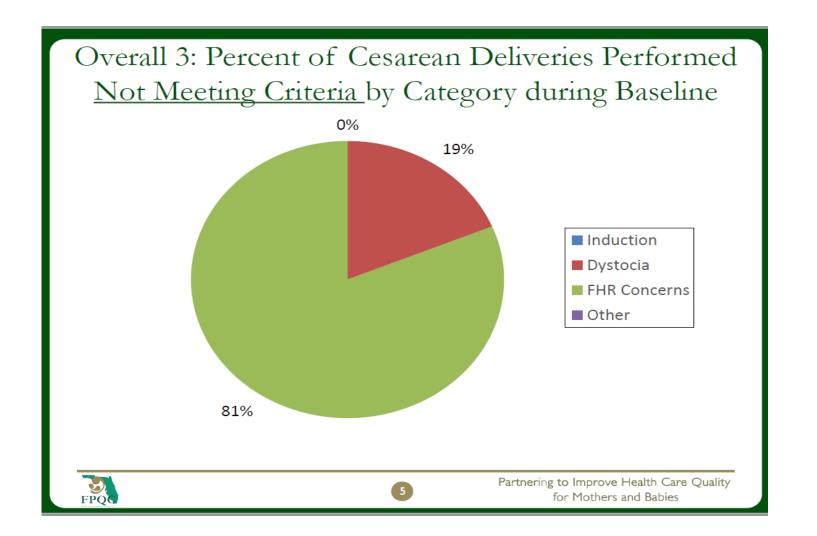








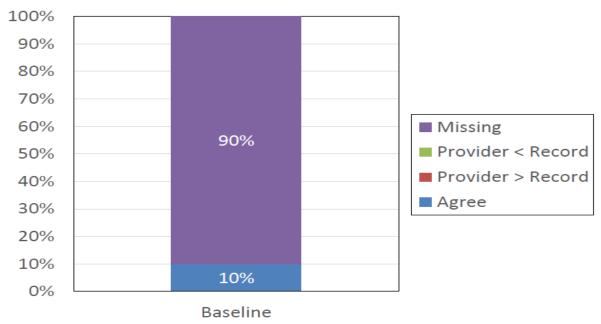








I-8: Percent of NTSV Cesarean Deliveries with Induction by Bishop Score Agreement at Time of Induction between Provider and Hospital Record



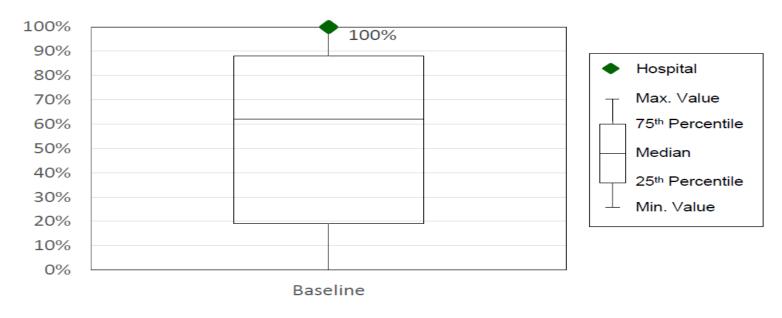








I-10: Percent of All NTSV Cesarean Deliveries with Induction and a Bishop Score <8 with Cervical Ripening Agent Used



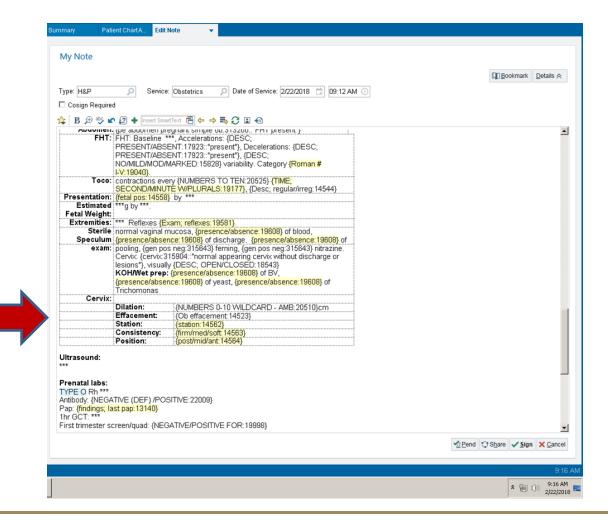








Previous Standard L&D H&P (Epic)



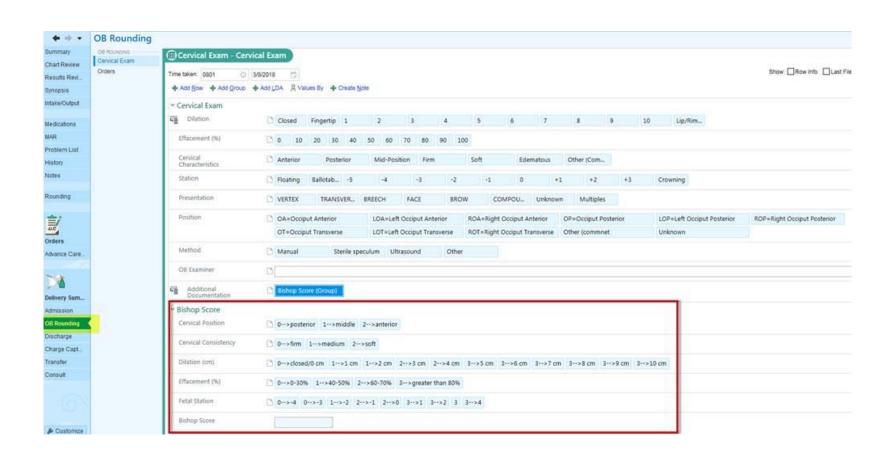


Changes to Standard L&D Admission H&P (Epic)

click, rub or gallop") Abdomen:{pe abdomen pregnant simple ob:313266} FHT: FHT: Baseline ***, Accelerations: {DESC; PRESENT/ABSENT:17923}, Decelerations: {DESC: PRESENT/ABSENT:17923}, {DESC: NO/MILD/MOD/MARKED: 15828} variability. Category {Roman # I-V: 19040} Toco: contractions every {NUMBERS TO TEN: 20525} {TIME; SECOND/MINUTE W/PLURALS:19177}, {Desc; regular/irreg:14544} Presentation: {fetal pos:14558} by *** Estimated Fetal ***g by *** Weight: Extremities: {EXTREMITIES EXAM:60117150}. Reflexes {Exam; reflexes:19581}. Sterile normal vaginal mucosa, {presence/absence: 19608} of blood, Speculum (presence/absence: 19608) of discharge. (presence/absence: 19608) of exam: pooling, {gen pos neg:315643} ferning, {gen pos neg:315643} nitrazine. Cervix: {cervix:315904::"normal appearing cervix without discharge or lesions"}, visually {DESC; OPEN/CLOSED:18543} KOHWet prep: {presence/absence: 19608} of BV, {presence/absence: 19608} of yeast, {presence/absence: 19608} of Trichomonas Cervix: Dilation: (NUMBERS 0-10 WILDCARD - AMB: 20510)cm {Ob effacement: 14523} Effacement: Station: {station: 14562} Consistency: {firm/med/soft:14563} Position: {post/mid/ant: 14564} Bishop Score: {NUMBERS 0-10 WILDCARD - AMB: 20510} Cervical Exam Points Subscore 0 Dilation Closed 1 - 2 cm 3 - 4 cm 5 - 6 cm Effacement (%) 0 - 3040 - 50 60 - 70Station -3 -2 -1,0 +1, +2 Consistency Firm Medium Soft Position Posterior Mid Anterior Total Score



Change to OB Rounding documentation Bishop score calculator







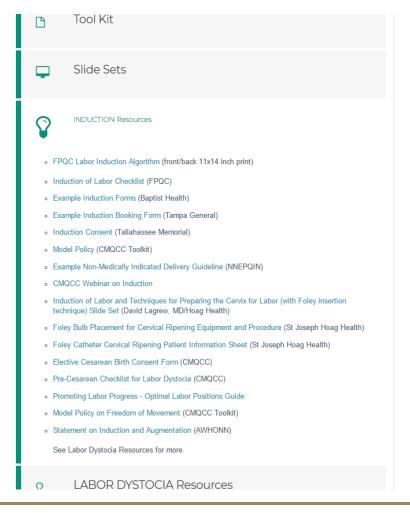
Sacred Heart Hospital Pensacola Experience

Dr Joe Peterson SHHS PROVIDE Lead
Erica Bottom RN, MSN PROVIDE Lead
Julie DeCesare, MD FPQC PROVIDE Lead



Comments? Questions?

http://health.usf.edu/publichealth/chiles/f pqc/provide/toolbox







Thank you!

www.fpqc.org fpqc@health.usf.edu



