



# **HCHS/SOL VISIT 2 Pregnancy Complications (PCE\_DERV) DERIVED VARIABLE DICTIONARY**

**INV3 - March 2019**

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**Version 3.1 – Visit 2 Investigator Use Data Sets (V2\_INV3 data file)**

**HCHS/SOL Visit 2 Pregnancy Complications (PCE\_DERV)**  
**Derived Variable Dictionary**  
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## Summary of updates to PCE and PCE\_DERV data and documentation

Version	Date	Description of Updates	Documentation
_INV1	12/19/2016	1 <sup>st</sup> Data Release (interim data; n=9,329)	V1.0 (Dec 2016)
_INV2	3/23/2018	2 <sup>nd</sup> Data Release (Final V2 data; n=11,623)	V2.0 (March 2018)
_INV3	3/4/2019	<p><b>3<sup>rd</sup> Data Release (Updated final V2 data; n=11,623)</b></p> <p><b>PCE_V2</b>  <b>Removed 15 records due to the following:</b></p> <ul style="list-style-type: none"> <li>○ PCE form is completely missing.</li> <li>○ Pregnancy length (PCE2 and PCE2a1) &lt; 24 weeks and inconsistent with RME13b (number of pregnancies after visit 1 that lasted 6 months or longer).</li> </ul> <p><b>PCE_DERV_V2</b></p> <ul style="list-style-type: none"> <li>○ Included units (wks or mo) for pregnancy length (PCE2A1) when missing and PCE2A was not missing.</li> <li>○ Changed conversion of pregnancy length from months to weeks (i.e., calculation of PCE2A_WEEKS from PCE2A and PCE2A1)</li> <li>○ Updated all variables that use PCE2A_WEEKS: BIRTHWT_GA_PCT, BIRTHWT_GA_Z, LGA, SGA, PRETERM</li> </ul>	V3.0 (March 2019)
_INV3	4/1/2019	NONE	V3.1 (April 2019) <b>ALERT: PRETERM is incorrect (it should NOT include 37wks). DO NOT USE.</b>

## 1. Derived Variables

### 1.1 PCE2A\_WEEKS (Pregnancy length (weeks))

This numeric variable is the pregnancy length in weeks. If PCE2A1=2 (i.e., pregnancy length reported in weeks), then PCE2A\_WEEKS=PCE2A. Otherwise, if PCE2A1=3 (i.e., pregnancy length reported in months), then pregnancy length is converted from months (PCE2A) to weeks (PCE2A\_WEEKS) using the following conversion:

Months	Weeks
10	42
9	40
8	36
7	32
6	28

Source variable(s):

PCE2A. Pregnancy length  
PCE2A1. Pregnancy length units

### 1.2 BABY1YN (First live birth after V1)

This is a 0/1 indicator variable to identify the first live birth after V1 for each woman. If a woman has multiple pregnancies and two of these ended with live births (PCE3=1), only the 1<sup>st</sup> live birth (PCE1A=1) will have a value of 1, and all other pregnancies for this woman will have a value of 0.

Response format: 1, Yes  
0, No

Source variable(s):

PCE1A. Pregnancy number (ordered by birthdate)  
PCE3. Pregnancy result

### 1.3 BIRTHWT\_GA\_PCT (Birth weight for gestational age percentile)

This is a numeric variable. Percentiles for birth weight by gestational age and by sex were calculated based on international population standards estimated by Villar et al (2014; 2016). Therefore, the value of this variable should correspond to the percentage of a healthy, low risk population (with the same gestational age and sex) with less than or equal birth weight. This variable was created using the INTERGROWTH-21st web application to calculate birth weight for gestational age percentiles and Z-scores, based on the work by Villar et al (2014; 2016).

Source variable(s):

PCE2A\_WEEKS. Pregnancy length (weeks)

PCE3. Pregnancy result

PCE7B. Baby 1 gender

PCE7C\_G. Baby 1 weight (g)

Reference(s):

Villar J, Ismail LC, Victora CG, Ohuma EO, Bertino E, Altman DG, Lambert A, Papageorgiou AT, Carvalho M, Jaffer YA, Gravett MG, Purwar M, Frederick IO, Noble AJ, Pang R, Barros FC, Chumlea C, Bhutta ZA, Kennedy SH. International standards for newborn weight, length, and head circumference by gestational age and sex: the Newborn Cross-Sectional Study of the INTERGROWTH-21st Project. Lancet. 2014 Sep 6; 384 (9946): 857-868. [PMID: [25209487](https://pubmed.ncbi.nlm.nih.gov/25209487/)]

Villar J, Giuliani F, Fenton TR, Ohuma EO, Ismail LC, Kennedy SH. INTERGROWTH-21st very preterm size at birth reference charts. Lancet. 2016 Feb 27;387(10021):844-5. [PMID: [26898853](https://pubmed.ncbi.nlm.nih.gov/26898853/)]

INTERGROWTH-21st web application to calculate birth weight for GA percentiles and Z-scores: <https://intergrowth21.tghn.org/intergrowth-21st-applications/>

#### **1.4 BIRTHWT\_GA\_Z (Birth weight for gestational age Z-score)**

This is a numeric variable. Z-scores for birth weight by gestational age and by sex were calculated based on international population standards estimated by Villar et al (2014; 2016). See derived variable BIRTHWT\_GA\_PCT for further details.

#### **1.5 DAYSV1BIRTH (Time between Visit 1 and baby's birth (days))**

This numeric variable is the amount of time in days between the Visit 1 clinic date and the baby's birth.

If PCE3 = 1 then DAYSV1BIRTH = PCE1B – CLINDATE

Else if PCE3 ≠ 1 then DAYSV1BIRTH = .N

Source variable(s):

CLINDATE. Visit 1 clinic date

PCE1B. Date of birth

PCE3. Pregnancy result

### **1.6 YRSV1BIRTH (Time between Visit 1 and baby's birth (years))**

This numeric variable is the amount of time in years between the Visit 1 clinic date and the baby's birth.

If PCE3 = 1 then YRSV1BIRTH = (PCE1B – CLINDATE)/365.25

Else if PCE3 ≠ 1 then YRSV1BIRTH = .N

#### Source variable(s):

CLINDATE. Visit 1 clinic date

PCE1B. Date of birth

PCE3. Pregnancy result

### **1.7 BIRTHWT\_C3 (Birth weight baby 1 (< 2.5kg, 2.5-4.0kg, >4.0kg))**

This is a categorical variable for the birth weight and it is based on the reported birth weight (PCE7C\_G) if available, and is based on the approximate birth weight (PCE7D) if the exact birth weight is not recorded.

Response format: 1, < 2500 g  
2, 2500 – 4000 g  
3, > 4000 g

#### Source variable(s):

PCE7C\_G. Baby 1 Weight (g, calculated)

PCE7D. Baby 1 approx weight

### **1.8 LGA (Large for gestational age for baby 1)**

This is a 0/1 indicator variable to identify babies that are large for gestational age (i.e., > 90<sup>th</sup> percentile).

Response format: 1, Yes  
0, No

#### Source variable(s):

BIRTHWT\_GA\_PCT. Birth weight for gestational age percentile

### **1.9 SGA (Small for gestational age for baby 1)**

This is a 0/1 indicator variable to identify babies that are small for gestational age (i.e., < 10<sup>th</sup> percentile).

Response format: 1, Yes  
0, No

#### Source variable(s):

BIRTHWT\_GA\_PCT. Birth weight for gestational age percentile

### 1.10 PRETERM (Pregnancy lasted $\leq$ 37 weeks)

**ALERT: This variable is incorrect. It should NOT include newborns born at 37 weeks. DO NOT USE. This variable must be calculated by investigators.**

This is a 0/1 indicator variable to identify preterm pregnancies (i.e., pregnancies that lasted  $\leq$  37 weeks).

Response format: 1, Yes  
0, No

Source variable(s):

PCE2A\_WEEKS. Pregnancy Length (weeks)

## Variable Modifications

Date	Variable	# data records changed	Notes
March 2019	All variables	7	<b>PCE record dropped.</b> All variables with missing values.
March 2019	All variables	6	<b>PCE record dropped.</b> Pregnancy length < 24 weeks or missing <u>and</u> RME13b equal to 0 or missing (i.e. number of pregnancies after Visit 1 lasting longer than 6 months). PCE form should not have been completed.
March 2019	All variables	2	<b>PCE record dropped.</b> Pregnancy length < 24 weeks or missing <u>and</u> the number of pregnancies after Visit 1 lasting longer than 6 months (RME13b) is less than the number of completed PCE forms.
March 2019	PCE2A_WEEKS	162	<b>Corrected conversion of pregnancy length</b> from months to weeks based on Women Health SIG Call on 10/1/2018
March 2019	PCE2A1	10	<b>Corrected missing values for PCE2A1</b> (pregnancy length units) based on value of PCE2A (pregnancy length)