The Ottawa Hospital's Clinical Practice Guideline for the Second Stage of Labour

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Abstract

The management of the second stage of labour remains controversial, and there are very few comprehensive evidence-based clinical practice guidelines to assist care providers. We describe an approach to developing a local clinical practice guideline that included extensive review of the literature; use of a guideline appraisal instrument to assess methodological rigour, content, clarity and applicability; use of a recommendation matrix; drafting a local guideline; obtaining formal feedback; making revisions; and designing an implementation and evaluation plan.

Recommendations from this guideline include timelines for the total length of second stage, waiting time, and pushing time. Positioning of the woman, use of oxytocin, and fetal assessment are also discussed. This guideline is not intended to be used for women with multiple gestation and women attempting vaginal birth after Caesarean (VBAC) or in clinical situations where little evidence on best practice exists and management is individualized. We advocate an approach to the second stage of labour that enhances patient safety through team planning, communication, and documentation.

Résumé

La prise en charge du deuxième stade du travail demeure controversée et nous ne disposons que de très peu de directives cliniques factuelles et exhaustives pour orienter les fournisseurs de soins. Nous décrivons une approche envers l'élaboration d'une directive clinique locale ayant compris une analyse documentaire exhaustive; l'utilisation d'un instrument d'évaluation des directives cliniques en vue d'évaluer la rigueur méthodologique, le contenu, la clarté et l'applicabilité; l'utilisation d'une matrice de recommandation; la rédaction d'une ébauche de directive clinique locale; l'obtention de commentaires formels; l'apport de révisions; et la conception d'un plan de mise en œuvre et d'évaluation.

Parmi les recommandations issues de cette directive clinique, on trouve les chronologies de la durée totale du deuxième stade, du temps d'attente et du temps de poussée. Le positionnement de la parturiente, le recours à l'oxytocine et l'évaluation fœtale y font

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également l'objet de discussions. Cette directive clinique ne s'applique pas aux femmes présentant une gestation multiple, aux femmes qui tentent un accouchement vaginal après avoir déjà subi une césarienne (AVAC) ni aux situations cliniques pour lesquelles nous ne disposons que de peu de résultats cliniques quant aux pratiques optimales et dans le cadre desquelles la prise en charge est personnalisée. Nous défendons une approche envers le deuxième stade du travail qui rehausse la sécurité des patientes au moyen de la planification d'équipe, de la communication et de la documentation.

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INTRODUCTION

The second stage of labour is a period of increased risk for the fetus,^{1,2} but there are very few comprehensive evidence-based clinical practice guidelines for second stage management.^{3,4} Debate continues about best practice.^{5,6} At the Ottawa Hospital, we were concerned about variations in practice that led to increasingly long second stages, especially for nulliparous women at term with singleton gestations (Table 1). In order to ensure best practice, we set out to develop a standardized approach to the second stage of labour as part of a comprehensive patient safety initiative in two birth units of a large merged teaching hospital. We describe here a multidisciplinary group's adaptation of evidence-based clinical practice guidelines (CPG). The implementation and evaluation of our clinical practice guideline will be described in a separate publication.

DEVELOPMENT OF A LOCAL GUIDELINE

The guideline for the second stage of labour is intended to be applied in women at term with low-risk pregnancies and when maternal and fetal status is reassuring. It is not intended for women with multiple gestation and women attempting vaginal birth after Caesarean (VBAC), because in these clinical situations there is very little evidence on best practice, and management is individualized. Taking a

| | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|-------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Mean duration of second stage (hrs) | 1.78 | 1.69 | 1.77 | 1.91 | 2.21 | 2.26 | 2.34 | 2.5 | 2.38 | 2.61 |
| 2nd stage > 4 hrs (%) | 6.9 | 5.4 | 7.3 | 8.6 | 13.8 | 15.4 | 18.6 | 19.3 | 18.2 | 23.2 |
| 2nd stage > 5 hrs (%) | 3.7 | 2.5 | 3.3 | 3.8 | 7.5 | 8.5 | 10.1 | 12.5 | 10.7 | 11.6 |

 Table 1. Duration of second stage of labour in nulliparous women at term with singleton vertex presentation,

 1995–2004, The Ottawa Hospital, General Campus

family-centred approach, we sought to develop guidelines based on informed choice, the woman's preference, support and flexibility on the part of the care providers,⁷ and the best quality evidence.

A multidisciplinary committee followed the process for evaluating and adapting practice guidelines for local use outlined by Graham et al.8 This process encourages a group to assess existing guidelines rigorously and make recommendations for adopting or adapting an existing guideline or developing a customized guideline by adapting recommendations from existing CPGs and recently published evidence. The steps involved are (1) completing an extensive literature review for existing guidelines and other more recent evidence; (2) using a validated guideline appraisal instrument to assess methodological rigour, content, clarity and applicability; (3) developing a recommendation matrix to compare the recommendations and levels of evidence in guidelines that scored well in the appraisal; (4) drafting the local guideline based on the matrix; (5) obtaining formal practitioner feedback on the guideline; (6) making revisions based on this feedback; and (7) developing an implementation and evaluation plan.

To identify existing guidelines, we conducted a search of the websites of major organizations involved in perinatal care. We identified three existing guidelines on the second stage of labour; these had been developed by the Association of Women's Health, Obstetric and Neonatal Nurses (AWHONN),9 the World Health Organization (WHO),10 and the Society of Obstetricians and Gynaecologists of Canada (SOGC).11 To identify additional evidence, we searched Medline, CINHAL (the Cumulative Index to Nursing and Allied Health Literature), and the Cochrane Databases, using the medical subject headings of "labor stage, second"; "pushing, childbirth"; "obstetrical nursing"; "posture"; "operative obstetrics"; "obstetrical forceps"; "pregnancy outcomes"; "birth injuries"; "cesarean section"; "vacuum extraction"; and "Valsalva maneuver" for other relevant publications in English from 2000 to 2005.

To evaluate the rigour of preparation, clarity, content, and applicability of the AWHONN, WHO, and SOGC guidelines, eight members of the Ottawa Hospital's Perinatal Clinical Practice Guideline Committee independently assessed each of the documents using the Appraisal Instrument for Clinical Guidelines.12 The WHO guideline received a low quality score for rigour of preparation, and it was eliminated from further consideration. Neither the SOGC guideline nor the AWHONN guideline scored high enough on rigour, content, or clarity to be accepted in its existing form. Therefore, a recommendations matrix was produced to allow the group to compare individual recommendations made by these two CPGs. The group reviewed the matrix and discussed each recommendation and the associated level of evidence. Recommendations for which there was stronger evidence or for which there was agreement among the guidelines were more likely to be retained. The committee also considered recommendations associated with good quality studies published since the individual CPGs were produced, such as the PEOPLE (Pushing Early or Pushing Late with Epidural) trial.¹³ When there was a lack of good quality evidence, the committee agreed to develop recommendations based on consensus opinion, and this process was clearly identified. The development of the local guideline took place over a six-month period.

The draft guideline was distributed for practitioner feedback to physicians, nurses, and midwives (n = 194). Fifty-eight forms (30%) were returned, with feedback received from each care provider group (35% of nurses, 28% of physicians, and 15% of midwives). Of all responders, 84% agreed or strongly agreed that the guideline should be approved, with slight modifications to formatting and clarification of the recommended latency time between full cervical dilatation and pushing. The feedback was incorporated into a further draft and re-circulated for final review and approval by departmental committees.

THE OTTAWA HOSPITAL GUIDELINE

Principles of Care

Our guideline consists of four decision pathways based on distinct clinical situations: nulliparous women with epidural anaesthesia, nulliparous women without epidural anaesthesia, multiparous women with epidural anaesthesia, and multiparous women without epidural anaesthesia (Appendix A). The supporting level of evidence matrix can be obtained on request to the first author. Regardless of the

| Level of evidence* | Classification of recommendations† | | | |
|---|---|--|--|--|
| I: Evidence obtained from at least one properly randomized controlled trial. | A. There is good evidence to recommend the clinical preventive action. | | | |
| II-1: Evidence from well-designed controlled trials without randomization. | B. There is fair evidence to recommend the clinical preventive action. | | | |
| II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more | C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination. | | | |
| than one centre or research group. | D. There is fair evidence to recommend against the clinical | | | |
| II-3: Evidence from comparisons between times or places with or | preventive action. | | | |
| without the intervention. Dramatic results from uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category. | E. There is good evidence to recommend against the clinical preventive action. | | | |
| III Opinions of respected outboutboutboutboutboutboutboutboutboutb | I. There is insufficient evidence (in quantity or quality) to make | | | |
| experience, descriptive studies, or reports of expert committees. | a recommendation; however, other factors may influence decision-making. | | | |

Table 2. Canadian Task Force on Preventive Health Care Evidence Rankings

* The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.⁴⁰

†Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.⁴⁰

pathway, the fundamental principles of care to be followed in all cases include (1) fetal and maternal well-being is established prior to any delay in pushing, (2) hourly vaginal assessments in the second stage of labour are performed by a consistent examiner who is proficient in the assessment of fetal station and position, (3) primary health care provider is notified at the time of full cervical dilatation if there is no progress within any one hour block and at the end of two hours, (4) family physicians and midwives are required to consult an obstetrician when women in their care have been in the second stage for two hours and birth is not imminent, (5) regular bladder assessment is performed to ensure a full bladder is not obstructing descent of the presenting part (especially with epidural anaesthesia).

The principal recommendations in the guideline address the duration of recommended latency from full cervical dilatation to pushing, the duration of pushing, the total duration of the second stage of labour, use of oxytocin, and positioning and pushing techniques.

When reviewing the evidence for these guidelines, we used the ranking system of the Canadian Task Force on Preventive Health Care^{14,15} (Table 2).

Latency From Full Cervical Dilatation to Pushing

The PEOPLE trial¹³ demonstrated that delaying maternal pushing for a maximum of two hours compared with immediate pushing at full cervical dilation in nulliparous women with epidural anaesthesia was associated with a significant reduction in the incidence of difficult births (from 22.5% to 17.8%). The reduction in risk of difficult birth was most marked in women in whom the station was above +2 at the onset of the second stage and, particularly, when the position was other than occipito-anterior. Data on multiparous women are more limited, but Hansen et al. found no difference in outcomes in multiparous women who waited for one hour before pushing.⁵ Overall, a policy of delayed rather than early pushing for women with epidural anaesthesia reduces operative intervention at the expense of an increased duration of second stage.^{16,17} In relation to fetal outcome, a recent randomized controlled trial identified better fetal oxygen saturation when pushing was delayed for up to two hours.¹⁸ Hansen et al. reported fewer incidences of fetal heart rate decelerations in both primigravidas and multigravidas who waited before pushing.⁵ Simpson and James reported this in a nulliparous population.¹⁸ The PEOPLE trial identified lower umbilical cord blood pH among infants in the delayed pushing group, but the authors felt that these results were of uncertain clinical significance. This finding contrasts with that of Piquard et al., who reported that fetal acid base status did not change during the passive phase of the second stage of labour in women without epidural anaesthesia.²

On the basis of these findings, the majority of our physicians supported a recommendation to wait two hours before pushing in all women with epidural anaesthesia who had no urge to push, or in whom the station of the presenting part was above +2, or who had a fetus in an occipito-posterior or occipito-transverse position.

Recommendations:

• In nulliparous women with epidural anaesthesia, waiting for up to two hours prior to the onset of pushing is appropriate if there is continued descent of the head and reassuring fetal and maternal status. (Level IA)

- In nulliparous women without epidural anaesthesia and in multiparous women with epidural anaesthesia, waiting for up to two hours prior to the onset of pushing, and up to one hour in multiparous women without epidural anaesthesia is appropriate in the presence of continued descent of the head and reassuring fetal and maternal status. (Level III)
- In nulliparous women with epidural anaesthesia, pushing can be commenced at any time when the head is visible OR the station is +2 or below AND the position is occipito-anterior (OA) or left (L)OA or right (R)OA. (Level IA)
- In multiparous women with epidural anaesthesia, pushing can be commenced when the urge to push is present OR the head is visible OR the station is +2 or below and the position is OA or LOA or ROA. (Level III)
- All women without epidural can commence pushing when the urge is present. (Level III)
- Pushing should commence in all women whenever the guideline waiting time is exceeded. (Level III)

Duration of Pushing

Time limits for the active (pushing) phase of second stage cannot be stipulated because conclusive evidence is lacking. It is known, however, that the duration of active pushing is more important for the fetal and maternal condition than the total duration of the second stage of labour.^{17,19} The findings in the PEOPLE trial¹³ related to nulliparous women with epidural anaesthesia support a general consensus recommendation. Waiting for up to two hours before pushing resulted in a reduction in the median duration of active pushing (from 110 minutes [10th and 90th percentiles 37 and 228 minutes respectively] to 68 minutes [17, 175 minutes]).¹³ Hansen et al. documented a similar finding.⁵ When the fetal heart rate is reassuring, Piquard et al. found the fetal scalp pH decreased slowly only during the active pushing phase.²

Recommendation:

• For all nulliparous women and for multiparous women with epidural anaesthesia, reassessment to decide if assisted birth is required should be made after a maximum of two hours of active pushing (one hour in multiparous women without epidural anaesthesia) unless spontaneous birth is felt to be imminent, even if the guideline for total timeline of the second stage has not been exceeded. It would be appropriate to intervene sooner if there is any concern over fetal or maternal status. (Level II-B)

Total Duration of Second Stage

Nulliparous Women

In a large study, Menticoglou et al. found that 93% of nulliparous women with epidural anaesthesia delivered within four hours of full cervical dilatation.²⁰ Of the 7% of women whose second stage of labour exceeded four hours, less than one third achieved a spontaneous vaginal birth. There was no change in neonatal mortality or cord pH at the time of birth when the second stage of labour lasted up to five hours. Similarly, Myles and Santolaya²¹ and Hansen⁵ found no difference in neonatal outcomes if the second stage lasted more than four hours. However, maternal complications have been reported in association with a second stage longer than four hours, including postpartum hemorrhage, third and fourth degree lacerations, chorioamnionitis, and operative vaginal births and Caesarean sections.3 Contrary to this, Hansen et al. found no adverse maternal outcomes when the second stage of labour lasted up to 4.9 hours in primigravidas with epidural anaesthesia.5 Paterson et al.²² found that 90% of nulliparous women without epidural anaesthesia were delivered within three hours.

Multiparous Women

Although there is less information on multiparous women, Paterson et al.²² found that approximately 80% of multiparous women with epidural anaesthesia delivered within three hours. Without epidural anaesthesia, almost all women had delivered within 90 minutes.

In a large retrospective cohort study including both nulliparous women and multiparous women, with and without epidural anaesthesia, Saunders et al.¹⁹ found there was no convincing relationship between infant mortality and morbidity and the duration of the second stage up to three hours.

The SOGC guidelines suggest that an arbitrary time limit for the second stage is not necessary, and that maternal status, fetal status, and the rate of descent of the presenting part should guide management. However, they also suggest that abnormal descent should be suspected with excessive duration of the second stage (i.e., more than two hours in primigravidas and more than one hour in multigravidas).¹¹ The American College of Obstetricians and Gynecologists (ACOG) guidelines²³ define dystocia in nulliparous women as labour that lasts for more than three hours when regional anaesthesia is used and more than two hours when it is not. For multiparous women, the respective values are two hours and one hour.

Our protocol provides more opportunity to achieve a spontaneous vaginal birth than the current ACOG²³ and SOGC¹¹ guidelines, and recommends frequent assessment

and use of measures to facilitate progress and descent. Care providers are advised to reassess women at the beginning of the fourth hour of the second stage to determine if spontaneous birth is likely. If not, the team is advised to estimate how long the second stage will progress beyond four hours (only if birth is imminent) and to consider alternative modes of delivery. The likelihood of spontaneous vaginal birth in nulliparous women undelivered after four hours in the second stage of labour is 24% in women without epidural anaesthesia and 28% in women with epidural anaesthesia.20 However, these figures need to be balanced against the potential for maternal morbidity. We agree with the SOGC statement that a prolonged second stage of labour should cause the practitioner to be especially alert to the possibility of cephalopelvic disproportion or malposition, and a decision to conduct an assisted birth can be made at the discretion of the care providers at any time.

Recommendations:

- Continuing the second stage beyond the following time limits may not be appropriate if there is slow or no progress despite oxytocin-augmented contractions. Extending these time limits may be appropriate if progress continues and spontaneous vaginal birth is imminent. (Level II-B)
 - Nulliparous women with epidural anaesthesia: four hours.
 - Nulliparous women without epidural anaesthesia: three hours.
 - Multiparous women with epidural anaesthesia: three hours.
 - Multiparous women without epidural anaesthesia: two hours.

Oxytocin Augmentation

In the PEOPLE trial, administration of oxytocin was continued in the second stage of labour for women who received it in the first stage, or it was started after one hour in the second stage if there was no progress.¹³ In this cohort, oxytocin use was not a significant predictor of difficult delivery.²⁴ For primigravidas with epidural anaesthesia, one randomized trial reported a reduction in instrumental birth rates when oxytocin was routinely initiated at the time of full cervical dilatation.¹⁹

Recommendation:

• Oxytocin administration can begin at any time during the second stage, particularly in nulliparous women with epidural anaesthesia, OR where contractions are assessed to be inadequate OR there is lack of progress. (Level IA)

• Women who are already receiving oxytocin at the onset of the second stage should continue to receive it during the second stage. (Level II-B)

Fetal Health Surveillance

Fetal health surveillance in labour is guided by the SOGC recommendations.¹¹ Following the guideline for the second stage of labour presumes that there is continuing evidence of fetal well-being (which may be demonstrated by intermittent auscultation of the fetal heart in healthy pregnancies or by electronic fetal monitoring). This guideline is not intended to be used when there have been non-reassuring findings regarding fetal status in the first stage or at any time in the second stage of labour. Management in these cases should be individualized.

Recommendations:

- Fetal heart rate auscultation should be carried out immediately after a contraction for one minute at 15to 30-minute intervals during the first stage of labour, and at five-minute intervals in the active portion of the second stage. (Level III)
- Continuous intrapartum electronic fetal monitoring is recommended in the following circumstances:
 - When there is an increased risk of perinatal death, cerebral palsy, or neonatal encephalopathy. (Level III)
 - When oxytocin is being used for augmentation of labour. (Level 1)

Positioning

It has been traditional practice for women to be positioned and to push in the horizontal, semi-Fowler's, or lithotomy position during the second stage of labour.9 Use of these positions is often dictated by interventions such as epidural analgesia, electronic fetal monitoring, or intravenous lines and pumps that limit mobility. In the past, even the supine position was used, although a meta-analysis identified that women pushing in the supine position had higher rates of instrumental deliveries and episiotomies, and more pain, than those using other positions.²⁵ Simkin and Ancheta recommend various physiologic positions and identify contributing features unique to each position.26 They assert that positioning is a key primary intervention when lack of progress is identified in the second stage. Frequent changes in position may help when fetal malposition is identified, or to relieve back pain. Mayberry et al.9 recommend squatting, semi-recumbency, standing, and upright kneeling to generate increased intra-abdominal pressure and increased anteroposterior and transverse diameters of the pelvic outlet.

In women with epidural analgesia, and especially in women with any degree of motor neurone blockade, appropriate positioning is important to prevent injury associated with lack of sensation, poor alignment, or unnatural positioning of joints (e.g., hyperflexion of hips). Women with epidural anaesthesia do not need to remain horizontal. More upright positions can be used when local anaesthetic is combined with narcotics to minimize motor blockade. This also decreases sympathetic blockade and postural hypotension, allowing women greater movement.²⁷

Recommendations:

- Women in labour should choose a position that is comfortable for them and enhances pushing efforts. (Level III)
- It is advisable to encourage frequent changes of position, especially if a fetal malposition or slow descent of the presenting part is present. (Level III)
- Labouring women should avoid supine positioning. (Level I)

Pushing Technique

Although many care providers encourage pushing that incorporates a Valsalva manoeuvre,²⁸ many authors encourage the use of "physiologic bearing down" instead of sustained breath-holding during expulsive efforts.^{9,11,17} "Physiologic bearing down" (making several short pushes without breath-holding), although resulting in a slightly longer second stage, may result in improved maternal-fetal gas exchange and maternal satisfaction with the birth experience.^{11(p57)} Recent studies have concluded that spontaneous (uncoached, rather than coached) pushing, although associated with a slightly longer second stage, had no disadvantages and was associated with a maternal perception of a supportive and encouraging style of care.^{29,30}

Pelvic Floor

There is concern that delayed pushing may have an adverse effect on subsequent pelvic floor function. Fitzpatrick et al. found that delayed pushing resulted in labour being prolonged by one hour but did not result in higher rates of altered continence or anal sphincter injury than immediate pushing.³¹ The factor most strongly associated with pelvic floor dysfunction following birth is instrumental delivery.³²⁻³⁵ The duration of the second stage likely has a minimal independent effect on pelvic floor function. Therefore, maximizing the chances of spontaneous vaginal birth during the second stage is desirable. Press et al. advocate choosing a care provider who promotes physiologic birth as an important determinant of good pelvic floor outcomes.³⁵

DISCUSSION

The management of the second stage of labour has evolved from the rigid advice of "push when fully dilated" (regardless of level of analgesia), to a more expectant approach. At the Ottawa Hospital, this expectant approach has included a more liberal attitude to the total length of the second stage, and its duration has gradually increased. Guidelines for management of the second stage became appropriate because of the potential for maternal and fetal complications and the need for extra nursing, obstetrical, and anaesthesia personnel if an assisted vaginal birth was undertaken, potentially lengthening the second stage even further.

Because of the nature of the intense care needed during the second stage and the various levels of technology associated with modern births, Roberts advocates the establishment of routines that minimize the stress of decision making.¹⁷ We therefore developed this guideline that uses decision trees to provide a consistent approach to management for all members of the health care team. Potential benefits include standards for timely assessment, the avoidance of prolonged second stages, and a reduction in the number of difficult operative deliveries.

There has been concern that small local groups may not have adequate resources to conduct systematic reviews of the evidence and develop local clinical practice guidelines.³⁶ Large groups or professional societies have more experience and resources for the process. However, in the absence of an adequate existing guideline in an area of clinical practice associated with increased risk and patient safety issues, we felt it was more prudent to examine the evidence and adapt existing guidelines to the local environment than to wait for a larger group to develop relevant guidelines. Our group used a guideline adaptation and development process advocated by established authorities³⁷⁻³⁹ and maintained the suggested methodological rigour.

Some of The Ottawa Hospital's recommendations have limited evidence to support them; nevertheless, our group recognized the need to provide some guidance for care providers. The guideline evaluation and approach described here allows for the incorporation of local consensus once the evidence has been reviewed, so that guidelines can be tailored to the local context. For example, the recommendation regarding hourly reassessments and the need for consultation after two hours for family physicians and midwives is made to ensure timely communication and follow-up of potential problems. We have advocated an approach to management of the second stage that enhances patient safety through proactive team planning, communication, and documentation. To this end, the four decision trees are designed to be used as real-time aids to promote timely clinical assessments and communication.

The potential benefits of the application of this guideline need to be confirmed in larger studies and the guideline should be revisited as further information becomes available on the effect of the nature of the second stage on the pelvic floor.

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| Consider 2 nd Stage being <u>finished</u> within 4 hours! | Appendix A – Decision SECOND STAGE OF | Trees LABOUR – | Notify HCP or OBS resident if position is unknown <u>or</u> NO progress in any 1-hour time period. | | | | |
|--|--|-------------------|--|--|--|--|--|
| | OW-RISK NULLIPARAS W | ITH EPIDURA | \L | | | | |
| Use ONL | .Y when maternal and fetal s | tatus is REASS | SURING | | | | |
| 1st Hour – BEGINS WHEN THE C | ERVIX IS FULLY DILATED | | | | | | |
| Time fully dilated: Position | n Station | Positio | on confirmed? | | | | |
| START Pushing – ONLY IF meets Pushing Criteria Head visible OR Urge to push is present AND Station is +2 or below, AND Position is OA, LOA, ROA Started pushing @ | | | | | | | |
| 2 nd Hour Begins @ | ASSESS PROGRESS | | 7 | | | | |
| Position Station Pushing criteria met? □ YES | _ Progress? □ YI | ES 0 NO-M 0 NO | NOTIFY HCP or resident | | | | |
| CONTINUE or START PUSHING Must meet Pushing Criteria - see box above Started pushing @ Wait meet Pushing @ Maternal positioning Oxytocin augmentation Epidural analgesia, prn Assess bladder *Can wait up to 2 hours | | | | | | | |
| 3 rd Hour Begins @ HCP NOTIFIED TO ASSESS - ALL SHOULD BE PUSHING (unless otherwise ordered by the HCP) | | | | | | | |
| Position Station | Progress? | YES L | NO | | | | |
| FP and midwife consult OB (unless delivery imminent): YES NO Pushing for 1 hour - CONTINUE Augmentation Pushing for 2 hours - Consider assisted delivery unless birth IMMINENT Bladder Women who have not pushed - START pushing Started pushing @ | | | | | | | |
| 4 th Hour Begins @ HCP NOTIFIED TO ASSESS - ALL SHOULD BE PUSHING Position Station Pushing for 1 hour – CONTINUE Pushing for 2 hours – Consider assisted delivery unless birth imminent | | | | | | | |
| AT END OF HOUR 4 Or Inadequate Progress SVB imminent - CONTINUE pushing Or SVB unlikely - NOTIFY HCP, if not present - CONSIDER Assisted Birth / C-Birth | | | | | | | |
| Plan for delivery communicated & documented on chart? □ YES □ NO | | | | | | | |
| Outcome: Birth @ □ SVB □ Forceps □ Vacuum □ Both □ C-Birth □ Apgar / *Place form in designated file Comments: pH BE designated file | | | | | | | |

| | | | | × | | | |
|---|--|---|---|----------------------|--|--|--|
| Consider 2 nd Stage being <u>finished</u> within 3 hours! | Notify HCP resident if p is unknown progress i 1-hour time | or OBS osition o <u>or</u> NO in any period. | | | | | |
| 1st Hour - BEGINS WHEN CERVIX IS FULLY DILATED | | | | | | | |
| Time fully dilated: | Position | Station | Position confirmed? | | | | |
| START Pushing – ONL meets Pushing Criter Head visible OR Urge to push is present OR Station is +2 or below, A Position is OA, LOA, RO Started pushing @ | Y IF ria* ND A | DELAY Pushing – ON The FHR is rease No urge to push AND Station is above + Position is OP or Continue or Start ox Urge to push remains - Empty bladder | LY IF (check all that apply) suring 2 OT <i>cytocin prn</i> <i>Give top-up</i> Reposition to facilitate rotation | | | | |
| 2 nd Hour Begins @ Position Station Pushing criteria met? YES CONTINUE or S PUSHING Must meet Pushing Criteria - se Started pushing @ | ASSESS P | Progress? YES NO WAIT* for 1 Reassess: Maternal pc Oxytocin au Epidural an Assess blac | NO - NOTIFY HCP or more hour psitioning gmentation algesia, prn lder *Can wait up to 2 h | resident | | | |
| 3 rd Hour Begins @ Position Station | HCP/RESIDENT N | IOTIFIED TO ASSESS | - ALL SHOULD BE PUSHII (unless otherwise ordered by the second se | NG the HCP) | | | |
| FP and midwife consult OB (unle Pushing for 1 hour - CONTINUE Pushing for 2 hours - Consider as Women who have not pushed - ST | ss delivery immine sisted delivery unless ART pushing Sta | ent): □ YES □ NC birth IMMINENT rted pushing @ | Augmen | tation | | | |
| AT END OF HOUR 3 Adequate Prog SVB Imminent - CO | ITESS INTINUE pushing | | equate Progress unlikely - CONSIDER Assisted Birth / (| C-Birth | | | |
| Plan for delivery communicated & documented on chart? UYES UNO SECOND STAGE SHOULD ONLY CONTINUE BEYOND 3 HOURS IF VAGINAL BIRTH IMMINENT | | | | | | | |
| Outcome: Birth @ □ SV Comments: | B 🗌 Forceps 🗌 | Vacuum □ Both □ C-B pH_ | irth □ Apgar/ *Place BE design: | form in ated file | | | |

| Consider 2nd Stage being finished within 3 hours!SECOND STAGE OF LABOUR – NULLIPARAS - NATURAL CHILDBIRTH Use ONLY when maternal and fetal status is REASSURINGNotify HCP or OBS resident if position is unknown or NO progress in any 1-hour time period.1st Hour – BEGINS WHEN CERVIX IS FULLY DILATED | | | | | | |
|---|--|--|--|--|--|--|
| Time fully dilated: Position | Station Position confirmed? □ YES | | | | | |
| START Pushing – IF Urge to push is present Started pushing @ | DELAY Pushing – ONLY IF (check all that apply) The FHR is reassuring No urge to push The woman can tolerate waiting Continue or Start oxytocin prn Assess bladder Reposition to facilitate rotation | | | | | |
| 2 nd Hour Begins @ ASS | ESS PROGRESS | | | | | |
| Position Station Urge to push present? | Progress? YES NO - NOTIFY HCP or resident NO | | | | | |
| □ CONTINUE or □ START PUSHING | G WAIT* for 1 more hour Reassess: Maternal positioning Oxytocin augmentation Epidural analgesia, prn Assess bladder *Can wait up to 2 hrs | | | | | |
| 3 rd Hour Begins @ HCP/RESIDI | ENT NOTIFIED TO ASSESS - ALL SHOULD BE PUSHING (unless otherwise ordered by the HCP) | | | | | |
| FP and midwife consult OB (unless delivery imminent): YES NO Pushing for 1 hour - CONTINUE Augmentation Pushing for 2 hours - Consider assisted delivery unless birth IMMINENT Bladder Women who have not pushed - START pushing Started pushing @ | | | | | | |
| End of 3 rd Hour @ REA Position Station | ASSESS | | | | | |
| Adequate Progress SVB Imminent - CONTINUE pushing | Or Inadequate Progress SVB unlikely - Notlfy HCP, <i>if not present</i> - CONSIDER Assisted Birth / C-Birth | | | | | |
| Plan for delivery communicated & documented on chart? If epidural is started during 2 nd Stage switch to Nulliparas With Epidural' guideline starting at the elapsed time. SECOND STAGE SHOULD ONLY CONTINUE BEYOND 3 HOURS IF VAGINAL BIRTH IMMINENT | | | | | | |
| Outcome: Birth @ | G □ Vacuum □ Both □ C-Birth □ Apgar/ *Place audit in pH BE designated file | | | | | |

| Consider 2 nd Stage being <u>finished</u> within 2 hours! Stage being MULTIPARAS - NATURAL CHILDBIRTH Use ONLY when maternal and fetal status is REASSURING | | | | | |
|--|----------------------------|--|--|--|--|
| 1st Hour – BEGINS WHEN CERVIX IS | FULLY DILATED | | | | |
| Time fully dilated: Position | Station | Position | n confirmed? UYES | | |
| START Pushing – ONLY IF | | ELAY Pushing – ONLY IF No urge to push (can push a The FHR is reassuring The woman can tolerate wai | (check all that apply) it anytime if urge occurs) ting | | |
| | | Continue or D Start oxytoo Reposition to facilitate rotation | c in prn on | | |
| 2nd Hour Begins @ ASS Position Station | SESS PROGRESS | - ALL SHOULD BE (unless otherwise order YES D NO | PUSHING red by the HCP) | | |
| Pushing for 1 hour – Consider assister Women who have not pushed – START | d delivery unless birth II | MMINENT ushing @ | eassess: Positioning Augmentation Bladder | | |
| : | | | | | |
| End of 2 nd Hour - HCP | RESIDENT NOTIFIE | D TO ASSESS | | | |
| FP and midwife consult OB (unless o | delivery imminent): | | | | |
| Adequate Progress SVB Imminent - CONTINUE pushing | or In | adequate Progress VB unlikely - CONSIDER Assisted B | iirth / C-Birth | | |
| | а. ¹ т | | | | |
| If epidural is started during 2nd Sta | ge switch to 'Multiparc | s With Epidural' guideline star | ting at the elapsed time. | | |
| | | | | | |
| SECOND STAGE SHOULD ON | LY CONTINUE BEYON | ID 2 HOURS IF VAGINAL BIR | | | |
| | | | | | |
| Outcome: Birth @ O SVD Comments: | ☐ Forceps ☐ Vacu | um 🛛 Both 🗂 C-Birth 🗌 A pH | pgar/ *Place audit in BE designated file | | |