

V.13.3 Special Report: Standardizing OB Data Definitions Report on the National ReVITALize Conference



I. Introduction

This V13.3 Special Report provides information related to efforts to standardize obstetric data definitions. Wide spread use of these operational definitions will improve the advancement and integration of performance measurement, registries, research, electronic health records, and birth certificates. Dissemination of the data definitions and the work of the Conference participants are critical to insuring the acceptance and use of the endorsed definitions. We are very pleased to participate in this process by using our quarterly special report platform to inform our members of the reVITALize work and have Dr. Kate Menard as a guest presenter during our quarterly webinar. NPIC/QAS will continue to update our membership on this important work as this effort progresses.

II. Standardizing Obstetrical Data Definitions: reVITALize

In August, 2012 the American Congress of Obstetrics and Gynecology (ACOG), with additional support from the March of Dimes, the Society for Maternal Fetal Medicine, and the United Health Foundation, brought together over 80 national leaders in women's health care for the reVITALize Obstetric Definitions Conference.¹ The Conference was chaired by Elliott K. Main, MD, FACOG and M. Kathryn Menard, MD, MPH, FACOG.

The goal of the conference was to standardize clinical obstetric data definitions for use in registries, electronic medical record systems, and vital statistics. Following pre-conference vetting, 69 individual data elements were presented for review. The definitions covered five areas relevant to pregnancy care: gestational age and term; delivery; labor; maternal indicators - current co-morbidities and complications; and maternal indicators – historical diagnoses. Fifty-three revised data element definitions were developed and voted on by conference attendees - 9 did not receive sufficient support and required additional revision.

Following revision, 50 refined data element definitions were sent forward for public comment (through January 2013). Public comment review and finalization is now in process. (Appendix A lists the 49 data elements and their definitions that are "in press".) Final confirmation of the definitions is expected by late spring/early summer.

III. Quarterly Data Submission Opportunities

As members of NPIC/QAS you have the unique opportunity to submit your perinatal data to a national comparative database that provides you with benchmarks on your volume, utilization, charges and quality metrics in comparison to similar hospitals (your subgroup) as well as all of the member hospitals in the database. This comparative data can help inform your internal and external quality initiatives regarding how to use your limited resources to improve care.

We are invested in improving the quality and validity of the submitted data as well as expanding the data set by adding data elements from multiple sources within your institution. Our current data request includes many items that “live” in an electronic format within your institution but may not be submitted on your hospital’s quarterly file. Below is a listing of some of the key perinatal data elements that we request and the percent of hospitals submitting that element. We encourage you to review the data submitted by your facility and we are happy to work with you to submit additional elements. We are acutely aware that IT staff are extremely busy so adding data fields to the current file is not always practical. In most cases, additional or supplemental data elements can be put on an excel spreadsheet with a couple of linking variable (MRN, DDate, etc.) and uploaded securely to our data portal.

Table 1: Perinatal Data Elements Requested by NPIC/QAS

Data Element	# Hospitals Submitting (% of total - n=78)	% of Total Discharges (Inborns or Deliveries)	Note
Numeric GA	64 (82.1% of total hospitals)	94.4%	Allows for discrimination between early term, term, late term and post term infants
Numeric BW	78 (100%)	98.5%	Refined analyses by BW
Mother/Baby link (MMRN provided)	75 (96.2%)	97.3%	Linked analyses
Gravida	31 (39.7%)	84.6%	
Parity	44 (56.4%)	74.2%	Able to identify nulliparous deliveries
Date of delivery	43 (55.1%)	77.0%	Able to identify long antepartum stays
Present on Admission (POA)	42 (53.8%)	64.9%	Joint Commission exclusions for PC 04
APGAR@ 1 min	69 (88.5%)	95.3%	
APGAR@ 5 min	72 (92.3%)	95.1%	Adverse Outcome Index variable
Intensive care admit date	24 (30.8%)	-	Prior to delivery or immediately following
Associated dx 18-24	45 (57.7%)	-	Improved case mix profiling
Associated opp codes 7-24	13 (16.7%)	-	

Table 2: The Joint Commission Perinatal Care Measure Data Elements generally requiring abstraction/confirmation

Data Element	Note
Clinical Trial	PC 01-05a
Prior Uterine Surgery	PC 01
Labor	PC 01
Spontaneous Rupture of Membranes	PC 01
Antenatal Steroid therapy initiated	PC 03
Reason for not administering antenatal steroid therapy	PC 03
Exclusive Breast Milk Feeding	PC 05-05a
Reason for not Exclusively Feeding Breast Milk	PC 05-05a

Please connect with your hospital liaison to discuss submission of additional data elements.

REFERENCES

¹ <http://www.acog.org/reVitalize>

Appendix A: reVITALize Elements and Definitions (Please note: these data definitions are “in press” as of 3/28/2014)

Element name	Definition	Notes
CESAREAN BIRTH	Birth of the fetus(es) from the uterus through an abdominal incision	Does not apply if any of the following occur: Abdominal pregnancy Ectopic Pregnancy Add separate data item to indicate presence of labor or no labor
PRIMARY CESAREAN BIRTH	Birth of the fetus(es) from the uterus through an abdominal incision in a woman without a prior cesarean birth	Does not apply if any of the following occur: Abdominal pregnancy Ectopic Pregnancy
REPEAT CESAREAN BIRTH	Birth of the fetus(es) from the uterus through an abdominal incision in a woman who had a cesarean birth in a previous pregnancy	Does not apply if any of the following occur: Abdominal pregnancy Ectopic Pregnancy
FORCEPS ASSISTANCE	Application of forceps to the fetal head	Should specify whether successful or unsuccessful in achieving birth This includes both cesarean and vaginal births
VACUUM ASSISTANCE	Application of vacuum to the fetal head	Should specify whether successful or unsuccessful in achieving birth This includes both cesarean and vaginal births
VERTEX PRESENTATION	A fetal presentation where the head is presenting first in the pelvic inlet Does not apply if compound or breech presentation or if brow, face, hand, shoulder, etc. present first in the pelvic inlet	Should specify whether position is anterior, posterior, or transverse.
MALPRESENTATION	Any presentation other than a vertex presentation Examples: Brow, face, compound, breech, hand, shoulder, etc.	
PERINEAL LACERATIONS	1°: Injury to perineal skin only 2°: Injury to perineum involving perineal muscles but not involving anal sphincter 3°: Injury to perineum involving anal sphincter complex 3a: Less than 50% of External	

	<p>Anal Sphincter (EAS) thickness torn</p> <p>3b: More than 50% External Anal Sphincter (EAS) thickness torn</p> <p>3c: Both External Anal Sphincter (EAS) & Internal Anal Sphincter (IAS) torn</p> <p>4°: Injury to perineum involving anal sphincter complex (External Anal Sphincter (EAS) & Internal Anal Sphincter (IAS)) and anal epithelium</p>	
PLACENTA ACCRETA	The clinical condition in which any part of the placenta invades and is inseparable from the uterine wall	Accreta may or may not be supported by pathologic findings
SHOULDER DYSTOCIA	A birth complication that requires additional maneuvers to relieve impaction of the fetal shoulder	
SPONTANEOUS VAGINAL BIRTH	<p>Birth of the fetus through the vagina without the application of vacuum or forceps or any other instrument</p> <p>Does not apply if the following occurs: Breech extraction</p>	
SPONTANEOUS VAGINAL BREECH BIRTH	Birth of the fetus in a breech presentation through the vagina without the application of vacuum or forceps or other instrument	
VAGINAL BIRTH AFTER CESAREAN (VBAC)	A vaginal birth in a woman with one or more previous cesarean births	
GESTATIONAL AGE & TERM		
GESTATIONAL AGE	<p>Gestational age (written with both weeks and days, eg. 39 weeks and 0 days) is calculated using the best obstetrical EDD based on the following formula:</p> $\text{Gestational Age} = (280 - (\text{EDD} - \text{Reference Date})) / 7$ <p>EDD: Estimated Due Date</p>	
REFERENCE DATE	Date on which you are trying to determine gestational age	
ESTIMATED DUE DATE	The best Estimated Due Date is determined by:	Ultrasound margin of error and “early” to be defined by ACOG

	<p>Last menstrual period (LMP) if confirmed by early ultrasound or no ultrasound performed, or</p> <p>Early ultrasound if no known LMP or the ultrasound is not consistent with LMP, or</p> <p>Known date of fertilization (eg. ART, IUI)</p>	Pregnancy should not be re-dated by a later ultrasound after a best obstetrical estimate of EDD has been established
PRETERM	<p>Less than 37 weeks and 0 days</p> <p>Late Preterm is 34 weeks and 0 days through 36 weeks and 6 days</p>	
TERM	<p>Greater than or equal to 37 weeks and 0 days using best EDD. It is divided into the following categories:</p> <p>Early Term - 37 weeks and 0 days through 38 weeks and 6 days</p> <p>Full Term - 39 weeks and 0 days through 40 weeks and 6 days</p> <p>Late Term - 41 weeks and 0 days through 41 weeks and 6 days</p> <p>Post Term - Greater than or equal to 42 weeks and 0 days</p>	
LABOR	<p>Uterine contractions resulting in cervical change (dilation and/or effacement)</p> <p>Phases:</p> <p>Latent phase – from the onset of labor to the onset of the active phase</p> <p>Active phase – accelerated cervical dilation typically beginning at 5 cm for multiparous women and at 6 cm for nulliparous women</p>	<p>Avoid the term ‘prodromal labor’</p> <p>Can be spontaneous in onset, spontaneous in onset and subsequently augmented, or induced</p>
THE TIME OF THE ONSET OF LABOR	The time when regular uterine contractions began that resulted in labor with or without the use of pharmacological and/or mechanical interventions	
AUGMENTATION OF LABOR	The stimulation of uterine contractions using pharmacologic	

	<p>methods or artificial rupture of membranes (AROM) to increase their frequency and/or strength following the onset of spontaneous labor or contractions following spontaneous rupture of membranes</p> <p>Does not apply if the following is performed: Induction of Labor</p>	
INDUCTION OF LABOR	<p>The use of pharmacological and/or mechanical methods to initiate labor</p> <p>Examples of methods include but are not limited to: artificial rupture of membranes, balloons, oxytocin, prostaglandin, laminaria, or other cervical ripening agents</p> <p>Still applies even if any of the following are performed: Unsuccessful attempts at initiating labor</p> <p>Initiation of labor following spontaneous ruptured membranes without contractions</p>	
NUMBER OF CENTIMETERS DILATED ON ADMISSION	<p>The last documented cervical dilation, in centimeters, when the provider orders admission</p>	<p>Cervical dilation may be unknown with:</p> <ul style="list-style-type: none"> Preterm labor Rupture of membranes Vaginal bleeding Exam refusal by patient (decline) <p>Cervical assessment may be performed by any clinician</p>
DURATION OF RUPTURED MEMBRANES	<p>Duration from rupture of membranes to birth (in hours and minutes)</p>	
ARTIFICIAL RUPTURE OF MEMBRANES (AROM)	<p>An intervention that perforates the amniotic sac</p> <p>Applies even if the rupture of membranes occurs during or immediately following a procedure or exam not intended to cause AROM</p> <p>Does not apply if rupture of membranes occurs during cesarean birth</p>	

<p>SPONTANEOUS RUPTURE OF MEMBRANES (SROM)</p>	<p>A rupture of the amniotic sac that is not concurrent with or immediately following a digital exam or other transvaginal intervention involving the amniotic membrane</p> <p>Does not apply if the following is performed: Artificial rupture of membranes</p>	<p>May occur at any gestational age</p>
<p>PRE-LABOR RUPTURE OF MEMBRANES</p>	<p>Spontaneous rupture of membranes that occurs before the onset of labor</p>	<p>Modified by gestational age categories (e.g. Preterm, term)</p>
<p>LABOR AFTER CESAREAN (LAC)</p>	<p>Labor in a woman who has had one or more previous cesarean births</p> <p>Planned LAC occurs in a woman intending to achieve a vaginal birth.</p> <p>Unplanned LAC occurs in a woman intending a repeat cesarean birth.</p>	<p>Should qualify the intended route of birth on admission</p> <p>May result in a vaginal or cesarean birth</p>
<p>PHYSIOLOGIC CHILDBIRTH</p>	<p>Spontaneous labor and birth at term without the use of pharmacologic and/or mechanical interventions for labor stimulation or pain management throughout labor and birth</p> <p>Does not apply if any of the following are used or performed: Opiates/nitrous oxide Augmentation of labor Regional anesthesia analgesia except for the purpose of spontaneous laceration repair Artificial rupture of membranes Episiotomy</p> <p>Still applies if any of the following are used: Uterotonic medications in the 3rd stage of labor</p> <p>Medications that do not stimulate labor or provide pain management (e.g. Antibiotics, medications to control chronic medical conditions)</p>	
<p>SPONTANEOUS LABOR AND BIRTH</p>	<p>Initiation of labor without the use of pharmacological and/or mechanical interventions, resulting in a non-operative vaginal birth</p>	

	<p>Does not apply if any of the following are used or performed: Cervical ripening agents, mechanical dilators, or induction of labor</p> <p>Forceps or vacuum assistance Cesarean birth</p> <p>Still applies if any of the following are used or performed: Augmentation of labor</p> <p>Episiotomy</p> <p>Regional anesthesia</p>	
SPONTANEOUS ONSET OF LABOR	<p>Labor without the use of pharmacological and/or mechanical interventions to initiate labor</p> <p>Does not apply if the following is performed: Artificial rupture of membranes before the onset of labor</p>	May occur at any gestational age
ABRUPTION	<p>Placental separation from the uterus with bleeding (concealed or vaginal) before fetal birth, with or without maternal/fetal compromise</p> <p>Does not apply if the following occurs: Placenta previa</p>	
ANTENATAL STEROIDS INITIATED	At least one dose of corticosteroids was administered to accelerate fetal maturation	
CLINICAL CHORIOAMNIONITIS	<p>Usually includes otherwise unexplained fever (at or above 38 degree C (100.4F)) with one or more of the following:</p> <p>Uterine tenderness and/or irritability</p> <p>Leukocytosis</p> <p>Fetal tachycardia</p> <p>Maternal tachycardia</p> <p>Malodorous vaginal discharge</p>	<p>Non-laboring, intact membranes with unexplained fever requires additional testing</p> <p>Clinical diagnosis could be supported by laboratory evaluation of amniotic fluid</p>
POSTPARTUM HEMORRHAGE		

EARLY POSTPARTUM HEMORRHAGE	Cumulative blood loss of ≥ 1000 ml OR blood loss accompanied by sign/symptoms of hypovolemia within 24 hours following the birth process (includes intrapartum loss).	Signs/symptoms of hypovolemia may include tachycardia, hypotension, tachypnea, oliguria, pallor, dizziness, or altered mental status Cumulative blood loss of 500-999ml alone should trigger increased supervision and potential interventions as clinically indicated A fall in hematocrit of $>10\%$ can be supportive data but generally does not make the diagnosis of postpartum hemorrhage alone Further research is needed on blood loss for late postpartum hemorrhage
PARITY	The number of pregnancies reaching 20 weeks and 0 days of gestation or beyond, regardless of the number of fetuses or outcomes	In cases of multiple pregnancies, parity is only increased with birth of the last fetus
NULLIPAROUS	A woman with a parity of zero	
PLURALITY	The number of fetuses birthed live or dead at any time in a single pregnancy regardless of gestational age, and regardless of if the fetuses were birthed on different dates Does not apply if any of the following occur: "Reabsorbed" fetus(es) (those that are not birthed separately from the placenta and membranes) A reduction during the first trimester	
GRAVIDA	A woman who currently is pregnant or has been in the past, irrespective of the pregnancy outcome	
GRAVIDITY	The number of pregnancies, current and past, regardless of the pregnancy outcome	
PRE-GESTATIONAL DIABETES	Diabetes diagnosed before current pregnancy (coordinate with GDM).	
CHRONIC HYPERTENSION		

CHRONIC HYPERTENSION (EXISTING PRIOR TO PREGNANCY)	See National Center for Health Statistics (NCHS) definition: Elevation of blood pressure above normal for age, gender, and physiological condition. Diagnosis prior to the onset of this pregnancy- does not include gestational hypertension (pregnancy induced hypertension (PIH)).	
CHRONIC HYPERTENSION DIAGNOSED DURING CURRENT PREGNANCY	Hypertension diagnosed before the 20th week of current pregnancy.	
MATERNAL WEIGHT GAIN DURING PREGNANCY	The last recorded maternal weight prior to birth minus the last recorded weight immediately prior to pregnancy	Weights used for the calculation should be from the best available information
NON-CESAREAN UTERINE SURGERY/SURGICAL SCAR	Surgery/injury and healing of the myometrium prior to birth other than from cesarean birth	
POSITIVE GBS RISK STATUS	Rectal/vaginal culture positive within 5 weeks prior to birth, or Urine GBS culture positive* or GBS bacteruria at any point in current pregnancy, or Prior infant with invasive GBS disease	