



### 3. General pregnancy variables

a. **Maternal Age (whole years) at time of delivery**

\_\_\_\_\_ (number if unknown fill UNK)

b. **Race** (tick one, please tick other and state UNK, if unknown/uncertain)

- Black
- White
- Asian
- Other \_\_\_\_\_

c. **Ethnicity** (tick one, please tick other and state UNK if unknown/uncertain)

- d.  Hispanic
- Not Hispanic
- Native Population
- Other \_\_\_\_\_

e. **Infant gender** (tick one, please tick other and state UNK if unknown/uncertain)

- Male
- Female
- Other \_\_\_\_\_

f. **Mode of delivery** (tick one, please tick other and state UNK if unknown/uncertain)

- Vaginal
- C-section:
- Other: \_\_\_\_\_

g. **Singleton pregnancy** (tick one, please tick other and state UNK, if unknown/uncertain)

- Yes
- No
- Other: \_\_\_\_\_

- h. **Parity (fill 1-4 each with full number based on the status at start of this pregnancy).** **Gravidity** is defined as the number of times that a woman has been pregnant and **parity** is defined as the number of times that she has given birth to a fetus, regardless of whether the child was born alive or was stillborn

(fill what you see in chart, if absent state UNK)

**Gravidity/Parity reported**

**G.... P.....**

1. **Prior Term Pregnancies**\_\_\_\_\_ (number or fill UNK if unknown)
2. **Prior Preterm Pregnancies (<37 wk)** \_\_\_\_\_ (number or fill UNK if unknown)
3. **Abortions/miscarriage (<20 wk)**\_\_\_\_\_ (number or fill UNK if unknown)
4. **Born Alive** \_\_\_\_\_ (number or fill UNK if unknown)

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**GESTATIONAL AGE ASSESSMENT**

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**4. Recorded gestational age (from chart)**

\_\_\_\_\_ (Number: weeks/days, if absent or unknow state UNK)

**5. How was reported gestational age above assessed (tick one, and if unknown tick other and state UNK)**

- Antenatal Maternal US
- LMP
- Infant Exam,
- Other (describe) \_\_\_\_\_

6. Elements of GA available in the record. (tick one option on each line for a-l)

	Recorded	NOT recorded	Incomplete/uncertain	Comments/Issues
a. Intrauterine insemination	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
b. Embryo transfer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. Certain LMP (LMP known)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. Uncertain LMP (LMP not known)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
e. First trimester US	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
f. Second trimester US	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
g. Third trimester US	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
h. Fundal height (any)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
i. Fundal height in 2 <sup>nd</sup> trimester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
j. Maternal physical exam in 1 <sup>st</sup> trimester	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
k. Birth weight	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
l. Newborn GA by physical exam	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

7. Assessment of Gestational Age LOC based on GAIA Definition (Use Case Definition

Checklist:see appendix 2):

a. Level of certainty \_\_\_\_\_ (1,2,3,4,5 or UNK: unable to assess)

b. If unable to assign GA LOC, describe the reason(s):

Reason \_\_\_\_\_

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**FGR CASE DEFINITION SPECIFIC VARIABLES**

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**8. Components of the FGR case definition in clinical record**

Parameter	Evidence in Medical Record or Study record			Comments
	Yes*	No*	Uncertain/ not recorded	
a. Estimated fetal weight below 3% using locally accepted growth curve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
b. Estimated fetal weight below 10% using locally accepted growth curve	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
c. Oligohydramnios <sup>1</sup> present	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
d. Absent or reversed end-diastolic flow of the umbilical artery doppler	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
e. NO FINDINGS of absent or reversed end-diastolic flow of the umbilical artery or oligohydramnios	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

\* Yes means recorded evidence, No means evidence of absence

<sup>1</sup> oligohydramnios is defined as a decreased amniotic fluid volume as defined by amniotic fluid index less than 8 cm or deepest vertical pocket less than 2 cm in the presence of intact membranes without concern for fetal anomalies contributing to its etiology

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**QUALITY ASSESSMENT CASE DEFINITION**

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**9. Case abstractor's best assessment of LOC for FGR is (Use Case Definition Checklist in appendix 1):**

a. Level of certainty \_\_\_\_\_ (1X, 2X, or UNK: unable to assess)

b. If unable to assign LOC, describe the reason(s):

Reason \_\_\_\_\_

**10. PI's assessment of LOC for FGR (Use Case Definition Checklist in appendix 1):**

a. Level of certainty \_\_\_\_\_ (1X, 2X or UNK: unable to assess)

b. If unable to assign LOC, describe the reason(s):

Reason \_\_\_\_\_

**11. Other comments:**

\_\_\_\_\_

**Appendix 1: Fetal Growth Restriction (FGR)**  
**Guide for LOC assignment for Fetal Growth Restriction (check all that are present)**

Fetal Growth Restriction (FGR) is a sonographic finding made prior to birth. The FGR workgroup felt ultrasound during pregnancy was mandatory to be able to determine a case of FGR

**Case definition of Fetal Growth Restriction**

**For all LEVELS:**

- . Ultrasound performed during pregnancy

**Level 1a of diagnostic certainty**

- 1. Level 1 evidence of pregnancy dating (see gestational age algorithm) AND
  - 2. Estimated fetal weight below 3% using locally-accepted growth curve
- OR
- 2. Estimated fetal weight below 10% using locally-accepted growth curve AND
  - 3. Absent or reversed end-diastolic flow of the umbilical artery Doppler
- OR
- 3. Oligohydramnios<sup>1</sup>

**Level 1b of diagnostic certainty**

- 1. Level 1 evidence of pregnancy dating (see gestational age algorithm) AND
  - 2. Estimated fetal weight below 10% using locally-accepted growth curve AND
  - 3. No findings of absent or reversed end-diastolic flow of the umbilical artery Doppler
- OR
- 3. No findings of oligohydramnios<sup>1</sup>

**Level 2a of diagnostic certainty**

- 1. Level 2 evidence of pregnancy dating (see gestational age algorithm) AND
  - 2. Estimated fetal weight below 3% using locally-accepted growth curve
- OR
- 2. Estimated fetal weight below 10% using locally-accepted growth curve AND
  - 3. Absent or reversed end-diastolic flow of the umbilical artery Doppler
- OR
- 3. Oligohydramnios<sup>1</sup>

**Level 2b of diagnostic certainty**

- 1. Level 2 evidence of pregnancy dating (see gestational age algorithm) AND

- 2. Estimated fetal weight below 10% using locally-accepted growth curve AND
  - 3. No findings of absent or reversed end-diastolic flow of the umbilical artery Doppler
- OR
- 3. No findings of oligohydramnios<sup>1</sup>
- OR
- 4. Level 1 evidence of pregnancy dating (see gestational age algorithm) AND
  - 5. Estimated fetal weight below 10% using locally-accepted growth curve AND
  - 6. No findings of oligohydramnios AND
  - 7. Inability to assess umbilical artery Doppler

<sup>1</sup> oligohydramnios is defined as a decreased amniotic fluid volume as defined by amniotic fluid index less than 8 cm or deepest vertical pocket less than 2 cm in the presence of intact membranes without concern for fetal anomalies contributing to its etiology

**Insufficient evidence:**

- 1. Absence of ultrasound for use in assessment of estimated fetal weight during pregnancy



## Appendix 2:

### Gestational Age Assessment Guide

#### Definitions of terms used:

**Intrauterine insemination (IUI)** – A procedure in which a fine catheter is inserted through the cervix into the uterus to deposit a sperm sample directly into the uterus, to achieve fertilization and pregnancy.

**Embryo transfer** – The procedure in which one or more embryos are placed in the uterus or fallopian tube.

#### **Ultrasound (U/S):**

- 1st trimester ( $\leq 13 \frac{6}{7}$  weeks).
- 2nd trimester scan ( $14 \frac{0}{7}$ – $27 \frac{6}{7}$  weeks).
- 3rd trimester ( $28 \frac{0}{7}$  + weeks).

**LMP** (last menstrual period) – GA is calculated from the first day of the mother’s LMP. If LMP and U/S do not correlate, default to U/S GA assessment.

**\*Certain LMP:** (LMP date + 280 days): Use LMP if within 7 days at  $\leq 14$  weeks; within 14 days at  $\leq 26$  weeks; within 21 days beyond 26 weeks.

**\*Uncertain LMP – first trimester** ( $\leq 13 \frac{6}{7}$  weeks by LMP): Use the approximate date of the last menstrual period (LMP) if corroborated by physical exam, or a first trimester ultrasound. If there is a discrepancy of  $>7$  days between the LMP and the first trimester ultrasound, the ultrasound-established dates will take preference over LMP for gestational age dating.

**\*Uncertain LMP – second trimester** ( $14 \frac{0}{7}$ – $27 \frac{6}{7}$  weeks by LMP): Use the approximate date of the LMP if corroborated by physical exam including fundal height, or a second trimester ultrasound. If there is a discrepancy of  $>10$  days between the LMP and the second trimester ultrasound, the ultrasound-established dates will take preference over LMP for GA dating.

**\*Uncertain LMP – third trimester**  $>28$  weeks – third trimester ultrasound.

**\*No LMP date:** If menstrual dates are unknown, the ultrasound established dates will be used for gestational age dating or 2nd trimester fundal height and/or newborn physical examination.

**Pregnancy symptoms**– nausea, fatigue, tender swollen breasts, frequent urination.

**Antenatal Physical Examination**– pelvic bimanual examination confirming enlarged uterus.

**Newborn Physical Examination**– New Ballard Score – physical and neurological assessment.

**Fundal Height (FH)** in cm

**Birth Weight (BW) in grams**

**GA Levels of Certainty (check all that are present)**

**Level 1**

- 1. Certain LMP\* or intrauterine insemination (IUI) date or embryo transfer (ET) date with confirmatory 1st trimester scan ( $\leq 13 \frac{6}{7}$  weeks).

OR

- 2. 1st trimester scan ( $\leq 13 \frac{6}{7}$  weeks).

**Level 2A**

- 1. Certain LMP\* with 2nd trimester scan (14 0/7 weeks to 27 6/7 weeks). If LMP and U/S do not correlate, default to U/S GA assessment.

OR

- 2. Certain LMP\* with 1st trimester physical examination.

**Level 2B**

- Uncertain LMP with 2nd trimester scan (14 0/7 weeks to 27 6/7 weeks).

**Level 3A**

- 1. Certain LMP with 3rd trimester scan – 28 0/7 weeks +.

OR

- 2. Certain LMP with confirmatory 2nd trimester FH.

OR

- 3. Certain LMP with birth weight.

OR

- 4. Uncertain LMP with 1st trimester physical examination.

**Level 3B**

- 1. Uncertain LMP with FH.

OR

- 2. Uncertain LMP with newborn physical assessment.

OR

- 3. Uncertain LMP with Birth weight.

