Second Stage Labor: “Doing the Duration Dance”

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Challenges for 2nd Stage Labor Management

- The “show”
- Excitement over “end result”
- New “participants”
- Challenges to maintaining an approach when new participants enter into the process
- Challenges to the evidence base
- Challenges with the use of epidurals
- Fetal well being vs maternal fatigue
Nothing is Simple
Focus

• Discussion of Issues related to Duration of Second Stage Labor and Best Practice
• What do you do DURING the duration of Second Stage Labor
• As 6cm is the new 4cm.....is 3 hours the new 2 hours?
Changes over time….

- Introduction of “management” of second stage with epidurals
  - Association with instrumental deliveries
  - Associate with inc risk cesarean deliveries
- Measurements of Duration
  - Active pushing vs passive pushing
- Focus on prevention of cesarean
  - Quality improvement initiatives
- Changing evidence
  - Whose science is better
Introduction of “Quality Indicators”

• Michigan Health & Hospital Association
  Keystone Obstetrics: A Statewide Collaborative for Perinatal Patient Safety in Michigan
  • Simpson, Kathleen Rice; Knox, G. Eric; Martin, Morgan; George, Chris; Watson, Sam R.
Duration of Second Stage

• How much time for overall pushing is too long

• Studies of Pelvic Floor Damage (Levator Ani Muscle Tear on MRI) correlated with prolonged second stage >2.5 hours
  » Kearney et al OB/GYN Jan 2006

• Confounding Variables and Cascade Effects
Global Focus on TIME

TIME as a PROXY for the other types of interventions we see included in management of second stage as the duration of it increases

Last 10 years of research...
How Long is too Long: Maternal/Fetal Outcomes

Myles et al 2003

• Retrospective Analysis 1996-1999 UIC
• N=6791
• Grouped by duration of second stage labor
  – <120 min (n=6259 92%),
  – 121-240 (n= 532, 5.7%),
  – >240 (148, 2.2%)
• High rates of vaginal delivery despite inc duration
• But higher rates of maternal morbidity
• > 121 minutes associated with inc epis, inc instrumental delivery and perineal trauma (p< .001)
How long is too long? Cheng et al 2004 AJOG

- Focus on nulliparous women (15,759 births)
- Retrospective cohort study 1976-2001 UCSF
- Divided analysis by each hour duration of 2nd stage
- 55% epidural use rate, diverse sample
- 9% > 35 yo, 9% > 4000 gm, 10% > 200lb (BMI not reported)

NSVD rates by duration of pushing
- 46% <1 hr,
- 22% 1-2 hours,
- 14% 2-3 hours,
- 10% in 3-4 hr

- Again, no neonatal increased morbidity but increased maternal morbidity
How long is too long cont... Cheng et al 2004

- Maternal morbidity with >3 hour 2nd stage duration
  - Increase rates of perineal trauma
  - Increased incidence of PPH
  - Increased incidence of chorioamnionitis
Probability of NSVD with inc duration of 2nd stage

Probability of spont vaginal delivery with well infant (apgar/pH) decreases every hour of active pushing that passes

1-2 hr OR 0.4; 95% CI 0.3-0.6
2-3 hr OR 0.1: 95% CI 0.09-0.2;
>3 hr OR 0.03; 95% CI 0.02-0.05

Questions whether a woman should be encouraged to continue to push after 2 hours of active pushing without evidence of imminent delivery
Secondary Analysis of Fetal Pulse $O_2$ Trial

Nulliparous women N=5341
96% epidural use, 87% oxytocin use, 38.6% IOL
75% NSVD, 18.5% operative delivery, 7.4% Cesarean

Inc duration of 2nd stage labor correlated with dec rate NSVD
85.2% NSVD in >1 hr second stage
8.7% in >5 hour duration

In > 3 hour duration of 2nd Stage labor,
Inc risk for Chorio, 3rd & 4th deg lacs, PPH (atony)

No negative Neonatal outcomes

Considered mode of delivery, in C/S group only inc risk Chrio
Duration of passive and active phases of the second stage of labour and risk of severe postpartum haemorrhage in low-risk nulliparous women

C. Le Ray a,b,*, W. Fraser c, P. Rozenberg d, B. Langer e, D. Subtil a,f, F. Goffinet a,b

for the PREMODA Study Group

- Assessed risk of severe PPH according to duration of 2nd stage duration using active and passive designations in 3300 low risk women
- PPH rate >1000ml was significantly inc with > 50 minute active phase pushing but not total duration of second stage
Overall

• Greater duration without neonatal morbidity
• Consistent focus on maternal morbidity with primary outcomes being inc risk for PPH and chorio
• Actual management approaches unclear and effects of various interventions not consistent
BOX 29-4 Definition of Prolonged Second-Stage Labor

No progress in descent or rotation for:

- 4 hours or more in nulliparous women with an epidural
- 3 hours or more in nulliparous women without an epidural
- 3 hours or more in multiparous women with an epidural
- 2 hours or more in multiparous women without an epidural

“Singing from the same page”
Fig. 3. Indications for primary cesarean delivery. (Data from Barber EL, Lundsberg LS, Belanger K, Pettler CM, Funai EF, Illuzzi JL. Indications contributing to the increasing cesarean delivery rate. Obstet Gynecol 2011;118:29–38.)
ACOG/SMFM Consensus Statement
Second Stage Labor

• Adverse neonatal outcomes have not been associated with the duration of 2nd stage of labor.
• Instrument delivery can reduce the need for cesarean.
• Use of manual rotation for posterior presentation
Consensus Statement 2nd Stage Duration

- At least 2 hours for multiparous women
- At least 3 hours for nulliparous women
- Longer durations may be appropriate on an individualized basis...e.g. epidural, fetal malposition
Neonatal and Maternal Outcomes With Prolonged Second Stage of Labor

S. Katherine Laughon, MD, MS, Vincenzo Berghella, MD, Uma M. Reddy, MD, MPH, Rajeshwari Sundaram, PhD, Zhaohui Lu, MS, and Matthew K. Hoffman, MD, MPH

- Retrospective cohort of 43,810 nulliparous, 59,605 multiparous singleton deliveries at term
- Prolonged 2nd stage inc risk chorio, 3/4th degree
- Neonatal morbidity inc, and in nulliparous women without an epidural prolonged 2nd stage associated with inc morbidity and mortality.
- Overall significant inc success with vaginal delivery using inc duration guidelines from ACOG consensus statement.
- Raises caution…..balancing risks…..
Obstetrics

Extending second stage of labor raised maternal and neonatal morbidity


AT THE PREGNANCY MEETING

VITALS

Key clinical point: Extending the second stage in nulliparous women from 3 hours to 4 hours was associated with an increased rate of maternal and neonatal morbidity.

Major finding: Among nulliparous women with an epidural, extending the second stage of labor from 3 hours to 4 hours resulted in 16% of maternal and 15% of neonatal morbidities, with approximately 5.5% additional spontaneous vaginal deliveries during that hour.

Data source: A retrospective study of medical records from 103,415 deliveries between 2002 and 2008.

Disclosures: The study was supported by the National Institute of Child Health and Human Development. Dr. Grantz reported having no relevant financial conflicts.
2nd Stage of Labor and Epidural Use:
A larger effect than previously suggested

- Retrospective cohort study of 42,268 women with vaginal births.
- Compared medial length and 95th percentiles of second stage duration and epidural use.
- Nulliparous women 95th tile 197 min w/o epidural and 336 min with an epidural.
- Multiparous women 95th tile 81 minutes w/o epidural and 255 min with epidural.
- There were no significant inc in morbidity with inc duration of second stage labor.
- Concludes the differences in the presence of the epidural is closer to 2 hours longer vs the 1 hour in general recommendations and current ACOG definitions may be too stringent.
DURATION OF 2nd STAGE LABOR:

When, how and in what position should a woman start pushing?
SECOND STAGE

- Traditional Management Paradigm

  Full Dilation:
  Pushing Begins

  Delivery

  Total Second Stage

  No effort to tailor pushing instruction to station

- Delayed Pushing Management Paradigm

  Delayed pushing

  Passive 2nd Stage  Active 2nd Stage

  Head in relationship to pelvic floor

  **High Pelvic Portion** of 2nd stage
  No contact with levator ani or nerves

  **Pelvic Floor Portion** of 2nd Stage
  Contact with muscle and nerve

  Head Contacts Pelvic Floor
Epidural Use and Assisted Second Stage
“Laboring Down”

• Physiological Process of Passive Descent

• Level 1A Evidence supports process of waiting up to two hours prior to initiation of active pushing process
The Evidence: Pushing with Epidurals

- Meta-analysis by Brancato (2008) of 7 RCTs (N= 2827) of initial period of “laboring down” vs. immediate pushing in primigravidas with epidurals found that passive descent:
  - increased incidence of spontaneous birth
  - reduced risk of instrument-assisted delivery
  - decreased active pushing time
  - no change in cesarean section rate
• Inc vaginal delivery rate in delayed group
• But…When only “High level studies” included difference was less and no longer significant
• No difference in instrument deliveries
• Inc duration of second stage total time, dec active
• Maternal and Fetal outcomes remain unclear…….
Original Research

Maternal and Neonatal Outcomes With Early Compared With Delayed Pushing Among Nulliparous Women

Lynn M. Yee, MD, MPH, Grecio Sandoval, MA, Jennifer Bailit, MD, MPH, Uma M. Reddy, MD, MPH, Ronald J. Wapner, MD, Michael W. Varner, MD, Steve N. Caritis, MD, Mona Prasad, DO, MPH, Alan T. N. Tita, MD, PhD, George Saade, MD, Yoram Sorokin, MD, Dwight J. Rouse, MD, Sean C. Blackwell, MD, and Jorge E. Tolosa, MD, MSCE, for the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD) Maternal-Fetal Medicine Units (MFMU) Network*
Pregnancy: No Benefits to Delayed vs Early Pushing

— Higher risk of serious maternal complications

by Molly Walker
Staff Writer, MedPage Today

October 13, 2016

Delayed pushing — when a woman “labor’s down”
Table 2. Labor Characteristics Associated With Use of Delayed Pushing

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Delayed Pushing (n=3,870)</th>
<th>Early Pushing (n=17,164)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor type</td>
<td></td>
<td></td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Spontaneous</td>
<td>937 (24.2)</td>
<td>4,980 (29.0)</td>
<td></td>
</tr>
<tr>
<td>Augmented</td>
<td>1,612 (41.7)</td>
<td>6,530 (38.0)</td>
<td></td>
</tr>
<tr>
<td>Induced</td>
<td>1,321 (34.1)</td>
<td>5,654 (32.9)</td>
<td></td>
</tr>
<tr>
<td>Date of delivery</td>
<td></td>
<td></td>
<td>.27</td>
</tr>
<tr>
<td>Weekday (Monday–Friday)</td>
<td>2,873 (74.2)</td>
<td>12,594 (73.4)</td>
<td></td>
</tr>
<tr>
<td>Weekend (Saturday–Sunday)</td>
<td>997 (25.8)</td>
<td>4,570 (26.6)</td>
<td></td>
</tr>
<tr>
<td>Time of day that second stage of labor began</td>
<td></td>
<td></td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Day (7 AM–7 PM)</td>
<td>2,195 (56.7)</td>
<td>9,233 (53.8)</td>
<td></td>
</tr>
<tr>
<td>Night (7 PM–7 AM)</td>
<td>1,675 (43.3)</td>
<td>7,931 (46.2)</td>
<td></td>
</tr>
<tr>
<td>Length of first stage (h)</td>
<td>11.4±0.14</td>
<td>11.0±0.06</td>
<td>.05</td>
</tr>
<tr>
<td>Neuraxial analgesia or anesthesia</td>
<td>3,466 (89.6)</td>
<td>13,571 (79.1)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Meconium</td>
<td>873 (22.6)</td>
<td>3,346 (19.5)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Birth weight (g)</td>
<td>3,400±6.95</td>
<td>3,311±3.23</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Treated for chorioamnionitis</td>
<td>346 (8.9)</td>
<td>1,081 (6.3)</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

Data are mean±standard error or n (%) unless otherwise specified.
<table>
<thead>
<tr>
<th>Outcome</th>
<th>Delayed Pushing (n=3,870)</th>
<th>Early Pushing (n=17,164)</th>
<th>Unadjusted OR (95% CI)</th>
<th>P</th>
<th>Adjusted OR (95% CI)</th>
<th>P*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cesarean delivery</td>
<td>432 (11.2)</td>
<td>878 (5.1)</td>
<td>2.33 (2.07–2.63)</td>
<td>&lt;.001</td>
<td>1.86 (1.63–2.12)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Operative vaginal delivery</td>
<td>627 (16.2)</td>
<td>1,923 (11.2)</td>
<td>1.53 (1.39–1.69)</td>
<td>&lt;.001</td>
<td>1.26 (1.14–1.40)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Episiotomy</td>
<td>763 (19.7)</td>
<td>2,867 (16.7)</td>
<td>1.22 (1.12–1.34)</td>
<td>&lt;.001</td>
<td>1.01 (0.92–1.11)</td>
<td>.87</td>
</tr>
<tr>
<td>3rd- or 4th-degree perineal laceration</td>
<td>340 (8.8)</td>
<td>1,198 (7.0)</td>
<td>1.28 (1.13–1.46)</td>
<td>&lt;.001</td>
<td>1.11 (0.97–1.27)</td>
<td>.13</td>
</tr>
<tr>
<td>Postpartum hemorrhage</td>
<td>62 (1.6)</td>
<td>220 (1.3)</td>
<td>1.25 (0.94–1.67)</td>
<td>.12</td>
<td>1.43 (1.05–1.95)</td>
<td>.02</td>
</tr>
<tr>
<td>Blood transfusion</td>
<td>44 (1.1)</td>
<td>163 (0.9)</td>
<td>1.20 (0.86–1.68)</td>
<td>.29</td>
<td>1.51 (1.04–2.17)</td>
<td>.03</td>
</tr>
<tr>
<td>Maternal ICU admission†</td>
<td>11 (0.3)</td>
<td>64 (0.4)</td>
<td>0.79 (0.42–1.48)</td>
<td>.46</td>
<td>1.21 (0.65–2.23)</td>
<td>.55</td>
</tr>
<tr>
<td>5-min Apgar score less than 5</td>
<td>14 (0.4)</td>
<td>45 (0.3)</td>
<td>1.38 (0.76–2.52)</td>
<td>.29</td>
<td>1.28 (0.68–2.40)</td>
<td>.44</td>
</tr>
<tr>
<td>Cord umbilical artery pH 7.0 or less†</td>
<td>10 (0.3)</td>
<td>39 (0.2)</td>
<td>1.18 (0.60–2.33)</td>
<td>.64</td>
<td>1.33 (0.70–2.52)</td>
<td>.39</td>
</tr>
<tr>
<td>Shoulder dystocia</td>
<td>107 (2.8)</td>
<td>429 (2.5)</td>
<td>1.11 (0.89–1.37)</td>
<td>.34</td>
<td>0.85 (0.67–1.06)</td>
<td>.15</td>
</tr>
<tr>
<td>NICU admission</td>
<td>340 (8.8)</td>
<td>1,172 (6.8)</td>
<td>1.31 (1.16–1.49)</td>
<td>&lt;.001</td>
<td>1.10 (0.96–1.26)</td>
<td>.15</td>
</tr>
</tbody>
</table>

OR, odds ratio; CI, confidence interval; ICU, intensive care unit; NICU, neonatal intensive care unit.
Data are n (%) unless otherwise specified.
Number of missing values: episiotomy, 9; 3rd- or 4th-degree laceration, 10; postpartum hemorrhage, 680; 5-minute Apgar score, 7; cord gases, 1; shoulder dystocia, 1.

* Adjusted for center, maternal age, gestational age, body mass index, race and ethnicity, insurance, gestational diabetes, labor augmentation or induction, neuraxial analgesia or anesthesia, birth weight, and treatment for chorioamnionitis.
† Firth’s adjustment used as a result of separation of values.
Table 5. Hospital Characteristics Associated With Use of Delayed Pushing

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Delayed Pushing (n=3,870)</th>
<th>Early Pushing (n=17,164)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house attending obstetrician</td>
<td>3,332 (86.1)</td>
<td>15,197 (88.5)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Dedicated obstetric anesthesiology 24 h/d</td>
<td>3,474 (89.8)</td>
<td>14,761 (86.0)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>In-house attending neonatologist</td>
<td>3,165 (81.8)</td>
<td>14,815 (86.3)</td>
<td>&lt;.001</td>
</tr>
<tr>
<td>Obstetrics and gynecology residents present</td>
<td>3,505 (90.6)</td>
<td>15,511 (90.4)</td>
<td>.70</td>
</tr>
<tr>
<td>Start of 2nd stage during resident shift change</td>
<td>273 (7.1)</td>
<td>1,152 (6.7)</td>
<td>.44</td>
</tr>
<tr>
<td>Start of 2nd stage during attending shift change</td>
<td>213 (5.5)</td>
<td>909 (5.3)</td>
<td>.60</td>
</tr>
</tbody>
</table>

Data are n (%) unless otherwise specified.

- Support during second stage labor........
Effect of Laboring Down on Time

- Does laboring down increase the second stage duration in total...sometimes
- Inc total time, dec active pushing time ???
- > active pushing associated with changes in pH and maternal fatigue
- Yet increased duration does not have negative effect on newborn outcomes
- Focus is on active pushing time...
Physics and Second Stage Management: Getting that Baby OUT!
Positions to overcome pelvic constraints
Epidural use and Position for Pushing

- Meta-analysis with only 2 studies
- N=281 women
- 166 upright, 115 recumbent

- Large but non-significant reductions in instrumental deliveries with upright position

- Median length of second stage was decreased significantly with upright position
Not being supine is best...

• So range of positions are possible
• Context of prior labor stages
  – Epidural
  – Flexbility
  – Rotation and descent
• One position is not an ideal, more than one is likely more efficient....
How should a woman start pushing?
The Evidence:
Spontaneous vs. Closed Glottis Pushing

Sustained Valsalva bearing down efforts:

**Increases:**
- Fetal heart rate decelerations
- Maternal fatigue
- Perineal tears (?)
- Urinary stress incontinence postpartum

**Decreases:**
- Umbilical cord pH values

Question of Clinical Significance
N= 425 primiparous women without an epidural across 4 studies in UK, USA, Hong Kong
Compared Valsalva to Spont Pushing
Key Indicators of Interest:
• Instrumental/operative delivery (no difference)
• Length of second stage (18 min less with Valsalva*)
• Perineal Lacerations, Episiotomy (no sig difference in 1 but a trend towards dec was noted with spont)
Type of Pushing and Pelvic Floor Function

A small randomized trial of the effects of coached vs uncoached maternal pushing during the second stage of labor on postpartum pelvic floor structure and function.

Schaffer, et al. (2005) RCT of coached vs uncoached maternal pushing Amer. J. Obstet & Gynec. 192(5)
Coached vs Uncoached Main Results

Coached group (n=67) vs Uncoached (n=61)

Uncoached pushing resulted in:
• Decreased bladder capacity
• Decreased 1st urge to void

Coached pushing resulted in:
• 2X Increase in Detrusor overactivity
• Increased Dx of urodynamic stress incontinence (11/67 vs 7/61  NS)

Women in both groups did not have epidural anesthesia
<table>
<thead>
<tr>
<th>Effects of Different Pushing Techniques</th>
<th>Directed</th>
<th>Physiologic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directions given to the woman</td>
<td>Provider directed, repeated counts to 10 with sustained breath holding. Usually results in 2–3 bearing down efforts per contraction</td>
<td>Spontaneous based on natural urges. Usually results in 5–6 bearing down efforts of 3–10 seconds each per contraction</td>
</tr>
<tr>
<td>Breathing</td>
<td>Valsalva, breath holding</td>
<td>Exhale, mouth open with occasional Valsalva maneuver</td>
</tr>
<tr>
<td>Noise</td>
<td>Silence encouraged</td>
<td>Grunting, exhaling, low groaning</td>
</tr>
<tr>
<td>Legs</td>
<td>Held up and back toward abdomen</td>
<td>No leg holding</td>
</tr>
<tr>
<td>Fatigue</td>
<td>Can be pronounced depending on duration of pushing</td>
<td>Less fatigue when compared to directed pushing</td>
</tr>
<tr>
<td>Fetus</td>
<td>Variable decelerations more likely</td>
<td>Variable decelerations not as frequent compared to directed pushing</td>
</tr>
<tr>
<td>Perineum</td>
<td>Rapid distention during forceful pushing</td>
<td>Gradual distension</td>
</tr>
<tr>
<td>Duration</td>
<td>Shorter second stage but longer period of active pushing</td>
<td>Longer second stage but shorter period of active pushing</td>
</tr>
<tr>
<td>Long-term effects</td>
<td>Unclear</td>
<td>Preliminary evidence that physiologic pushing is associated with better urodynamic measures in the first 3 months postpartum</td>
</tr>
</tbody>
</table>
Open Glottis, Self Directed Pushing

Supported as the Best Practice method of pushing
Education regarding strategy in CBE classes
QI method of managing second stage labor
AWHONN Guidelines for Nursing Care during Second Stage
What are some of the issues?

• In Osborn’s (2012) survey of CNMs in the US regarding second stage labor management, of the 375 CNMs only about 12% indicated they believed women without an epidural required directed management of 2nd stage labor,

• Yet almost 70% indicated that women with an epidural were in need of valsalva type direction during 2nd stage,

• This demonstrates the influence of the clinical context on the use or non-use of evidence based practices.

• Challenge of applying physiologic approaches when there is “disrupted” physiology.
Role of Supportive Direction

• When a woman may need assistance how do you maintain the “self directed approach”
• Use of supportive, tailored information vs taking over and directing
• Breaking down the dynamics of pushing into single elements

• Offering supportive comments and then awaiting response

  • Roberts et al, 2007, Sampselle, 2005, Low R03 NINR
Value of tailoring the approach

• Exercising clinical judgment INFORMED by clinical assessment of maternal, fetal well being
• Use of evidence as a filter to the approach
• “There is no wrong approach”
• Supporting the woman to “do what works best for her” or “letting her go”
  – Benefits and Risks

• Need further research to explore how we should be doing this dance. Initial qualitative work documents less nuance and more oppositional approaches.
When to push with the contraction.

• Coordination with contraction

• Sensation of bearing down

• “Letting it build”

• “Keep going” or “Again”
Biomechanical Analyses of the Efficacy of Patterns of Maternal Effort on Second-Stage Progress

Kuo-Cheng Lien, PhD, John O. L. DeLancey, MD, and James A. Ashton-Miller, PhD

Fig. 3. A. The predicted effect of the six different push patterns on the duration of labor. B. The estimated number of the voluntary pushes required for the different push patterns. (© Biomechanics Research Laboratory, University of Michigan).

Risk of Traditional Pushing Method

- Range of second stage in modeling
  - 57.5 min to 75.8 minutes range
  - 23 pushes with Peak Push Pattern compared to 59 pushes (a 61% increase in energy expended)
  - Duration is increased by 16% compared to 3 Pattern Pushing with Peak Pushing (~13 minutes)

- Three push per contraction pattern is common traditional practice but more likely to contribute to maternal fatigue

- Fatigue potential for dec capacity to push
- More studies necessary…….
Duration conclusions

– It is complicated….

• Accurate assessment of second stage initiation
  – ?To check or not to check?

• Efficacy vs Efficiency

• Communication, Communication

• Assessment and observation of progress

• Ongoing research focused on the “process aspects of second stage” not just the product

• Continuous one to one support
EB Management of Second Stage Labor

Spontaneous Onset of Pushing
Laboring down with an epidural and also without?
Open Glottis, Self Directed Pushing not Coached (maybe tailored support if needed)
Upright Positions, Freedom of Movement to Change Position
Pushing Actively for 3 hours as measure of duration P0
Evaluate progress in descent and ROTATION
Consider potential change in process/route of delivery with not descent or rotation, using new duration guidelines
Close fetal AND MATERNAL assessment during second stage
Consensus Statement
2nd Stage Duration

• At least 2 hours for multiparous women

• At least 3 hours for nulliparous women
The Power of Birth
Woman Centered Care

Term used to describe a philosophy of maternity care that gives priority to the wishes and needs of the woman, and emphasizes the importance of informed choice, continuity of care, and the woman’s involvement in shared decision making to promote optimal, desired health outcomes for the woman and her baby.
Evidence to Support Practices
• Explore more opportunities to support normal healthy physiologic approaches to childbirth

• To Promote Optimal Outcomes for Mothers and Babies

• www.BirthTOOLS.org
Questions?

kanelow@med.umich.edu