Labor Induction

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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

Definitions of Failed Induction and Arrest Disorders

Failed induction of labor
- Failure to generate regular (eg, every 3 min) contractions and cervical change after at least 24 h of oxytocin administration, with artificial membrane rupture if feasible

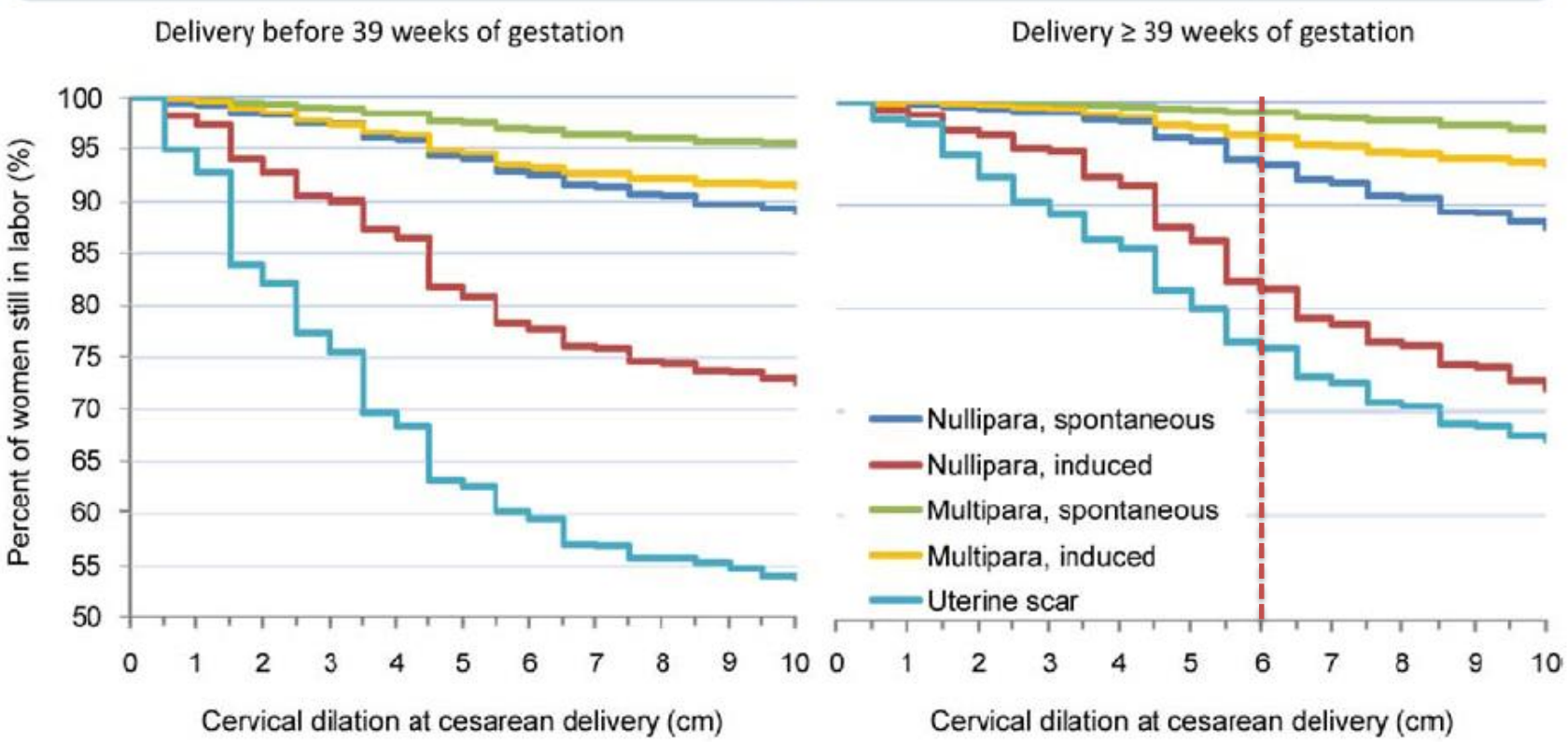
First-stage arrest
- 6 cm or greater dilation* with membrane rupture and no cervical change for
  - 4 h or more of adequate contractions (eg, >200 Montevideo units) or
  - 6 h or more if contractions inadequate

Second-stage arrest
- No progress (descent or rotation) for
  - 4 h or more in nulliparous women with an epidural
  - 3 h or more in nulliparous women without an epidural
  - 3 h or more in multiparous women with an epidural
  - 2 h or more in multiparous women without an epidural

Spong CY et al. Obstet Gynecol Nov 2012;120(5):1181–1193.

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

Labor Induction Checklist

For Obstetrical and Medically Necessary Induction of Labor:

- Confirm gestational age (The need to deliver at a gestational age less than 39 weeks is dependent on severity of condition)
- Confirm one of the following indications

☐41+0 weeks
☐Abruptio placentae
☐Preeclampsia
☐Gestational HTN
☐GDM
☐PROM
☐Fetal Demise
☐Coagulopathy/Thrombophilia
☐Pulmonary disease
☐Chorioamnionitis
☐Unstable Lie
☐Other Fetal compromise
☐IUGR
☐Isoimmunization
☐Fetal malformation
☐Multiples w/ complications
☐Twins w/o complication
☐Heart disease
☐ Liver disease (e.g. cholestasis of pregnancy.)
☐Chronic HTN
☐Diabetes (Type I or II)
☐Renal disease
☐Oligohydramnios

- If other indication, confirm necessity for induction with perinatology:

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

Suspected Macrosomia

- Suspected fetal macrosomia is **not an indication for delivery** and rarely is an indication for cesarean delivery.
- To avoid potential birth trauma, **the College recommends that cesarean delivery be limited to estimated fetal weights of at least 5,000 g in women without diabetes and at least 4,500 g in women with diabetes.**
- The prevalence of birth weight of 5,000 g or more is rare, and **patients should be counseled that estimates of fetal weight, particularly late in gestation, are imprecise.**
- Screening ultrasonography performed late in pregnancy has been associated with the unintended consequence of increased cesarean delivery with no evidence of neonatal benefit. Thus, **ultrasonography for estimated fetal weight in the third trimester should be used sparingly and with clear indications**.

Safe prevention of the primary cesarean delivery. Obstetric Care Consensus No. 1. American College of Obstetricians and Gynecologists. Obstet Gynecol 2014;123:693–711.

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	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

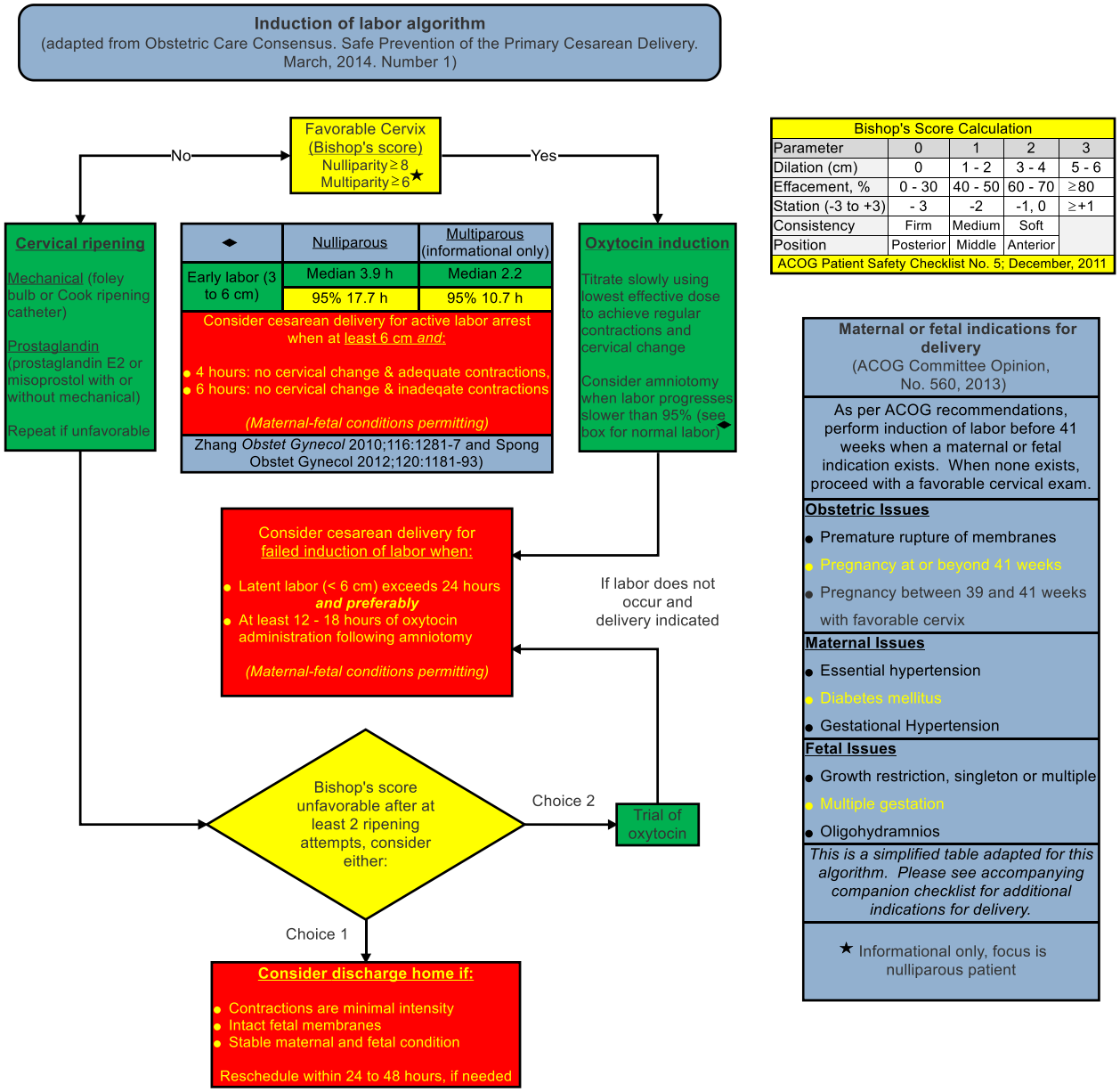
For all Inductions:

- 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



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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 beyond 41 weeks
- Pregnancy between 39 and 41 weeks with favorable cervix

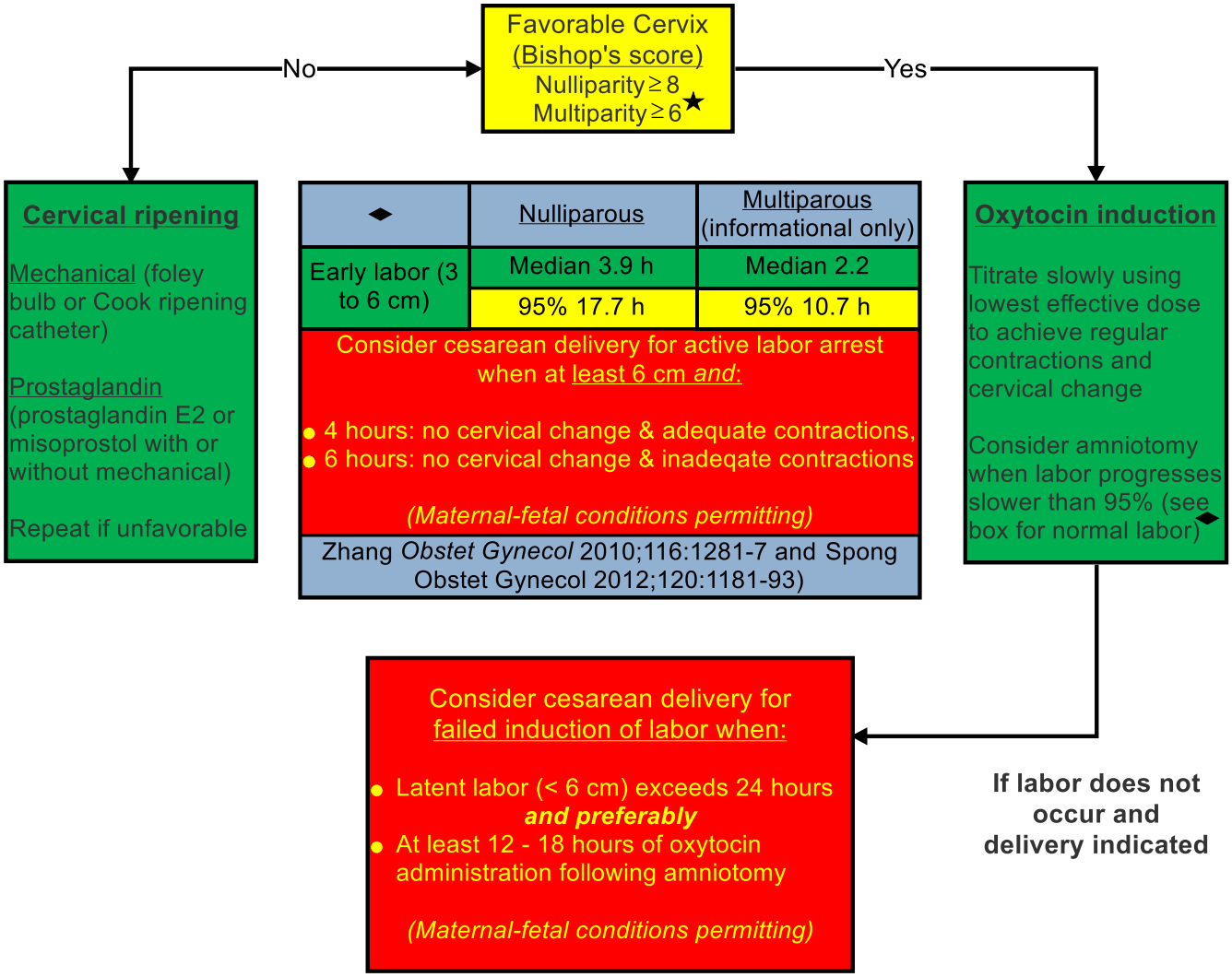
Maternal Issues
- Essential hypertension
- Diabetes mellitus
- Gestational Hypertension

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

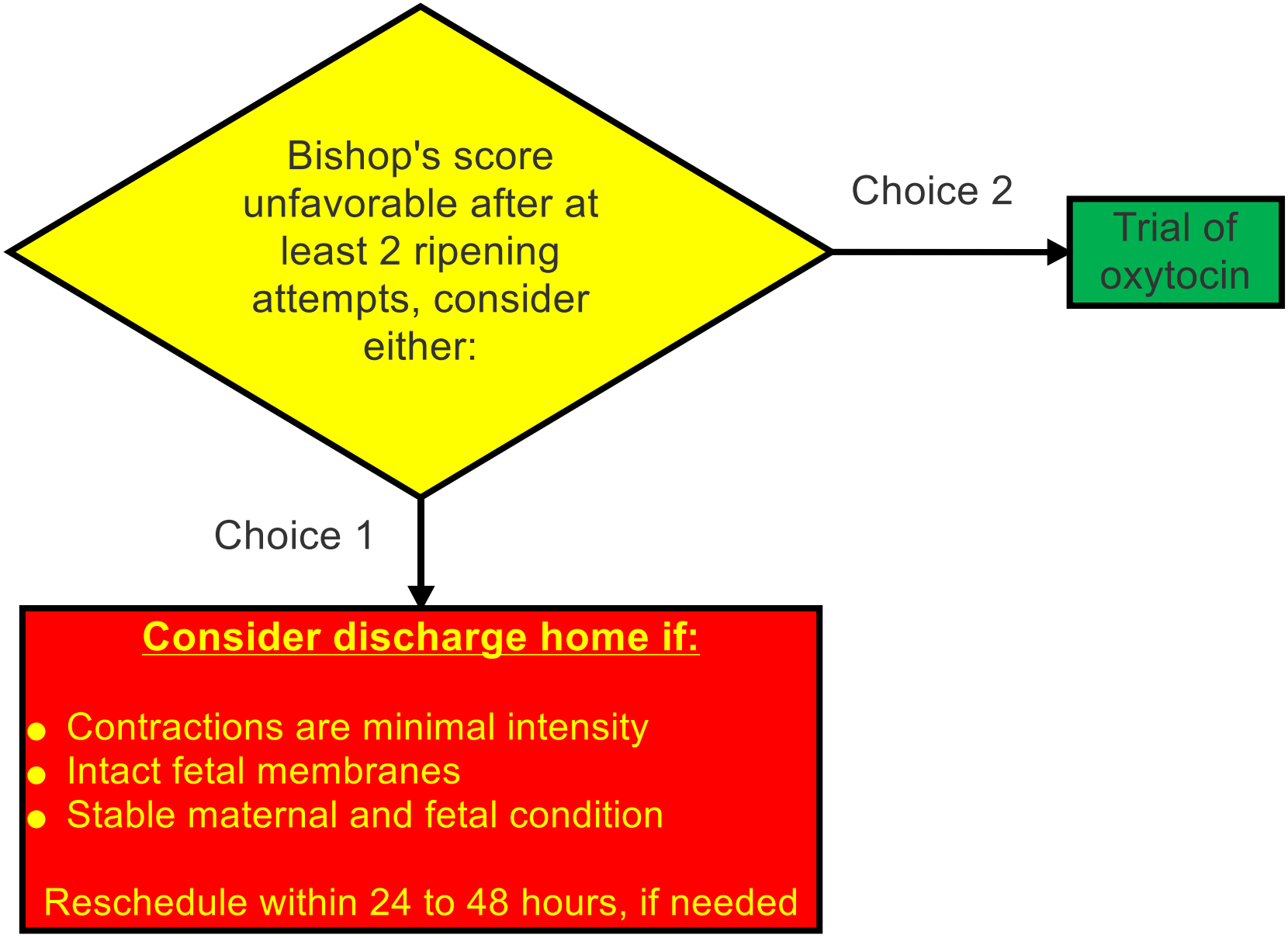
This is a simplified table adapted for this algorithm. Please see accompanying companion checklist for additional indications for delivery.

★ Informational only, focus is nulliparous patient

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.



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				


Bishop's score unfavorable after at least 2 ripening attempts, consider either:
Choice 2
Trial of oxytocin
Choice 1
Consider discharge home if:
Contractions are minimal intensity
Intact fetal membranes
Stable maternal and fetal condition
Reschedule within 24 to 48 hours, if needed

Sample Policies, Booking Forms, etc.

CMQCC
California Maternal
Quality Care Collaborative

Appendix T
Model Policies

Hoag Hospital. Induction of Labor Scheduling Policy. Includes Induction of Labor Scheduling Request and patient education materials. Used with permission.

Category: Patient Care Services	Effective Date: See footer
Owner: Labor and Delivery OR Manager	
Title: Cesarean Delivery / Induction of Labor Scheduling	

PURPOSE: To eliminate non-medically indicated (elective) deliveries prior to 39 weeks. Non-medically indicated cesarean delivery or induction of labor prior to 39 completed weeks gestation requires approval of the Hoag Physician Leader or designee.

SCOPE: Labor and Delivery

NNE PQIN
NORTHERN NEW ENGLAND
PERINATAL QUALITY IMPROVEMENT NETWORK

The following guidelines are intended only as a general educational resource for hospitals and clinicians, and are not intended to reflect or establish a standard of care or to replace individual clinician judgment and medical decision making for specific healthcare environments and patient situations.

Guideline for Non-Medically Indicated Delivery (NMID)
Approved 5/1/2015
(Replaces Elective Labor Induction)

Please note NNEPQIN has separately published "Guideline for Medically Indicated Delivery and Induction of Labor".

Scope: Women undergoing non-medically indicated delivery (NMID). This guideline does not apply to women presenting with spontaneous rupture of membranes or spontaneous onset of labor.

Baptist Hospital of Miami
BAPTIST HEALTH SOUTH FLORIDA

LABOR AND DELIVERY
STANDBY INDUCTION SCHEDULING

Desired Induction Date: _____ Obstetrician: _____

Standby Inductions will not be called in without scheduling form.

Patients Name: _____ Phone: _____

Age: _____ Gravida: _____ Para: _____ EDC: _____ GA: _____wks GBS: _____

Type of Induction: _____Cytotec _____Pitocin _____ Cervidil

Indications:

_____ Favorable Cervix: _____cms _____% effacement

*Circle all that apply below:

Cervix	Score				Bishop Score Modifiers
	0	1	2	3	
Position	Posterior	Mid-position	Anterior		***Add 1 point for each previous vaginal delivery***
Consistency	Firm	Medium	Soft		
Effacement	0 - 30%	40 – 50%	60 – 70%	>80%	
Dilation	Closed	1 – 2 cm	3 -4 cm	>5 cm	
Station	-3	-2	-1, 0	+1, +2	

Per policy, a Bishop score of 6 or greater required for elective induction.

TOTAL BISHOP SCORE: _____ Date: _____

TGH Tampa General Hospital

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: _____

☐ Patient has received written material on Induction of Labor
☐ Patient has signed consent for Induction of Labor

Indication for induction

Medical
(May book up to 4 wks prior to requested date)
☐ Abruptio placentae
☐ Chorioamnionitis
☐ Fetal demise
☐ Gestational Hypertension

Elective *(May book up to 7 days prior to requested date)*
39 weeks or more at time of induction
AND
☐ Bishop Score 10 or greater for a Primipara
☐ Bishop Score 8 or greater for a Multipara

Form 5: Tallahassee Consent (Permission to use is granted)

Tallahassee Memorial
Women's Pavilion
Tallahassee Memorial HealthCare

YOUR LABOR INDUCTION

Labor induction is usually done with a medication called Oxytocin or Pitocin®. With your practitioners order, our staff will start the medication at a standard dose and increase it over time to achieve labor progress. While you are getting the medication, we will closely monitor the baby's heart rate and your contractions. The length of labor depends on how dilated or "ripe" your cervix is at the start of the induction. In general the more dilated you are, the quicker your labor. Also, if this is not your first birth, labor may be faster for you.

If your cervix is already fairly dilated, your practitioner may start your induction by breaking the bag of water. If your cervix is closed and not shortening, we may schedule cervical ripening the day before your induction. This procedure will soften and begin to dilate your cervix. Ripening will make the Oxytocin more effective when it is begun. Sometimes, the ripening process will trigger the onset of your labor.

WHY ARE LABOR INDUCTIONS PERFORMED?

Labor inductions are performed for many reasons. Clearly, some reasons are more urgent than others. Here are just a few examples:

- A woman is well past her due date
- A woman is experiencing medical problems that place her or her baby at risk, such as high blood pressure, diabetes, rupture of the bag of water, etc.
- The baby or babies may be small or the amniotic fluid too low
- Though less common elective labor induction may be done for convenience or discomfort of the mother after 39 weeks

WHAT ARE THE POTENTIAL RISKS AND BENEFITS OF LABOR INDUCTION?

It is always important to consider the potential benefits and risks of any procedure. The risks include, but are not limited to, the following:

- Labor inductions may carry a greater risk of cesarean birth delivery than do labors that start on their own, especially with an "unripe" cervix..
- Induction usually results in longer labors and may lead to a higher chance of a vacuum or forceps delivery.
- All medications have possible side effects or unintended adverse reactions. For example, it is possible to cause contractions that are too frequent and may affect the baby's heart rate. This is why careful monitoring of your baby's heart rate is necessary during labor induction.

If you are considering an elective induction, the risks may outweigh the possible benefits especially, if this is a first time labor.

CONSENT FOR INDUCTION OF LABOR

Indication for Induction: _____

_____

I have read the above information and I have had the chance to ask my practitioner questions. All of my questions have been answered to my satisfaction. I wish to proceed with the induction.

_____ _____

Patient Signature Date

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QUESTIONS?