**Appendix C**

**PIP Variable Creation Plan**

**Data set: Infant Birth Outcomes**

1. Background/Overview

The PIP “Infant Birth Outcomes” data creation plan is intended to supplement previously created outcome data files from KPNW and KPNC teams. The goal is to create a flat file to summarize infant birth outcomes of interest with rows representing subjects (Maternal StudyID and season of participation) and columns capturing specific diagnoses (or conditions) that occur within particular timeframes. This plan uses previously created variables from KPNW and KPNC and creates some new variables based on three dimensions:

* Presence of existing variable in either the Delivery Dataset or Pregnancy Outcomes Dataset or previous derivation
* Time period of interest
* Type of variable (dichotomous or date)

Steps for creating the Infant Outcomes Dataset

-Import the existing Pregnancy Outcomes Dataset and the existing Delivery Dataset

-Further delineate existing variable “Preterm” into two additional variables “VPTB” “PTB” using time windows

-Create NICU variables using time windows and types of variables

-Import SGA variable(s) based on KPNC variable creation methodology

**2. Time windows**

For each participant, use the previously calculated milestone dates from the Maternal Outcomes Variable Creation Plan to determine delivery dates relevant to each woman’s pregnancy. Relevant time variables are listed below:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **VARIABLE ROOT** | **DESCRIPTION** | **SOURCE** | **TYPE** | **RESPONSES** |
| **DOC** | Date of conception | (PREGSTARTDT from Pregnancy Outcomes dataset) | Date  MM/DD/YYYY | Missing for 4 participants |
| **DEOP** | Date of end of pregnancy | (PREGENDDT from Pregnancy Outcomes dataset) | Date  MM/DD/YYYY | Missing for 9 participants |
| **DEOP\_PRIOR** | One week (7 days) prior to DEOP | Calculate using DEOP (plus 7 days) | Date  MM/DD/YYYY |  |
| **DEOP\_POST** | One week (7 days) post DEOP | Calculate using DEOP (plus 7 days) | Date  MM/DD/YYYY |  |
| **D1MPP** | Date 1 month (28 days) post pregnancy (post delivery date) | Calculate using DEOP | Date  MM/DD/YYYY | Missing for 9 participants |

**3. Types of variables**

All content areas for all relevant time windows will be quantified with two types of variables:

* Di = Dichotomous – the presence (1) or absence (0) of any code in that content area during the designated time period
* FDT = Date (MM/DD/YYYY) – First date of an encounter with any code in that category
* CNT = Count of days where one or more codes occurred

**4. Additional content and variable names**

|  |  |  |
| --- | --- | --- |
| **ROOT** | **OUTCOME** | **DESCRIPTION OF OUTCOME** |
| VPTB\_Di | Preterm infant born under 32 weeks gestation | Infant born under 32 weeks gestation(e.g. completed weeks gestation 31 weeks or less [use GA-WEEKS variable to create) |
| PTB\_Di | Preterm infant born between 32 and 37 weeks gestation | Infant born between 32 weeks completed gestation and 36 weeks completed gestation [use GA-WEEKS variable to create |
| NICU\_Di | Any NICU admission for an infant around time of delivery | Infants admitted to the NICU for any reason from DEOP till 1 month post pregnancy |
| NICU\_FDT | First date of NICU admission | Date of first encounter with a NICU admit in the period DEOP till 1 month post pregnancy |
| NICU\_DISCR\_CNT | Number of discrete NICU admissions | Total number of discrete NICU admissions for an infant in the period DEOP till 1 month post pregnancy |
| SGA\_Di | Small for gestational age (defined as fetal birth weight below 10th percentile for gestational age | [Use KPNC derived variable(s) for this] |