

VERMONT OXFORD NETWORK DATABASE

MANUAL OF OPERATIONS

PART 2: DATA DEFINITIONS, DATA FORMS AND SUBMISSION TIMELINE
FOR INFANTS BORN IN 2011

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Database Eligibility

VLBW Database Eligibility

Any infant who is born alive at your hospital and whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days (inclusive) is eligible, regardless of where in your hospital the infant receives care. A live born infant is one who breathes or has any evidence of life, such as beating of the heart, pulsation of the umbilical cord, or definite movement of voluntary muscles. Stillborn infants (those who are not live born) are not eligible for the VLBW database.

Birth Weight	Gestational Age (Wks/Days)	Eligible for VLBW DB?
350	22/0	Yes
400	21/6	No
401	21/6	Yes
400	22/0	Yes
1500	30/0	Yes
1501	30/0	No
1501	29/6	Yes
1600	28/4	Yes
1600	30/0	No

Any outborn infant who is admitted to any location in your hospital within 28 days of birth, without first having gone home, and whose birth weight is between 401 and 1500 grams OR whose gestational age is between 22 weeks 0 days and 29 weeks 6 days (inclusive) is eligible, regardless of where in your hospital the infant receives care.

Examples

These examples assume that the infant was born in your hospital or was admitted to your hospital within 28 days of birth.

Expanded Database Eligibility

All infants eligible for the VLBW Database are also eligible for the Expanded Database.

In addition, the following infants are also eligible for the Expanded Database only:

- (1) Any infant whose birth weight is over 1500 grams and who is admitted to a neonatal intensive care unit (NICU) in your hospital within the first 28 days of life without first having gone home, regardless of gestational age. A NICU is any location within the hospital in which newborn infants receive continuous positive airway pressure (CPAP) or intermittent mandatory ventilation (IMV). When applying this definition, do not include those areas in which these modalities of respiratory support are used only for brief periods of stabilization prior to transfer to another location. The intent is that units designated as a NICU routinely provide these services for ongoing care beyond an initial period of stabilization.
- (2) Any infant whose birth weight is over 1500 grams and who dies at any location in your hospital within 28 days of birth without first having gone home. This includes inborn and outborn infants.

Revisions for 2011

Manual Organization: Beginning in 2011, the Database Manual of Operations is published in two parts. Part 1 is entitled “Guidelines for Database Participation”; Part 2 (this manual) provides data definitions, data forms and the data submission timeline for Infants Born in 2011. The intention is to update Part 2 of the manual annually and only update Part 1 when operational changes within the Network require these to be documented. The hope is that the new approach will save paper and other resources, make it easier to understand procedures and help your center identify changes that occur from year to year.

New Data Items: The following new data items apply to infants born in 2011 and later; they do not apply to infants born prior to 2011.

- Item 15f, 28 Day Form and Delivery Room Death Form (Nasal CPAP during Initial Resuscitation).
- Respiratory Support at 36 Weeks: Prior to 2011 the status of respiratory support on the date of 36 weeks post menstrual age was limited to oxygen administration on this date. Oxygen at 36 Weeks will continue to be collected as in previous years and is now Item 25a on the Discharge Form. Beginning in 2011, the status at 36 weeks for the following new respiratory support items will be included on the Discharge Form:
 - Item 25b, Discharge Form (Conventional Ventilation at 36 Weeks).
 - Item 25c, Discharge Form (High Frequency Ventilation at 36 Weeks).
 - Item 25d, Discharge Form (High Flow Nasal Cannula at 36 Weeks).
 - Item 25e, Discharge Form (Nasal IMV or SIMV at 36 Weeks).
 - Item 25f, Discharge Form (Nasal CPAP at 36 Weeks).

Revised Definition: The definition for Patent Ductus Arteriosus has been revised. This is Item 36 on the Discharge Form.

Definition Clarifications: The following definitions are clarified in the 2011 manual:

- Item 4c, 28 Day Form (Transfer Code of Center from which Infant Transferred): a description of the purpose of the item and a note on applicability were added.
- Item 18, 28 Day Form (Oxygen on Day 28): added note on calculation of day 28.
- Item 20, 28 Day Form (Died within 12 Hours of Admission to Your NICU): the definition was clarified to state how to answer the item based on the infant’s birth location and for eligible infants who are admitted to your hospital but are not admitted to your NICU.

- Items 21a to 21e, Discharge Form (Oxygen, Conventional Ventilation, High Frequency Ventilation, High Flow Nasal Cannula and Nasal IMV or SIMV): these items were renamed to add the phrase “after Initial Resuscitation” in order to differentiate these items from the new items on status of respiratory support at 36 weeks.
- Item 22a, Discharge Form (Nasal CPAP after Initial Resuscitation): the item was renamed to clearly differentiate it from the new items, Nasal CPAP during Initial Resuscitation and Nasal CPAP at 36 Weeks. A note was added to clarify that if Nasal IMV or Nasal SIMV is answered “Yes”, Nasal CPAP after Initial Resuscitation should also be answered “Yes”.
- Item 32, Discharge Form (Other Surgery): the note for the definition was expanded, clarifying entry of surgery codes when Other Surgery is answered “Yes”.
- Item 48, Discharge Form (Weight at Initial Disposition): instructions were added in case the infant’s weight was not measured on the Date of Initial Disposition or the previous day. This is Item 48 on the Discharge Form.
- Item 52, Transfer and Readmission Form (Transfer Code of Center to which Infant Transferred): a description of the purpose of the item was added.
- Item 55, Transfer and Readmission Form (Weight at Disposition after Readmission): instructions were added in case the infant’s weight was not measured on the Date of Disposition after Readmission or the previous day.
- Transfer and Readmission Form: notes on applicability of items were added to clarify when the items apply for infants who transfer from your hospital.
- Item S1.C1, Supplemental Data Form (Hypothermic Therapy at Your Hospital): the definition was clarified to specify that a “Yes” response requires that active cooling was performed.
- Item S2.B2, Supplemental Data Form (Tracheal Suctioning for Meconium Attempted in the Delivery Room): a note was added on item applicability.

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CHAPTER 1

Introduction

This manual is Part 2 of the Vermont Oxford Network Manual of Operations. It includes the data definitions, data forms and data submission timeline for infants born in 2011. It is intended to be used along with the Vermont Oxford Network (VON) Manual of Operations, Part 1: Guidelines for Database Participation. Part 1 of the Manual of Operations describes database eligibility requirements, rules for collecting data and how to complete data forms.

Definitions and data forms may change from one year to another as changes are approved by the Network Database Advisory Committee. Use the forms in this manual for infants born in 2011. For infants born in 2010, use the forms and definitions for infants born in 2010 as described in the 2010 Manual of Operations. If you need to submit data for infants born prior to 2010, use the data forms and definitions included in the Manual of Operations for the infant's birth year.

Confidentiality and Patient Privacy

The Vermont Oxford Network strictly maintains the confidentiality of the data in its databases. Although data at Network or group levels are summarized for comparative purposes, individual center data are only reported to the submitting center.

None of the data submitted to the Network includes patient identifiers, as defined by the U.S. Health Insurance Portability and Accountability Act of 1996 (HIPAA). Vermont Oxford Network does not accept protected health care information. Your hospital must take appropriate measures to assure that patient data stored at your hospital are protected and secure from unauthorized access.

Getting Help

Your center has been assigned an Account Manager to assist you with data submission. Your Account Manager will answer any questions you may have about collecting, recording, or submitting data and will support your center in achieving complete and accurate data reporting.

You can get copies of the booklets, forms and worksheets described in this manual by copying them from Appendix A in this manual. They are also available on the Network web site at www.vtoxford.org.

If you have questions, don't hesitate to contact your Account Manager. If your Account Manager is unavailable, you can speak to anyone on the Data Processing Team listed in Table 1.1.

Account Manager	(802-865-4814) Phone Extension	Email Address
Kathy Arcovitch	215	KArco@vtoxford.org
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Joan Schillhammer	224	Joan@vtoxford.org
Andy Warner	226	AWarner@vtoxford.org
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Table 1.1: Account Manager Contact Information

CHAPTER 2

Definitions of Data Items for Infants Born in 2011

Introduction

Each data item has its own *data definition*, a precise explanation of the information required for the item. As you enter data, use the data definitions presented in this chapter as a reference. Read the explanations carefully so that you understand the details for each item. To assure data integrity and accuracy of reports to your hospital, it is very important that the definitions provided in this chapter be followed as closely as possible. If you have any questions about these definitions, please contact your Account Manager.

28 Day Form Data Definitions

Use the definitions below when completing the 28 Day Form for infants born in 2011.

ITEM 1: Birth Weight

Record the birth weight in grams. Since many weights may be obtained on an infant shortly after birth, enter the weight from the Labor and Delivery record if available and judged to be accurate. If unavailable or judged to be inaccurate, use the weight on admission to the neonatal unit or lastly, the weight obtained on autopsy (if the infant expired within 24 hours of birth).

ITEM 2: Gestational Age

Record the best estimate of gestational age in weeks and days using the following hierarchy:

1. Obstetrical measures based on last menstrual period, obstetrical parameters, and prenatal ultrasound as recorded in the maternal chart.
2. Neonatologist's estimate based on physical criteria, neurologic examination, combined physical and gestational age exam (Ballard or Dubowitz), or examination of the lens.

The best estimate should be recorded in weeks and days. In instances when the best estimate of gestational age is an exact number of weeks, enter the number of weeks in the space provided for weeks and enter "0" in the space provided for days. Do not leave the number of days blank.

ITEM 3: Died in Delivery Room

Answer "**Yes**" if the infant was born in your center, was never admitted to the NICU, and died in the delivery room or at any other location in your hospital within 12 hours after birth. These locations may include the mother's room, resuscitation rooms or any location other than the NICU in your hospital.

Answer "**No**" if the infant did not die in the delivery room or at any other location in your hospital within 12 hours after birth and prior to admission to the NICU.

Answer "**No**" for all outborn infants. If "**No**", continue to complete the 28 Day and Discharge Forms.

ITEM 4a. Location of Birth

Answer "**Inborn**" if the infant was delivered at your center.

Answer "**Outborn**" if the infant was delivered outside your center. Any infant requiring ambulance transfer will be considered outborn. When completing the Network data forms for outborn infants, use all information available from the hospital that transferred the infant to your center as well as from your own hospital.

ITEM 4b. Day of Admission to Your Hospital

For outborn infants only, Day of Admission is the day of life on which the infant is admitted to your hospital. The Date of Birth is day 1. For example, if an outborn infant is born on June 1, and admitted to your hospital on June 1, the Day of Admission would be 1. If that same infant were admitted on June 3, the Day of Admission would be 3.

To determine the Day of Admission for outborn infants you must know the Date of Birth and the Date of Admission. The time of birth does not matter. If the infant is born at 11:30 PM and admitted to your hospital at 11:59 PM on the same day, the Day of Admission is 1, since the infant was admitted on the Date of Birth.

<p>NOTE: This item applies only to outborn infants. The acceptable range for Day of Admission is from 1 (for infants admitted on their Date of Birth) to 28 (since outborn infants admitted more than 28 days after birth are not eligible for the database).</p>
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ITEM 4c. Transfer Code of Center from which Infant Transferred

If the infant is outborn, enter the Transfer Code of the VON center or other location from which the infant transferred. This item is not applicable if the infant is inborn. The Transfer Code for hospitals is a special code assigned by the Network for member hospitals, as well as 'other' codes for non-members. It is not the Network assigned center number. Please refer to the current Transfer Code List of the Vermont Oxford Network when answering this question.

NOTE: The Transfer Code List may be accessed from the Network website address: <http://www.vtoxford.org>.

ITEM 5: Head Circumference at Birth

Enter the head circumference to the nearest tenth of a centimeter as recorded in the chart or clinical flow sheets on the day of birth. If the head circumference is not recorded on the day of birth, record the first head circumference measurement on the following day. If the head circumference is not measured on the day of birth or on the following day, record as unknown.

ITEM 6a. Ethnicity of Mother

The response to this item should be obtained by personal interview with the mother or review of the birth certificate or medical record, in that order of preference.

Answer "**Hispanic**" if the biological mother is a person of Cuban, Mexican, Puerto Rican, South or Central American or other Spanish culture or origin, regardless of race.

Answer "**Not Hispanic**" if the biological mother's ethnicity is not of Hispanic or Latino origin as defined above.

ITEM 6b. Race of Mother

The response to this item should be obtained by personal interview with the mother or review of the birth certificate or medical record, in that order of preference. Choose only one response.

Answer "**Black**" if the biological mother is a person having origins in any of the original peoples of Africa.

Answer "**White**" if the biological mother is a person having origins in any of the original peoples of Europe, the Middle East, North Africa (Arabic origins) or Western Russia (including Afghanistan and South Russia).

Answer "**Asian or Pacific Islander**" if the biological mother is a person having origins in the original peoples of the Far East, Southeast Asia, the Indian Subcontinent or the Pacific Islands. This includes Cambodia, China, Guam,

Hawaii, India, Japan, Korea, Laos, Philippines, Samoa, Thailand, Vietnam or any Pacific Island.

Answer "**Native American**" if the biological mother is an American Indian or Alaskan Native.

Answer "**Other**" if none of the race categories above applies to the biological mother.

ITEM 7: Prenatal Care

Answer "**Yes**" if the mother received any prenatal obstetrical care prior to the admission during which birth occurred.

Answer "**No**" if the mother did not receive any prenatal obstetrical care.

ITEM 8: Antenatal Steroids

Answer "**Yes**" if corticosteroids were administered IM or IV to the mother during pregnancy at any time prior to delivery. Corticosteroids include betamethasone, dexamethasone, and hydrocortisone.

Answer "**No**" if no corticosteroids were administered IM or IV to the mother during pregnancy at any time prior to delivery.

ITEM 9: Chorioamnionitis

Answer "**Yes**" if a diagnosis of chorioamnionitis was recorded in the maternal or infant medical record.

Answer "**No**" if a diagnosis of chorioamnionitis was not recorded in the maternal or infant medical record.

ITEM 10: Maternal Hypertension, Chronic or Pregnancy-Induced

Answer "**Yes**" if maternal hypertension, chronic or pregnancy-induced, with or without edema and proteinuria, was recorded in the maternal or infant medical record, or if a maternal blood pressure above 140 systolic or 90 diastolic was recorded prior to or during the present pregnancy.

Answer "**No**" if maternal hypertension, chronic or pregnancy induced, with or without edema and proteinuria, was not recorded in the maternal or infant medical record, and if a maternal blood pressure above 140 systolic or 90 diastolic was not recorded prior to or during the present pregnancy.

<p>NOTE: Eclampsia and pre-eclampsia should be considered forms of pregnancy-induced hypertension.</p>

ITEM 11: Mode of Delivery

Answer "**Vaginal**" for any vaginal delivery (spontaneous or induced).

Answer "**Cesarean Section**" for any cesarean delivery (elective or emergent).

ITEM 12: Sex of Infant

Answer "**Male**" or "**Female**".

ITEM 13a. Multiple Gestation

Answer "**Yes**" if two or more live fetuses were documented at any time during the pregnancy which resulted in the birth of the infant.

Otherwise answer "**No**".

ITEM 13b. Number of Infants Delivered

If Multiple Gestation is answered "**Yes**", enter the number of infants actually delivered (count both live born and stillborn infants). For example, if twins were delivered, enter "2"; if triplets were delivered, enter "3". Do not count fetuses which have been reabsorbed in-utero and are not delivered. This item is not applicable if Multiple Gestation is answered "**No**".

ITEM 14: APGAR Scores

Enter the APGAR score at 1 minute and at 5 minutes as noted in the Labor and Delivery record.

ITEM 15: Initial Resuscitation

Initial Resuscitation

Initial Resuscitation refers to interventions performed in the delivery room or in an initial resuscitation area immediately following birth and prior to admission to the NICU. There are situations in which infants receive their initial neonatal resuscitation in locations other than a "delivery room". These include cases in which birth occurs outside of a "delivery room" (home, automobile, ambulance, hospital room, emergency room, etc.) and cases in which resuscitation is provided in locations adjacent to or close-by the delivery room. In such situations, the responses to the Initial Resuscitation items should be based on the initial resuscitation provided immediately after birth, regardless of where the resuscitation took place.

ITEM 15a. Oxygen during Initial Resuscitation

Answer "**Yes**" if the infant received any supplemental oxygen in the delivery room or during the initial resuscitation performed immediately after birth.

Answer "**No**" if the infant did not receive supplemental oxygen in the delivery room or during the initial resuscitation performed immediately after birth.

NOTE: 21% oxygen is room air. This is not considered supplemental oxygen, no matter how administered.

ITEM 15b. Face Mask Ventilation during Initial Resuscitation

Answer "**Yes**" if the infant received any positive pressure breaths via a face mask in the delivery room or during the initial resuscitation performed immediately after birth. Positive pressure may be administered using a resuscitation bag or other device that generates intermittent positive pressure.

Answer "**No**" if the infant did not receive any positive pressure breaths via a face mask in the delivery room or during the initial resuscitation performed immediately after birth.

Answer "**No**" if a face mask was only used to administer CPAP (continuous positive airway pressure) and no positive pressure breaths were given.

ITEM 15c. Endotracheal Tube Ventilation during Initial Resuscitation

Answer "**Yes**" if the infant received ventilation through an endotracheal tube in the delivery room or during the initial resuscitation performed immediately after birth.

Answer "**No**" if the infant did not receive ventilation through an endotracheal tube in the delivery room or during the initial resuscitation performed immediately after birth. If an endotracheal tube was placed only for suctioning and assisted ventilation was not given through the tube, answer "**No**".

ITEM 15d. Epinephrine during Initial Resuscitation

Answer "**Yes**" if epinephrine was given in the delivery room or during the initial resuscitation performed immediately after birth via intravenous, intracardiac or intratracheal (through an endotracheal tube) routes.

Answer "**No**" if epinephrine was not given in the delivery room or during the initial resuscitation performed immediately after birth via intravenous, intracardiac or intratracheal routes.

ITEM 15e. Cardiac Compression during Initial Resuscitation

Answer "**Yes**" if external cardiac massage was given in the delivery room or during the initial resuscitation performed immediately after birth.

Answer "**No**" if external cardiac massage was not given in the delivery room or during the initial resuscitation performed immediately after birth.

ITEM 15f. Nasal CPAP during Initial Resuscitation

Answer "**Yes**" if the infant was given continuous positive airway pressure applied through the nose during the initial resuscitation performed immediately after birth.

NOTE: Nasal IMV (intermittent mandatory ventilation) and nasal SIMV (synchronized intermittent mandatory ventilation) are both considered forms of nasal CPAP for the purpose of this definition. High flow nasal cannula oxygen is NOT considered nasal CPAP for the purpose of this definition.

Answer "**No**" if the infant was not given continuous positive airway pressure applied through the nose during the initial resuscitation performed immediately after birth.

ITEM 16a. Temperature Measured within the First Hour after Admission to Your NICU

NOTE: This item applies to the temperature of the infant during the first hour after admission to your NICU. Do not record temperature measurements taken at the transferring center for outborn infants.

Answer "**Yes**" if the infant's core body temperature was measured and recorded within the first hour after admission to your NICU. Core body temperature may be measured by taking a rectal, esophageal, tympanic or axillary temperature.

NOTE: If an attempt is made to measure the temperature during the first hour after admission to your NICU, and the temperature of the infant is lower or higher than the thermometer can measure, check "**Yes**" and record the lowest or highest temperature on the thermometer in part b of this item. If the infant's core body temperature is not measured within the first hour after admission to the NICU, part b of this item is not applicable.

Answer "**No**" if the infant's core body temperature was not measured and recorded within the first hour after admission to your NICU.

Answer "**N/A**" if the infant is eligible but was never admitted to your NICU.

ITEM 16b. Temperature within the First Hour after Admission to Your NICU

If the infant's core body temperature was measured and recorded within the first hour after admission to your NICU, enter the infant's temperature in degrees centigrade to the nearest tenth of a degree. If the infant's temperature is measured multiple times within the first hour after admission to your NICU, enter the value of the first temperature measurement. For centers that measure temperature in degrees Fahrenheit, please use a Fahrenheit to centigrade conversion table. Use rectal temperature or, if not available, esophageal temperature, tympanic temperature or axillary temperature, in that order.

NOTE: A Fahrenheit to centigrade conversion table is provided on the Network web site, www.vtoxford.org.

ITEM 17: Bacterial Sepsis on or before Day 3

Answer "**Yes**" if a bacterial pathogen from the Bacterial Pathogens List was recovered from a blood and/or cerebrospinal fluid culture obtained on day 1, 2 or 3 of life.

Answer "**No**" if a bacterial pathogen from the Bacterial Pathogens List was not recovered from a blood culture or cerebrospinal fluid culture obtained on day 1, 2 or 3 of life, or if no blood or cerebrospinal fluid cultures were obtained on day 1, 2 or 3 of life.

NOTE: The date of birth counts as day 1 regardless of the time of birth. For an infant born at 11:59 PM on September 1, day 3 will be September 3rd.

NOTE: Bacterial Pathogens are listed in Appendix B.

ITEM 18: Oxygen on Day 28

NOTE: To calculate the date of day 28, add 28 days to the birth date and subtract 1 day. The date of birth counts as Day 1 regardless of the time of birth. For an infant born at 11:59 PM on September 1, Day 28 is September 28th.

NOTE: This item is not applicable if:

- The infant is discharged home or dies prior to the date of day 28.
- The infant is transferred from your center to another hospital prior to the date of day 28 and either,
 - Is not readmitted to your center following initial transfer and before discharge home, death or first birthday, or
 - Is transferred a second time before the date of day 28.

Otherwise the item is applicable.

NOTE: Infants who are moved from one unit to another unit within your hospital are not considered to have been transferred.

NOTE: 21% oxygen is room air. This is not considered supplemental oxygen, no matter how administered.

Answer "**Yes**" if the item is applicable and the infant received any supplemental oxygen on the date of day 28.

Answer "**No**" if the item is applicable and the infant did not receive supplemental oxygen on the date of day 28.

Answer "**N/A**" if the item is not applicable based on the criteria above.

NOTE: A chart showing the date of day 28 for infants born in 2011 may be downloaded from www.vtoxford.org.

ITEM 19a. Cranial Imaging on or before Day 28

Answer "**Yes**" if at least one cranial ultrasound, cranial CT or cranial MRI was performed on or before day 28.

Answer "**No**" if no cranial ultrasound, CT or MRI was performed on or before day 28.

NOTE: A chart showing the date of day 28 for infants born in 2011 may be downloaded from www.vtoxford.org.

ITEM 19b. Periventricular-Intraventricular Hemorrhage (PIH), Worst Grade

If a cranial ultrasound, CT or MRI was performed on or before day 28, enter the worst grade of PIH based on any study using the criteria below. If multiple ultrasounds, CT scans or MRI's were done on or before day 28, record the most severe grade. This item is not applicable if the answer Cranial Imaging on or before Day 28 is "**No**".

- Grade 0: No subependymal or intraventricular hemorrhage
- Grade 1: Subependymal germinal matrix hemorrhage only
- Grade 2: Intraventricular blood, no ventricular dilation
- Grade 3: Intraventricular blood, ventricular dilation
- Grade 4: Intraparenchymal hemorrhage

ITEM 19c. PIH, Where First Occurred

If the infant had a periventricular-intraventricular hemorrhage (PIH) documented on an ultrasound, CT or MRI on or before day 28, indicate where a PIH first occurred. Note that this item does not ask where the worst grade occurred but rather where any PIH (grades 1 to 4) first occurred. Answer either "**Your Hospital**" or "**Other Hospital**". This item is not applicable if no ultrasound, CT or MRI was done on or before day 28 or if no PIH occurred.

If a PIH first occurred at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If a PIH first occurred at another hospital based on the following criteria, answer "**Other Hospital**".

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, a PIH will be considered to have occurred at another hospital in the following situations:

1. A PIH was first diagnosed on an ultrasound, CT or MRI at the other hospital either prior to admission to your hospital or prior to readmission following initial transfer.

Or,

2. A PIH was first diagnosed on an ultrasound, CT or MRI within 4 hours of admission to your hospital.

ITEM 20: Died Within 12 Hours of Admission to Your NICU

NOTE: If the infant is inborn and dies within 12 hours of birth without being admitted to your NICU, the infant should be considered as a delivery room death and this item is not applicable. Use the Delivery Room Death Form when this is the case.

Answer "**Yes**" if the infant is admitted to your NICU and dies 12 hours or less from the time of admission to your NICU. If the infant is outborn and is never admitted to your NICU, answer "**Yes**" if the infant dies 12 hours or less from the time of admission to your hospital.

Answer "**No**" if the infant is admitted to your NICU and does not die 12 hours or less from the time of admission to your NICU. If an eligible infant is never admitted to your NICU, answer "**No**" if the infant does not die within 12 hours of admission to your hospital.

End of 28 Day Form Definitions

Discharge Form Data Definitions

ITEM 21a. Oxygen after Initial Resuscitation

Answer "**Yes**" if the infant was given supplemental oxygen at any time after leaving the initial resuscitation area.

Answer "**No**" if the infant was never given supplemental oxygen after leaving the initial resuscitation area.

NOTE: 21% oxygen is room air. This is not considered supplemental oxygen, no matter how administered.

ITEM 21b. Conventional Ventilation after Initial Resuscitation

Answer "**Yes**" if the infant was given intermittent positive pressure ventilation through an endotracheal tube with a conventional ventilator (IMV rate <240/minute) at any time after leaving the initial resuscitation area.

Answer "**No**" if the infant was never given intermittent positive pressure ventilation through an endotracheal tube with a conventional ventilator (IMV rate <240/minute) after leaving the initial resuscitation area.

NOTE: Intermittent positive pressure ventilation (IPPV) via nasal prongs is not considered conventional ventilation. Synchronized intermittent positive pressure ventilation (SIMV) via nasal prongs is not considered conventional ventilation.

ITEM 21c. High Frequency Ventilation after Initial Resuscitation

Answer "**Yes**" if the infant received high frequency ventilation (IMV rate \geq 240/minute) at any time after leaving the initial resuscitation area.

Answer "**No**" if the infant never received high frequency ventilation (IMV rate \geq 240/minute) after leaving the initial resuscitation area.

NOTE: High frequency ventilation via nasal prongs is not considered high frequency ventilation.

ITEM 21d. High Flow Nasal Cannula after Initial Resuscitation

Answer "**Yes**" if the infant received air or oxygen (any FiO₂) at a flow rate of one liter per minute or more via nasal cannula at any time after leaving the initial resuscitation area.

Answer "**No**" if the infant did not receive air or oxygen (any FiO₂) at a flow rate of one liter per minute or more via nasal cannula at any time after leaving the initial resuscitation area.

ITEM 21e. Nasal IMV or Nasal SIMV after Initial Resuscitation

Answer "**Yes**" if the infant received intermittent positive pressure ventilation (intermittent mandatory ventilation or synchronized intermittent mandatory ventilation) via nasal prongs or other nasal device at any time after leaving the initial resuscitation area.

Answer "**No**" if the infant did not receive intermittent positive pressure ventilation via nasal prongs or other nasal device at any time after leaving the initial resuscitation area.

NOTE: Nasal IMV or Nasal SIMV should be coded "**Yes**" if the infant receives positive pressure patterns that include two or more levels of positive pressure such as "BiPAP" or "SiPAP".

Nasal IMV (intermittent mandatory ventilation) and nasal SIMV (synchronized intermittent mandatory ventilation) are both considered forms of nasal CPAP.

Intermittent positive pressure ventilation (IPPV) via nasal prongs is not considered conventional ventilation. Synchronized intermittent positive pressure ventilation (SIMV) via nasal prongs is not considered conventional ventilation.

ITEM 22a. Nasal CPAP after Initial Resuscitation

Answer "**Yes**" if the infant was given continuous positive airway pressure applied through the nose at any time after leaving the initial resuscitation area. If Nasal IMV or Nasal SIMV is answered "**Yes**", Nasal CPAP should also be answered "**Yes**".

NOTE: Nasal IMV (intermittent mandatory ventilation) and nasal SIMV (synchronized intermittent mandatory ventilation) are both considered forms of nasal CPAP for the purpose of this definition. High flow nasal cannula oxygen is NOT considered nasal CPAP for the purpose of this definition.

Answer "**No**" if the infant was never given continuous positive airway pressure applied through the nose after leaving the initial resuscitation area.

ITEM 22b. Nasal CPAP before ETT Ventilation

Answer "**Yes**" if the infant was given continuous positive airway pressure applied through the nose without having previously received intermittent positive pressure breaths through an endotracheal tube.

NOTE: Intermittent positive pressure breaths refers to assisted breaths given through an endotracheal tube using a mechanical ventilator or by using a bag.

Answer "**No**" if the infant received intermittent positive pressure breaths through an endotracheal tube before being given continuous positive airway pressure applied through the nose.

Nasal CPAP before ETT Ventilation is only completed when the answer to Nasal CPAP is "**Yes**". When responding to Nasal CPAP before ETT Ventilation, the important point is whether the Nasal CPAP was given before or after assisted positive pressure breaths through an endotracheal tube. If an infant was first treated with Nasal CPAP and later was intubated and ventilated, the response to Nasal CPAP before ETT Ventilation would be "**Yes**". If an infant was treated with Nasal CPAP and never was subsequently intubated the response to Nasal CPAP before ETT Ventilation would also be "**Yes**". If an infant was intubated and given intermittent positive pressure breaths through the endotracheal tube and then later received Nasal CPAP, the response to Nasal CPAP before ETT Ventilation would be "**No**".

If an infant was intubated in the initial resuscitation area solely for suctioning meconium, this does not count as prior intubation when responding to Nasal CPAP before ETT Ventilation. Thus, for an infant suctioned for meconium via an endotracheal tube who had the tube removed immediately after the suctioning was completed and who was later treated with Nasal CPAP the response to Nasal CPAP before ETT Ventilation would be "**Yes**" if the infant was subsequently ventilated.

ITEM 23a. Surfactant during Initial Resuscitation

Answer "**Yes**" if surfactant was administered to the infant in the initial resuscitation area or as part of the stabilization immediately after birth even if that occurred in a location other than the delivery room.

Answer "**No**" if surfactant was not administered when the infant was in the initial resuscitation area or as part of the stabilization immediately after birth.

NOTE: The initial resuscitation and stabilization of infants immediately after birth may occur in locations other than a delivery room. These may include a designated resuscitation area, hospital room, emergency room, operating room, ambulance, etc. If surfactant is administered during stabilization and resuscitation immediately following birth, the answer to this question is "**Yes**" regardless of location. If the stabilization immediately after birth occurs in a delivery room, resuscitation room or other location and the infant is then transferred to the NICU for further stabilization during which surfactant is administered, check "**No**".

ITEM 23b. Surfactant at Any Time

Answer "**Yes**" if the infant received an exogenous surfactant at any time. If the answer to Surfactant in the DR is "**Yes**", Surfactant at Any Time must also be answered "**Yes**".

Answer "**No**" if the infant never received an exogenous surfactant.

ITEM 23c. Age at First Dose of Surfactant

If surfactant was given at any time, enter the infant's postnatal age in hours and minutes at the time when the first dose of surfactant was administered. For inborn infants, the first dose may have occurred prior to or after NICU admission. For outborn infants, the first dose may have occurred before transfer, during transport or at your hospital. Do not answer this item if the answer to Surfactant at Any Time is "**No**".

The postnatal age at first dose is the interval in hours and minutes, to the nearest minute, between the date and time of birth and the date and time at which the first dose was given.

If the postnatal age at the time of the first dose was exact in hours, a "0" should be entered in the "minutes" portion of this item. Do not leave hours or minutes blank. If the precise age at first dose is unknown, but an estimated age at first dose can be reliably determined to the nearest 15 minutes, please record this estimate. If the best estimate of age at first dose to the nearest 15 minutes cannot be determined, this item should be recorded as unknown.

EXAMPLE 1: An infant is born at 15:30 hours on October 1 in your hospital. The first dose of surfactant is given at 15:45 hours on October 1 in the delivery room. The postnatal age at first dose is 0 hours and 15 minutes.

EXAMPLE 2: An infant is born at 15:30 hours on October 1 in an outlying hospital. The first dose of surfactant is given at 15:45 hours on October 1 in the delivery room at that hospital. The infant is subsequently transferred to your hospital. The postnatal age at first dose is 0 hours and 15 minutes.

EXAMPLE 3: An infant is born at 15:30 hours on October 1. The first dose of surfactant is given at 15:00 hours on October 4. The age at first dose is 71 hours and 30 minutes.

EXAMPLE 4: An infant is born at 15:30 hours on October 1. The first dose of surfactant is given at 16:30 hours on October 1. The age at first dose is 1 hour and 0 minutes. (Please record as 1 hour and 0 minutes, rather than 0 hours and 60 minutes.)

ITEM 24a: Inhaled Nitric Oxide

Answer "**Yes**" if the infant received inhaled nitric oxide.

Answer "**No**" if the infant did not receive inhaled nitric oxide.

ITEM 24b: Inhaled Nitric Oxide, Where Given

If the infant received Inhaled Nitric Oxide (iNO), indicate where given. This item is not applicable if iNO was not given.

If iNO was given only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If iNO was given only at another hospital, answer "**Other Hospital**".

NOTE: iNO will be considered to be given at another hospital in the following situations:

1. iNO is given before being admitted to your hospital.
2. iNO is given prior to readmission to your hospital after initial transfer.

Answer "**Both**" if iNO was given both at your hospital and at another hospital as defined above.

ITEM 25: Respiratory Support at 36 Weeks

To answer items for Respiratory Support at 36 Weeks, calculate the date of week 36 for the infant and determine whether the infant is eligible for reporting these items. If the infant is not eligible, answer “**N/A**” to each of the items for Respiratory Support at 36 Weeks. Otherwise, answer “**Yes**” or “**No**” to each item based on the item definitions.

Calculating the Date of Week 36

1. Identify the infant’s gestational age (GA, weeks and days) from the 28 Day Form.
2. Round the gestational age to the nearest week. If the value of GA days is between 0 and 3 round the number of weeks to the value of GA weeks. If the value of GA days is between 4 and 6 round the number of weeks to the value of GA weeks plus 1.
3. If the rounded gestational age is greater than 36, the date of week 36 is N/A.
4. If the rounded gestational age is equal to 36, the date of week 36 is the infant’s date of birth.
5. If the infant’s rounded gestational age is less than 36:
 - a. Subtract the rounded gestational age from 36 to get the number of weeks for the infant to reach the date of week 36.
 - b. Multiply the number of weeks for the infant to reach the date of week 36 by 7 to get the number of days for the infant to reach the date of week 36.
 - c. Add the number of days for the infant to reach the date of week 36 to the infant’s birth date and subtract 1 day to get the date of week 36.

NOTE: A chart showing the date of week 36 for infants born in 2011 may be downloaded from www.vtoxford.org.

Eligibility Criteria for Respiratory Support at 36 Weeks

Respiratory support items on the date of week 36 are not applicable if:

- The infant’s rounded gestational age is greater than 36 weeks.
- The infant is discharged home or dies prior to the Date of Week 36.
- The infant is transferred from your center to another hospital prior to the date of week 36 and either,
 - Is not readmitted to your center before discharge home, death or first birthday, or
 - Is transferred a second time before the Date of Week 36.

Otherwise the items are applicable.

NOTE: Infants who are moved from one unit to another unit within your hospital are not considered to have been transferred.

ITEM 25a: Oxygen at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant received any supplemental oxygen at any time on the date of week 36.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant did not receive supplemental oxygen at any time on the date of week 36.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

NOTE: 21% oxygen is room air. This is not considered supplemental oxygen, no matter how administered.

ITEM 25b: Conventional Ventilation at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant was given intermittent positive pressure ventilation through an endotracheal tube with a conventional ventilator (IMV rate <240/minute) at any time on the date of week 36.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant was not given intermittent positive pressure ventilation through an endotracheal tube with a conventional ventilator (IMV rate <240/minute) at any time on the date of week 36.

NOTE: Intermittent positive pressure ventilation (IPPV) via nasal prongs is not considered conventional ventilation. Synchronized intermittent positive pressure ventilation (SIMV) via nasal prongs is not considered conventional ventilation.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

ITEM 25c. High Frequency Ventilation at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant received high frequency ventilation (IMV rate \geq 240/minute) at any time on the date of week 36.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant did not receive high frequency ventilation (IMV rate \geq 240/minute) at any time on the date of week 36.

NOTE: High frequency ventilation via nasal prongs is not considered high frequency ventilation.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

ITEM 25d. High Flow Nasal Cannula at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant received air or oxygen (any FiO₂) at a flow rate of one liter per minute or more via nasal cannula at any time on the date of week 36.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant did not receive air or oxygen (any FiO₂) at a flow rate of one liter per minute or more via nasal cannula at any time on the date of week 36.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

ITEM 25e. Nasal IMV or Nasal SIMV at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant received intermittent positive pressure ventilation (intermittent mandatory ventilation or synchronized intermittent mandatory ventilation) via nasal prongs or other nasal device at any time on the date of week 36.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant did not receive intermittent positive pressure ventilation via nasal prongs or other nasal device at any time on the date of week 36.

NOTE: Nasal IMV or Nasal SIMV should be coded "**Yes**" if the infant receives positive pressure patterns that include two or more levels of positive pressure such as "BiPAP" or "SiPAP".

Intermittent positive pressure ventilation (IPPV) via nasal prongs is not considered conventional ventilation. Synchronized intermittent positive pressure ventilation (SIMV) via nasal prongs is not considered conventional ventilation.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

ITEM 25f. Nasal CPAP at 36 Weeks

Answer "**Yes**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant was given continuous positive airway pressure applied through the nose at any time on the date of week 36. If Nasal IMV or Nasal SIMV is answered "**Yes**", Nasal CPAP should also be answered "**Yes**".

NOTE: Nasal IMV (intermittent mandatory ventilation) and nasal SIMV (synchronized intermittent mandatory ventilation) are both considered forms of nasal CPAP for the purpose of this definition. High flow nasal cannula oxygen is NOT considered nasal CPAP for the purpose of this definition.

Answer "**No**" if the item is applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks, and the infant was never given continuous positive airway pressure applied through the nose on the date of week 36.

Answer "**N/A**" if the item is not applicable based on the Eligibility Criteria for Respiratory Support at 36 Weeks.

ITEM 26a: Steroids for CLD

Answer "**Yes**" if systemic corticosteroids were used after birth to treat or prevent bronchopulmonary dysplasia or chronic lung disease.

Answer "**No**" if systemic corticosteroids were not used after birth to treat or prevent bronchopulmonary dysplasia or chronic lung disease.

Inhaled corticosteroids are not considered systemic corticosteroids. Thus, if an infant received inhaled corticosteroids but did not receive systemic corticosteroids after birth to treat or prevent bronchopulmonary dysplasia or chronic lung disease, then the answer to Steroids for CLD is "**No**".

ITEM 26b: Steroids for CLD, Where Given

If Steroids for CLD is answered "**Yes**", indicate where steroids for CLD were given. This item is not applicable if the infant did not receive steroids for CLD.

If Steroids for CLD are given only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If Steroids for CLD are given only at another hospital, answer "**Other Hospital**".

NOTE: Steroids for CLD will be considered to be given at another hospital in the following situations:

1. Steroids for CLD are given before being admitted to your hospital.
2. Steroids for CLD are given prior to readmission to your hospital after initial transfer.

Answer "**Both**" if Steroids for CLD are given both at your hospital and at another hospital as defined above.

ITEM 27: Indomethacin

Answer "**Yes**" if Indomethacin was administered after birth for any reason. The answer to this question may be "**Yes**" even if an infant did not meet the definition of Patent Ductus Arteriosus on the Discharge Form.

Answer "**No**" if Indomethacin was not administered after birth.

NOTE: Ibuprofen should not be counted as Indomethacin.

ITEM 28: Ibuprofen for PDA

Answer "**Yes**" if Ibuprofen was administered at any time after birth for the prevention or treatment of PDA. The answer to this question may be "Yes" even if an infant did not meet the definition of Patent Ductus Arteriosus on the Discharge Form.

Answer "**No**" if Ibuprofen was not administered after birth for the prevention or treatment of PDA.

NOTE: Ibuprofen use other than for the prevention or treatment of PDA should not be coded as "**Yes**" for this item.

ITEM 29a. PDA Ligation

Answer "**Yes**" if surgical ligation of the ductus arteriosus was attempted either in the operating room or NICU. This item can be answered even if an infant did not meet the definition of Patent Ductus Arteriosus on the Discharge Form.

Answer "**No**" if surgical ligation of the ductus arteriosus was not attempted either in the operating room or NICU.

ITEM 29b. PDA Ligation, Where Done

If PDA Ligation is answered "Yes", indicate where PDA ligation was done. This item is not applicable if PDA ligation was not done.

If PDA Ligation is done only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If PDA Ligation is done only at another hospital, answer "**Other Hospital**".

NOTE: PDA Ligation will be considered to be done at another hospital in the following situations:

1. PDA Ligation is done before being admitted to your hospital.
2. PDA Ligation is done prior to readmission to your hospital after initial transfer.

Answer "**Both**" if PDA Ligation is done both at your hospital and at another hospital as defined above.

ITEM 30a. ROP Surgery

Answer "Yes" if retinal cryosurgery and/or laser surgery were performed for ROP.

Answer "No" if retinal cryosurgery and/or laser surgery were not performed for ROP.

ITEM 30b. ROP Surgery, Where Done

If ROP Surgery is answered "Yes", indicate where ROP surgery was done. This item is not applicable if ROP surgery was not done.

If ROP Surgery is done only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If ROP Surgery is done only at another hospital, answer "**Other Hospital**".

NOTE: ROP Surgery will be considered to be done at another hospital in the following situations:

1. ROP Surgery is done before being admitted to your hospital.
2. ROP Surgery is done prior to readmission to your hospital after initial transfer.

Answer "**Both**" if ROP Surgery is done both at your hospital and at another hospital as defined above.

ITEM 31: NEC Surgery

Answer "**Yes**" if one or more of the following procedures: laparotomy, laparoscopy, bowel resection or intraperitoneal drain placement was performed for necrotizing enterocolitis, suspected necrotizing enterocolitis, or bowel perforation.

NOTE: If NEC Surgery is answered "**Yes**", at least one of the following surgery codes must be entered in the Surgery Codes item:

- S302 Laparoscopy
- S303 Laparotomy
- S307 Jejunostomy, ileostomy, enterostomy or colostomy for intestinal diversion
- S308 Small bowel resection
- S309 Large bowel resection
- S333 Primary peritoneal drainage for NEC, suspected NEC or intestinal perforation.

Answer "**No**" if none of the following procedures: laparotomy, laparoscopy, bowel resection or intraperitoneal drain placement was performed for necrotizing enterocolitis, suspected necrotizing enterocolitis, or bowel perforation.

NOTE: Surgery Codes are listed in Appendix D.

ITEM 32: Other Surgery

Answer "**Yes**" if a surgical procedure other than PDA Ligation, ROP Surgery and NEC Surgery was performed and either:

- The surgical procedure is included on the Surgery Codes List,
Or,
- The specific surgical procedure is not specifically identified on the Surgery Codes List and the procedure was performed under general or spinal anesthesia,
Or,
- Other cardiac catheterization procedures are performed (code S600), whether or not the procedure is performed under general or spinal anesthesia.

NOTE: If Other Surgery is answered "**Yes**", one or more valid surgery codes must be entered in the Surgery Codes item. If NEC Surgery and Other Surgery are both answered "**Yes**", one or more surgery codes in the Surgery Codes List, other than the NEC Surgery codes (S302, S303, S307, S308, S309, S333), must be entered in the Surgery Codes item.

Answer **"No"** if the infant does not have other surgery as defined above. If the infant only had PDA Ligation, ROP Surgery or NEC Surgery, answer "No".

NOTE: Surgery Codes are listed in Appendix D.

NOTE:

Central lines are not considered 'Other Surgery'. Do not consider the following as 'Other Surgery': Broviac catheters, percutaneous venous catheters, central venous catheters, PICC lines, umbilical artery lines, umbilical venous lines, or any other intravascular catheter. We recognize that some of these lines may be placed while the infant is under anesthesia for other procedures. Do not code any lines as surgery even if they are placed under general or spinal anesthesia.

ECMO, ECMO cannulation and ECMO decannulation are not considered Other Surgery. Do not code ECMO, ECMO cannulation, or decannulation as surgery even if the procedures are performed under anesthesia.

Chest tube placement is not considered Other Surgery.

Peritoneal dialysis and placement or removal of peritoneal dialysis catheters are not considered Other Surgery.

ITEM 33a: Surgery Codes and Location of Surgery

If you answered **"Yes"** to NEC Surgery or Other Surgery, enter up to ten Surgery Code numbers that are listed on the Surgery Codes List in the spaces provided. For each Surgical Code reported, indicate the location of surgery for that procedure. If the specific surgical procedure is not listed on the Surgery Codes List and the procedure was performed under general or spinal anesthesia, use the code for other surgery in that category (for example, S100, S200, etc.) and provide a description in the text field.

NOTE: If a specific procedure is not on the list of surgical codes, do not use these "other" surgery codes unless the procedure is performed under general or spinal anesthesia: S100, S200, S300, S400, S500, S700, S800, or S900.

Codes for "other" procedures S100, S200, S300, etc., should only be used to identify procedures for which there is no specific code. Do not use "other" codes to further describe surgical procedures that are on the list or to indicate why procedures are performed. For example, do not use S500 to add a description for the S504 procedure or to explain why heart surgery was performed. Cardiac surgery for the repair or palliation of congenital heart disease is coded as S504. Do not use code S500 to further describe the details of that surgery.

NOTE: If NEC Surgery is answered "**Yes**", at least one of the NEC surgery codes must be entered in this item (S302, S303 S307, S308, S309, S333). If NEC Surgery and Other Surgery are both answered "**Yes**", one or more surgery codes in the Surgery Codes List, other than the NEC Surgery codes above must be entered in this item.

NOTE: If PDA ligation is performed as an isolated procedure for PDA, do not enter a surgery code in Item 33a (only check "**Yes**" to Item 29a and enter the location of surgery in Item 29b). If the PDA is ligated as a component of the repair or palliation of congenital heart disease, use code S504.

Location of Surgery

For each Surgical Code entered, indicate where the procedure was done. Location of Surgery should be entered for each surgery code entered.

If the surgical procedure is performed only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If the surgical procedure is performed only at another hospital, answer "**Other Hospital**".

NOTE: The surgical procedure will be considered to be done at another hospital in the following situations:

1. The surgical procedure is performed before being admitted to your hospital.
2. The surgical procedure is performed prior to readmission to your hospital after initial transfer.

Enter "**Both**" if the surgical procedure is done both at your hospital and at another hospital as defined above.

NOTE: Surgery Codes are listed in Appendix D.

ITEM 33b: Surgical Code Description

The following surgery codes require a description be entered into this item. Only provide a description if one or more of the codes below is reported.

<u>Code</u>	<u>Description</u>
S100	Other head and neck surgery requiring general or spinal anesthesia
S200	Other thoracic surgery requiring general or spinal anesthesia
S300	Other abdominal surgery requiring general or spinal anesthesia
S400	Other genito-urinary surgery requiring general or spinal anesthesia

- S500 Other open heart or vascular surgery requiring general or spinal anesthesia
S600 Other interventional cardiac catheterization

NOTE: Record procedures for other cardiac catheterization (S600) whether or not the infant received general or spinal anesthesia.

- S700 Skin or soft tissue surgery requiring general or spinal anesthesia
S800 Other musculoskeletal surgery requiring general or spinal anesthesia
S900 Other central nervous system surgery requiring general or spinal anesthesia
S1000 Fetal surgery at your hospital
S1001 Fetal surgery at another hospital

NOTE: Surgery Codes are listed in Appendix D.

ITEM 34: Respiratory Distress Syndrome

Answer "**Yes**" if the infant had respiratory distress syndrome (RDS), defined as:

1. PaO₂ <50 mmHg in room air, central cyanosis in room air, a requirement for supplemental oxygen to maintain PaO₂ >50 mmHg, or a requirement for supplemental oxygen to maintain a pulse oximeter saturation over 85% within the first 24 hours of life.

And,

2. A chest radiograph consistent with RDS (reticulogranular appearance to lung fields with or without low lung volumes and air bronchograms) within the first 24 hours of life.

Answer "**No**" if the infant did not satisfy both of the above criteria.

ITEM 35a. Pneumothorax

Answer "**Yes**" if the infant had extrapleural air diagnosed by chest radiograph or needle aspiration (thoracentesis). For infants who had thoracic surgery and then later developed extrapleural air diagnosed by CXR or needle thoracentesis, answer "**Yes**".

Answer "**No**" if the infant did not have extrapleural air as defined above. For infants who had thoracic surgery and a chest tube was placed at the time of surgery OR if free air was only present on a CXR taken immediately after thoracic surgery and was not treated with a chest tube, answer "**No**".

ITEM 35b. Pneumothorax, Where Occurred

If the infant had a pneumothorax as defined above, indicate where the pneumothorax occurred.

If the pneumothorax occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If the pneumothorax occurred only at another hospital, answer "**Other Hospital**".

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, pneumothorax will be considered to have occurred at another hospital in the following situations:

1. The pneumothorax was diagnosed at the other hospital or during transport either prior to admission to your hospital or prior to readmission following initial transfer.

Or,

2. The pneumothorax was diagnosed within 4 hours of admission to your hospital.

NOTE: If the pneumothorax that occurred at another hospital was initially drained without insertion of a chest tube, and recurred or reaccumulated at your hospital on the same side within 24 hours of admission, it will be considered to have occurred at the other hospital.

If a chest tube was inserted at another hospital, and the pneumothorax recurred or reaccumulated at your hospital on the same side within 24 hours of removing the chest tube placed at initial diagnosis, it will be considered to have occurred at the other hospital.

Enter "**Both**" if the pneumothorax occurred both at your hospital and at another hospital as defined above.

ITEM 36: Patent Ductus Arteriosus

Answer "**Yes**" for Patent Ductus Arteriosus if:

At least one of the following findings is present:

1. Left to Right or bidirectional ductal shunt on Doppler echo
2. Systolic or continuous murmur

And,

At least two of the following findings are present:

1. Hyperdynamic precordium
2. Bounding pulses
3. Wide pulse pressure
4. Pulmonary vascular congestion, cardiomegaly or both

Answer "**No**" if the infant does not satisfy the above conditions.

ITEM 37a. Necrotizing Enterocolitis

NOTE: Infants who satisfy the definition of Necrotizing Enterocolitis below but are found at surgery or post-mortem examination for that episode to have a "Focal Gastrointestinal Perforation" should be coded as having "focal gastrointestinal perforation", not as having NEC.

Answer "**Yes**" if the infant had Necrotizing Enterocolitis (NEC) diagnosed at surgery, at postmortem examination or clinically and radiographically using the following criteria:

1. One or more of the following clinical signs present:
 - a. Bilious gastric aspirate or emesis
 - b. Abdominal distension
 - c. Occult or gross blood in stool (no fissure)

And,

2. One or more of the following radiographic findings present:
 - a. Pneumatosis intestinalis
 - b. Hepato-biliary gas
 - c. Pneumoperitoneum

Answer "**No**" if the infant did not satisfy the above definition of NEC.

ITEM 37b. NEC, Where Occurred

If NEC, indicate where occurred. This item is not applicable if NEC did not occur.

If NEC occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If NEC occurred only at another hospital, answer "**Other Hospital**".

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, NEC will be considered to have occurred at another hospital in the following situations:

1. NEC was diagnosed at the other hospital prior to admission to your hospital or prior to readmission following initial transfer.
2. NEC was diagnosed within 4 hours of admission to your hospital.

NOTE: Recurrence or recrudescence of NEC that had previously occurred at another hospital will not be considered to be NEC that occurred at your hospital unless the original case of NEC had resolved and the infant had been on full feedings for 1 week or more.

Enter "**Both**" if NEC occurred both at your hospital and at another hospital as defined above.

ITEM 38a. Gastrointestinal Perforation

Answer "**Yes**" if the infant has a Gastrointestinal Perforation separate from Necrotizing Enterocolitis. This diagnosis will be based on visual inspection of the bowel at the time of surgery or post-mortem examination that demonstrates a single focal perforation with the remainder of the bowel appearing normal.

Answer "**No**" if the infant did not have a Gastrointestinal Perforation as defined above.

ITEM 38b. Gastrointestinal Perforation, Where Occurred

If GI perforation occurred, indicate where occurred. This item is not applicable if GI perforation did not occur.

If GI Perforation occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If GI Perforation occurred only at another hospital, answer "**Other Hospital**".

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, GI Perforation will be considered to have occurred at another hospital in the following situations:

1. GI Perforation was diagnosed at the other hospital prior to admission to your hospital or prior to readmission following initial transfer.
2. GI Perforation was diagnosed within 4 hours of admission to your hospital.

Enter "**Both**" if GI Perforation occurred both at your hospital and at another hospital as defined above.

ITEMS 39 to 41: Sepsis and/or Meningitis, Late (after Day 3 of life)

Late Infection Applicability Criteria

Each of the late infection items is based on whether the infant had the infection *after* Day 3 of life. In determining the date of Day 3, the date of birth counts as Day 1 regardless of the time of birth. For an infant born at 11:59 PM on September 1, Day 3 is September 3rd. Use the criteria below when answering each of the late infection questions.

The three late infection items are not applicable if:

- The infant is discharged home or dies on or before Day 3, or
- The infant is transferred from your center to another hospital on or before Day 3 and either,
 - Is not readmitted to your center before discharge home, death or first birthday, or
 - Is transferred a second time on or before Day 3.

Otherwise the late infection items are applicable.

ITEM 39a. Bacterial Pathogen after Day 3

Answer "**Yes**" if the item is applicable based on the Late Infection Applicability Criteria and a bacterial pathogen from the Bacterial Pathogens List is recovered from a blood and/or cerebral spinal fluid culture obtained after day 3 of life.

Answer "**No**" if the item is applicable based on the Late Infection Applicability Criteria and a bacterial pathogen from the Bacterial Pathogens List is not recovered from a blood and/or cerebral spinal fluid culture obtained after day 3 of life.

Answer "**N/A**" if the item is not applicable based on the Late Infection Applicability Criteria.

NOTE: If a bacterial pathogen and a coagulase negative staph are recovered during the same sepsis workup performed after Day 3, check only "Bacterial Pathogen" for that episode. If a bacterial pathogen is recovered during one episode of sepsis after Day 3, and coagulase negative staphylococcus is recovered during another episode of sepsis after Day 3 (associated with the three clinical criteria for coagulase negative staph), check both "Bacterial Pathogen" and "Coagulase Negative Staph".

NOTE: Bacterial Pathogens are listed in Appendix B.

ITEM 39b. Bacterial Pathogen after Day 3, Where Occurred

If late bacterial pathogen occurred, indicate where occurred. This item is not applicable if late bacterial pathogen did not occur.

If late bacterial pathogen occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If late bacterial pathogen occurred only at another hospital, answer "**Other Hospital**".

Answer "**Both**" if late bacterial pathogen occurred both at your hospital and at another hospital as defined above.

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, late bacterial pathogen will be considered to have occurred at another hospital in the following situations:

1. Late bacterial pathogen was diagnosed at the other hospital prior to admission to your hospital or prior to readmission following initial transfer.
2. Late bacterial pathogen was diagnosed within 4 hours of admission to your hospital.

NOTE: Recurrence or recrudescence of a late bacterial pathogen with the same organism that had previously occurred at another hospital will not be considered to be a late bacterial pathogen that occurred at your hospital unless the original case of late bacterial pathogen had resolved and the infant had been off of antibiotics for 1 week or more.

ITEM 40a. Coagulase Negative Staph Infection after Day 3

Answer "**Yes**" if the item is applicable based on the Late Infection Applicability Criteria and the infant has all 3 of the following after day 3 of life:

Coagulase negative staphylococcus is recovered from a blood culture obtained from either a central line, or peripheral blood sample, and/or is recovered from cerebrospinal fluid obtained by lumbar puncture, ventricular tap or ventricular drain.

And,

One or more signs of generalized infection (such as apnea, temperature instability, feeding intolerance, worsening respiratory distress or hemodynamic instability).

And,

Treatment with 5 or more days of intravenous antibiotics after the above cultures were obtained. If the infant died, was discharged, or transferred prior to the completion of 5 days of intravenous antibiotics, this condition would still be met if the intention were to treat for 5 or more days.

NOTE: If a bacterial pathogen and a coagulase negative staph are recovered during the same sepsis workup performed after Day 3, answer only "Bacterial Pathogen" for that episode. If a bacterial pathogen is recovered during one episode of sepsis after Day 3, and coagulase negative staphylococcus is recovered during another episode of sepsis after Day 3 (associated with the three clinical criteria for coagulase negative staph), check both "Bacterial Pathogen" and "Coagulase Negative Staph".

Answer "**No**" if the item is applicable based on the Late Infection Applicability Criteria and any or all of the above are not true.

Answer "**N/A**" if the item is not applicable based on the Late Infection Applicability Criteria.

ITEM 40b. Coagulase Negative Staph after Day 3, Where Occurred

If coagulase negative staph after day 3 occurred, indicate where occurred. This item is not applicable if coagulase negative staph did not occur.

If coagulase negative staph occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer "**Your Hospital**".

If coagulase negative staph occurred only at another hospital, answer "**Other Hospital**".

Answer **"Both"** if coagulase negative staph occurred both at your hospital and at another hospital as defined above.

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, Coagulase Negative Staph will be considered to have occurred at another hospital in the following situations:

1. Coagulase negative staph was diagnosed at the other hospital prior to admission to your hospital or prior to readmission following initial transfer.
2. Coagulase negative staph was diagnosed within 4 hours of admission to your hospital.

NOTE: Recurrence or recrudescence of a coagulase negative staph infection that had previously occurred at another hospital will not be considered to be a coagulase negative staph infection that occurred at your hospital unless the original case of coagulase negative staph infection had resolved and the infant had been off of antibiotics for 1 week or more.

ITEM 41a. Fungal Infection after Day 3

Answer **"Yes"** if the item is applicable based on the Late Infection Applicability Criteria and a fungus was recovered from a blood culture obtained from either a central line or peripheral blood sample after day 3 of life.

Answer **"No"** if the item is applicable based on the Late Infection Applicability Criteria and a fungus was not recovered from a blood culture obtained from either a central line or peripheral blood sample after day 3 of life.

Answer **"N/A"** if the item is not applicable based on the Late Infection Applicability Criteria.

ITEM 41b. Fungal Infection after Day 3, Where Occurred

If fungal infection after day 3 occurred, indicate where occurred. This item is not applicable if fungal infection did not occur.

If Fungal Infection occurred only at your hospital prior to Initial Disposition or following readmission after initial transfer, answer **"Your Hospital"**.

If Fungal Infection occurred only at another hospital, answer **"Other Hospital"**.

NOTE: When infants transfer to your hospital or are readmitted to your hospital after initial transfer, fungal infection will be considered to have occurred at another hospital in the following situations:

1. Fungal infection was diagnosed at the other hospital prior to admission to your hospital or prior to readmission following initial transfer.
2. Fungal infection was diagnosed within 4 hours of admission to your hospital.

NOTE: Recurrence or recrudescence of a fungal infection with the same organism that had previously occurred at another hospital will not be considered to be a fungal infection that occurred at your hospital unless the original case of fungal infection had resolved and the infant had been off of antifungal agents for 1 week or more.

Enter "**Both**" if fungal Infection occurred both at your hospital and at another hospital as defined above.

ITEM 42: Cystic Periventricular Leukomalacia

NOTE: To be considered cystic periventricular leukomalacia there must be multiple small periventricular cysts identified. Periventricular echogenicity on ultrasound without cysts should not be coded as cystic periventricular leukomalacia. A porencephalic cyst in the area of previously identified intraparenchymal hemorrhage should not be coded as cystic periventricular leukomalacia. Periventricular abnormalities on CT or MRI should not be coded as cystic periventricular leukomalacia unless multiple small periventricular cysts are identified.

Answer "**Yes**" if the infant has evidence of cystic periventricular leukomalacia on a Cranial Ultrasound, CT, or MRI scan obtained at any time.

Answer "**No**" if there was no evidence of cystic periventricular leukomalacia on any Cranial Ultrasound, CT, or MRI and at least one cranial imaging study (ultrasound, CT, or MRI) was done.

Answer "**N/A**" if no cranial imaging study (Ultrasound, CT, or MRI) was ever done.

ITEM 43a. Retinal Examination

Answer "**Yes**" if an indirect ophthalmologic examination for retinopathy of prematurity (ROP) was performed at any time.

Answer "**No**" if an indirect ophthalmologic examination for ROP was not performed.

ITEM 43b. ROP Stage

If a retinal examination was performed, enter the worst stage documented on any exam in the eye with the most advanced stage¹. This item is not applicable if no retinal examination was done.

Stage 0: No evidence of ROP

Stage 1: Presence of demarcation line (+/- abnormal vascularization)

Stage 2: Presence of intraretinal ridge

Stage 3: Presence of a ridge with extraretinal fibrovascular proliferation

Stage 4: Partial retinal detachment

Stage 5: Total retinal detachment

¹ An International Committee for the Classification of Retinopathy of Prematurity: The International Classification of Retinopathy of Prematurity Revisited. *Arch Ophthalmol* 2005; 123:991-999.

ITEM 44: Major Birth Defect

Answer "**Yes**" if the infant had one or more of the birth defects included in the Birth Defects Codes List. In the spaces provided, you may enter as many as five 3-digit code numbers of birth defects from the list.

Answer "**Yes**" if the infant had birth defects, not included in the Major Birth Defects List which were lethal or life threatening. In this case use the defect code of "100" (in addition to any other applicable code) and describe the defects in detail in the space provided for description. Be specific. Do not use general descriptions such as "multiple congenital anomalies" or "complex congenital heart disease". To be considered as lethal or life threatening a birth defect must either; 1) be the primary cause of death, or 2) be treated prior to discharge with specific surgical or medical therapy to correct a major anatomic defect or a life threatening physiologic dysfunction.

Answer "**No**" if an infant was not diagnosed as having one or more of the birth defects included in the Major Birth Defects List and did not have an unlisted birth defect which was lethal or life threatening.

The following birth defect codes require a detailed description in the space provided on the Discharge Form:

- Code 504 - Other Chromosomal Anomaly
- Code 601 - Skeletal Dysplasia
- Code 605 - Inborn Error of Metabolism
- Code 901 - Other Lethal or Life Threatening Central Nervous System Defects
- Code 902 - Other Lethal or Life Threatening Congenital Heart Defects
- Code 903 - Other Lethal or Life Threatening Gastro-Intestinal Defects
- Code 904 - Other Lethal or Life Threatening Genito-Urinary Defects
- Code 907 - Other Lethal or Life Threatening Pulmonary Malformation
- Code 100 - Other Lethal or Life Threatening Defects not listed in Appendix C

The following conditions should NOT be coded as Major Birth Defects:

- Cleft Lip without Cleft Palate
- Club Feet
- Congenital Dislocation of the Hips
- Congenital CMV
- Cystic Fibrosis
- Extreme Prematurity
- Fetal Alcohol Syndrome
- Hypospadias
- Hypothyroidism
- Intrauterine Growth Retardation
- Intrauterine Infection
- Limb Abnormalities
- Patent Ductus Arteriosus
- Persistent Pulmonary Hypertension (PPHN)
- Polydactyly
- Pulmonary Hypoplasia (use code 401 for bilateral renal agenesis, or 604 for oligohydramnios sequence, if applicable)
- Small Size for Gestational Age
- Syndactyly

NOTE: Birth defect codes are listed in Appendix C.

ITEM 45: Enteral Feeding At Discharge

NOTE: When completing this item, "Discharge" refers to initial disposition in most cases. If an infant is transferred from your center to another hospital and readmitted to your center following transfer, update this item based on the infant's enteral feeding status on the date of Disposition after Readmission. Complete this item based on enteral feedings received during the 24 hour period prior to discharge, transfer, or death. For infants who remained in your hospital on their first birthday, complete the item, Enteral Feeding at Discharge, based on enteral feedings received on that day.

Enteral feedings may be given by any method including breast, bottle, gavage tube, gastrostomy tube, feeding cup, etc. Formula milk includes all standard newborn formulas, premature formulas, and special formulas. Please answer this question based only on the enteral feedings at discharge. Do not consider parenteral feedings when answering this item. For example, if an infant was discharged on IV TPN as well as human milk, the correct response would be "Human Milk Only" since human milk was the only enteral feeding.

Answer "**None**" if the infant was not receiving any enteral feedings with either formula milk or human milk at discharge.

Answer "**Human Milk Only**" if the infant was discharged receiving human milk as their only enteral feeding, either by being breast fed and/or by receiving pumped human milk.

Answer "**Formula Only**" if the infant was discharged receiving formula milk as their only enteral feeding.

Answer "**Human Milk in Combination with Either Fortifier or Formula**" if the infant was discharged receiving human milk, plus human milk fortifier and/or formula milk.

If an infant was discharged on IV TPN alone, the correct response would be "**None**" since the infant was not receiving any enteral feedings. If an infant was discharged only on sterile water or glucose water, the correct response would be "**None**" since the infant was not receiving either formula milk or human milk.

ITEM 46: Oxygen and Monitor at Discharge

NOTE: When completing these items, "Discharge" refers to initial disposition in most cases. If an infant is transferred from your center to another hospital and readmitted to your center following transfer, update. These items are based on whether the infant was on oxygen or monitor at the time of discharge after readmission.

ITEM 46a. Oxygen at Discharge

For infants who went home or were transferred, answer "**Yes**" if the infant was discharged on supplemental oxygen.

Answer "**No**" if the infant was not discharged on supplemental oxygen.

For infants who remained in your hospital on his/her first birthday, answer "**Yes**" if the infant was on supplemental oxygen on the date of the infant's first birthday. Answer "**No**" if the infant was not on supplemental oxygen on his/her first birthday.

For infants who died prior to discharge, answer "**Yes**" if the infant received supplemental oxygen at any time on the day of death. Answer "**No**" if the infant did not receive supplemental oxygen at any time on the day of death.

NOTE: 21% oxygen is room air. This is not considered supplemental oxygen, no matter how administered.

ITEM 46b. Monitor at Discharge

NOTE: A pulse oximeter is considered a cardio-respiratory monitor.

For infants who went home or were transferred, answer "**Yes**" if the infant was discharged on an Apnea Monitor or Cardio-Respiratory Monitor. If arrangements were made to provide Cardio-Respiratory or Apnea monitoring at home following discharge, answer "**Yes**" even if the infant was not actually on the monitor at the time he/she left your hospital. For infants who died prior to discharge, answer "**Yes**" if the infant was on an Apnea Monitor or Cardio-Respiratory Monitor at any time on the day of death. For infants who remained in your hospital on his/her first birthday, answer "**Yes**" if the infant was on an Apnea Monitor or Cardio-Respiratory Monitor on the date of the infant's first birthday.

Answer "**No**" if the infant was not discharged on an Apnea or Cardio-Respiratory Monitor and arrangements were not made to provide Cardio-Respiratory or Apnea monitoring at home following discharge. Answer "**No**" if the infant was not on an Apnea or Cardio-Respiratory Monitor at any time on the day of death.

Answer "**No**" if the infant was not on an Apnea or Cardio-Respiratory Monitor on his/her first birthday.

ITEM 47: Initial Disposition

Initial Disposition refers to the first time that the infant was discharged or transferred from your hospital. Do not change this item based on later dispositions following transfer or readmission.

Answer "**Home**" if the infant was discharged home on or before his/her first birthday from your hospital without ever transferring to another hospital. Complete the remaining items on the Discharge Form. Do not complete the Transfer and Readmission Form.

Answer "**Died**" if the infant died on or before his/her first birthday at your hospital prior to being discharged home or transferred. Complete the remaining items on the Discharge Form. Do not complete the Transfer and Readmission Form.

Answer "**Transferred to another Hospital**" if the infant was transferred to another hospital or chronic care facility on or before his/her first birthday and before going home.

NOTE: Infants transferred from one unit to another within your hospital are not considered to have been transferred or discharged.

Answer "**Still Hospitalized as of First Birthday**" if the infant was still at your center on the date of the infant's first birthday.

ITEM 48: Weight at Initial Disposition

Enter the weight in grams as recorded in the chart or clinical flow sheets on the date of Initial Disposition. If the infant's weight was not recorded on the date of Initial Disposition and was recorded on the previous day, enter the weight in grams as recorded in the chart or clinical flow sheets from the previous day. If the infant's weight was not recorded on the date of Initial Disposition or on the previous day, this item should be recorded as unknown.

NOTE: This item refers to the Initial Disposition (first discharge or transfer) from your hospital. Do not change this item based on later dispositions following transfer or readmission. If the answer to Initial Disposition from Your Hospital is "**Still Hospitalized as of first Birthday**", the date of Initial Disposition is the date of the infant's first birthday.

ITEM 49: Head Circumference at Initial Disposition

Enter the head circumference in centimeters (cm) to the nearest tenth of a cm as recorded in the chart or clinical flow sheets on the date of Initial Disposition. If the infant's head circumference was not recorded on the date of Initial Disposition and was recorded on the previous day, enter the head circumference in cm to the nearest tenth of a cm as recorded in the chart or clinical flow sheets from the previous day. If the infant's head circumference was not recorded on the date of Initial Disposition or on the previous day, this item should be recorded as unknown.

NOTE: This item refers to the Initial Disposition (first discharge or transfer) from your hospital. Do not change this item based on later dispositions following transfer or readmission. If the answer to Initial Disposition from Your Hospital is "**Still Hospitalized as of First Birthday**", the date of Initial Disposition is the date of the infant's first birthday.

ITEM 50: Initial Length of Stay

NOTE: This item refers to the first discharge or transfer from your hospital. Do not change this item based on later dispositions following transfer or readmission.

Initial Length of Stay is the number of days from the date the infant was admitted to your hospital until the Date of Initial Discharge, Transfer or Death. Part A of the Length of Stay Calculation Worksheet in Appendix A may be used for calculating Initial Length of Stay. Calculate the Initial Length of Stay as ([Date of Initial Discharge, Transfer or Death] minus [Date of Admission] plus one). Infants who die on the day of birth, other than those who meet the delivery room death criteria, will have an Initial Length of Stay of 1 day. The maximum value of Initial Length of Stay is 366 (or 367 if leap day must be added) because tracking ends on the infant's first birthday.

NOTE: For inborn infants, the Date of Admission is the Date of Birth. For outborn infants, the Date of Admission is the date the infant was admitted to your center. If the date of Initial Disposition is "Unknown", Initial Length of Stay will also be "Unknown". If an infant is still in your hospital on his or her first birthday, and has not transferred or been home, use the date of the infant's first birthday as the date of Initial Disposition.

NOTE: The delivery room death criteria are described in Part 1 of this manual.

End of Discharge Form Definitions

Transfer and Readmission Form Data Definitions

Items on the Transfer and Readmission Form only apply to infants who transfer from your center to another hospital.

NOTE: Infants transferred from one unit to another within your hospital are not considered to have been transferred or discharged. Only use the Transfer and Readmission Form for infants who transfer from your center to another hospital.

Part A of Transfer and Readmission Form

ITEM 51: Reason for Transfer

NOTE: This item is applicable to all infants who transfer from your center to another hospital prior to first birthday and prior to being discharged to home.

Answer only one response indicating the primary reason for transfer.

Answer "**Growth/Discharge Planning**" if an infant is transferred to another hospital for continuing care in preparation for eventual discharge home. This category will include "back transfers" to a hospital closer to the parents' home. If the facility to which the infant is transferred is a tertiary care facility, the answer to this question will be "**Growth/Discharge Planning**" as long as the purpose of the transfer is not for the provision of surgical, medical or diagnostic services, or long term chronic care which were unavailable at your hospital.

Answer "**Medical/Diagnostic Services**" if the infant is transferred to another hospital to receive medical care or diagnostic tests which are not available at your hospital. If an infant is transferred to have a diagnostic work-up and the work-up results in surgery, the reason for transfer is still "**Medical/Diagnostic Services**".

Answer "**Surgery**" if an infant is transferred to another hospital specifically to have surgery even if surgery is not actually performed after the transfer.

Answer "**ECMO**" if the infant is transferred to another hospital for extracorporeal membrane oxygenation.

Answer "**Chronic Care**" if the infant is transferred to an institution for long term chronic care.

Answer "**Other**" if the reason for transfer does not meet any of the above criteria.

ITEM 52: Transfer Code of Center to which Infant Transferred

NOTE: This item is applicable to all infants who transfer from your center to another hospital prior to first birthday and prior to being discharged home.

The Transfer Code for hospitals is a special code assigned by the Network for member hospitals, as well as 'other' codes for non-members. It is not the Network assigned center number. Please refer to the current Transfer Code List of the Vermont Oxford Network when answering this question.

NOTE: The Transfer Code List may be accessed from the Network website address: <http://www.vtoxford.org>.

ITEM 53: Post Transfer Disposition

NOTE: This item is applicable to all infants who transfer from your center to another hospital prior to first birthday and prior to being discharged to home.

Answer "**Home**" if the infant was discharged to home on or before his/her first birthday from the hospital to which he/she was transferred.

Answer "**Transferred Again to another Hospital**" if the infant was transferred again to another hospital or to a chronic care facility from the hospital to which he/she was originally transferred.

Answer "**Died**" if the infant died on or before his/her first birthday at the hospital to which he/she was initially transferred.

Answer "**Readmitted to Any Location in Your Hospital**" if an infant is readmitted on or before his/her first birthday (before ever having gone home) to any location in your hospital such as the neonatal intensive care unit, a step-down unit, newborn nursery, intermediate care, pediatric intensive care unit, pediatric ward, etc.

Answer "**Still Hospitalized as of First Birthday**" if infant was still in the "Transferred To" hospital on his/her first birthday.

Part B of Transfer and Readmission Form

ITEM 54: Disposition after Readmission

NOTE: This item is only applicable if the infant is readmitted to your center following transfer to another hospital, was less than a year old when readmitted to your center and had never been discharged home prior to readmission.

Answer "**Home**" if the infant was discharged to home on or before his/her first birthday from any location in your hospital after readmission.

Answer "**Died**" if the infant died on or before his/her first birthday at any location in your hospital after readmission.

Answer "**Transferred Again to another Hospital**" if the infant was transferred again to another hospital or to a chronic care facility on or before his/her first birthday after readmission.

Answer "**Still Hospitalized as of First Birthday**" if infant was still in your hospital as of his/her first birthday.

ITEM 55: Weight at Disposition after Readmission

NOTE: This item is applicable if the infant is readmitted to your center following transfer to another hospital, was less than a year old when readmitted to your center and had never been discharged home prior to readmission.

This item refers to the Disposition after Readmission to your hospital following first transfer to another hospital. If the infant is transferred again following readmission, do not change this item based on subsequent dispositions. If the answer to Disposition after Readmission is "**Still Hospitalized as of first Birthday**", the date of Disposition after Readmission is the date of the infant's first birthday.

Enter the weight in grams as recorded in the chart or clinical flow sheets on the date of Disposition after Readmission. If the infant's weight was not recorded on the date of Disposition after Readmission and was recorded on the previous day, enter the weight in grams as recorded in the chart or clinical flow sheets from the previous day. If the infant's weight was not recorded on the date of Disposition after Readmission or on the previous day, this item should be recorded as unknown.

Part C of Transfer and Readmission Form

ITEM 56: Ultimate Disposition

NOTE: This item is only applicable if the infant transfers more than once prior to first birthday and before discharge to home. This includes infants who (1) transfer from your center to another hospital and subsequently transfer to a third hospital, and (2) infants who are readmitted to your center following transfer to another hospital and then transfer again after readmission.

Answer "**Home**" if the infant went home on or before the first birthday after transferring more than once.

Answer "**Died**" if the infant died on or before the first birthday before being discharged home after transferring more than once.

If the infant transferred more than once, answer "**Still Hospitalized as of First Birthday**" if the infant was still hospitalized on his/her first birthday, without ever having gone home.

Part D of Transfer and Readmission Form

ITEM 57: Total Length of Stay

NOTE: This item is applicable to all infants who transfer from your center to another hospital prior to first birthday and prior to being discharged to home.

The Total Length of Stay is the number of days from the date the infant was first admitted to your hospital until the date of Final Discharge or Death. Part B of the Length of Stay Calculation Worksheet in Appendix A may be used for calculating Total Length of Stay. Calculate the Total Length of Stay as ([Date of Final Discharge or Death] minus [Date of Admission] plus one). The maximum value of Total Length of Stay is 366 (or 367 if leap day must be added), because tracking ends on the infant's first birthday.

NOTE: For inborn infants, the Date of Admission is the Date of Birth. For outborn infants, the Date of Admission is the date the infant was admitted to your center. If the date of Final Discharge or Death is "Unknown", Total Length of Stay will also be "Unknown". If an infant is still hospitalized on his or her first birthday, and has not been home, use the date of the infant's first birthday as the date of Final Discharge or Death.

End of Transfer and Readmission Form Definitions

Supplemental Data Form Data Definitions

Items on the Supplemental Data Form apply to centers participating in the Expanded Database.

ITEM S1.A.1: Duration of Assisted Ventilation

NOTE: Only consider conventional ventilation or high frequency ventilation when answering the questions on Duration of Assisted Ventilation.

NOTE: Only include the Duration of Assisted Ventilation which occurs during the initial stay in your hospital. Do not include duration of ventilation at other hospitals or duration following readmission for infants who are transferred from your center to another hospital.

Enter "**None**" if the infant did not receive assisted ventilation after admission to a NICU in your hospital during initial hospital stay.

Enter "**<4 hours**" if the infant received assisted ventilation for <4 hours after admission to a NICU in your hospital during initial hospital stay.

Enter "**4-24 hours**" if the infant received assisted ventilation for 4-24 hours after admission to a NICU in your hospital during initial hospital stay.

Enter "**>24 hours**" if the infant received assisted ventilation for more than 24 hours after admission to a NICU in your hospital during initial hospital stay.

Enter "**N/A**" if the infant meets the delivery room death criteria.

NOTE: The delivery room death criteria are described in Part 1 of this manual.

ITEM S1.A.2: Days of Assisted Ventilation

If the infant's Duration of Assisted Ventilation after admission to a NICU in your hospital during initial hospital stay was more than 24 hours, enter the total number of days of assisted ventilation after admission to your NICU. The number of days should include any complete or partial day during which the infant received assisted ventilation. This item is not applicable if the infant was not ventilated more than 24 hours or if the infant meets the delivery room death criteria.

ITEM S1.B: ECMO at your Hospital

Enter "**Yes**" if the infant was treated with ECMO at your hospital.

Enter "**No**" if the infant was not treated with ECMO at your hospital.

Enter "**N/A**" if the infant meets the delivery room death criteria.

ITEM S1.C.1: Hypothermic Therapy at Your Hospital

Enter "**Yes**" if either selective head or whole body cooling was provided at your hospital. This item is answered "**Yes**" only if the infant received active cooling at your hospital. This may include cooling at your hospital prior to initial disposition or following readmission to your center if the infant is transferred.

Enter "**No**" if neither selective head nor whole body cooling was provided at your hospital. If the infant did not receive active cooling at your hospital, answer "**No**".

NOTE: Infants may be treated with hypothermia during surgery. If hypothermic therapy is only performed during and immediately around the time of cardiac surgery or other surgery, Hypothermic Therapy at Your Hospital should be answered "**No**".

Answer "**N/A**" if the infant meets the delivery room death criteria.

NOTE: The delivery room death criteria are described in Part 1 of this manual.

ITEM S1.C.2: Cooling Method

If the infant received hypothermic therapy at your hospital, choose the method of cooling received there. Choose "**Selective Head**" cooling, or "**Whole Body**" cooling based on the criteria below. This item is not applicable if the infant did not receive hypothermic therapy at your hospital.

Selective Head Cooling means active cooling restricted to the head and brain. This is an intervention to reduce the temperature of the head and brain by exposing the head to lower than environmental temperature. Specially designed head cooling devices, other cooling devices and ice packs applied to the head would be considered active cooling. Passive exposure to environmental temperature and cooling of the face for treatment of supraventricular tachycardia are not considered active cooling of the head and brain.

Whole Body Cooling means active cooling of the body not restricted to the head and brain. This is an intervention to reduce the core body temperature and temperature of the brain by exposing the body to lower than environmental temperature. Cooling blankets, other cooling devices and ice packs applied to the body would be considered active cooling. Passive exposure to environmental temperature would not be considered active cooling. Whole body cooling may include cooling of the head in addition to the rest of the body.

ITEM S2.A.1: Hypoxic-Ischemic Encephalopathy

Answer "Yes" if the infant's gestational age is 36 weeks, 0 days or greater and the infant was diagnosed with Hypoxic-Ischemic Encephalopathy (HIE) as defined below. The diagnosis of HIE requires the presence of all 3 of the following criteria:

1. The presence of a clinically recognized encephalopathy within 72 hours of birth. Encephalopathy is defined as the presence of 3 or more of the following findings within the first 72 hours after birth:
 - a. Abnormal level of consciousness: hyper alertness, lethargy, stupor or coma.
 - b. Abnormal muscle tone: hypertonia, hypotonia or flaccidity.
 - c. Abnormal deep tendon reflexes: increased, depressed or absent.
 - d. Seizures: subtle, multifocal or focal clonic.
 - e. Abnormal Moro reflex: exaggerated, incomplete or absent.
 - f. Abnormal suck: weak or absent.
 - g. Abnormal respiratory pattern: periodic, ataxic or apneic.
 - h. Oculomotor or pupillary abnormalities: skew deviation, absent or reduced Doll's eyes or fixed unreactive pupils.

And,

2. Three or more supporting findings from the following list:
 - a. Arterial cord pH<7.00.
 - b. APGAR score at 5 minutes of 5 or less.
 - c. Evidence of multiorgan system dysfunction (see below).
 - d. Evidence of fetal distress on antepartum monitoring: persistent late decelerations, reversal of end-diastolic flow on Doppler flow studies of the umbilical artery or a biophysical profile of 2 or less.
 - e. Evidence on CT, MRI, technetium or ultrasound brain scan performed within 7 days of birth of diffuse or multifocal ischemia or of cerebral edema.
 - f. Abnormal EEG: low amplitude and frequency, periodic, paroxysmal or isoelectric

And,

3. The absence of an infectious cause, a congenital malformation of the brain or an inborn error of metabolism, which could explain the encephalopathy.

NOTE: Multiorgan system dysfunction (2.c. above) requires evidence of dysfunction of one or more of the following systems within 72 hours of birth:

- a. Renal: oliguria or acute renal failure.
- b. GI: Necrotizing enterocolitis, hepatic dysfunction.
- c. Hematologic: thrombocytopenia, disseminated intravascular coagulopathy.
- d. Endocrine: hypoglycemia, hyperglycemia, hypercalcemia, syndrome of inappropriate ADH secretion (SIADH).
- e. Pulmonary: persistent pulmonary hypertension.
- f. Cardiac: myocardial dysfunction, tricuspid insufficiency.

Answer "**No**" if the infant's gestational age is 36 weeks, 0 days or greater and the infant was not diagnosed with hypoxic-ischemic encephalopathy as defined above.

Answer "**N/A**" if the infant's gestational age is less than 36 weeks, 0 days or if the infant meets the delivery room death criteria.

NOTE: The delivery room death criteria are described in Part 1 of this manual.

ITEM S2.A.2: HIE Severity

If the infant was diagnosed with hypoxic-ischemic encephalopathy, record the worst stage observed during the first 7 days following birth based on the infant's level of consciousness and response to arousal maneuvers such as persistent gentle shaking, pinching, shining a light or ringing of a bell:

Answer "**Mild**" if normal or hyperalert. Infants in this category are alert or hyperalert with either a normal or exaggerated response to arousal.

Answer "**Moderate**" if lethargic or mild stupor. Infants in this category are arousable but have a diminished response to arousal maneuvers.

Answer "**Severe**" if deep stupor or coma. Infants in this category are not arousable in response to arousal maneuvers.

Answer "**N/A**" if Hypoxic-Ischemic Encephalopathy is answered either "No" or "N/A".

ITEM S2.B.1: Meconium Aspiration Syndrome

NOTE: This item is applicable to all eligible infants, including infants who meet the delivery room death criteria.

Answer "**Yes**" if all 5 of the following criteria are satisfied:

1. Presence of meconium stained amniotic fluid at birth.

And,

2. Respiratory distress with onset within 1 hour of birth. Respiratory distress will be defined as the presence of one of the following signs: tachypnea, grunting, nasal flaring or intercostal retractions.

And,

3. A PaO₂<50 mmHg in room air, central cyanosis in room air or a requirement for supplemental oxygen to maintain PaO₂>50 mmHg.

And,

4. Abnormal chest x-ray compatible with the diagnosis of meconium aspiration. Findings may include coarse irregular or nodular pulmonary densities, areas

of diminished aeration or consolidation alternating with areas of hyperinflation and generalized hyperinflation.

And,

5. Absence of culture proven early onset bacterial sepsis or pneumonia. The diagnosis of culture proven early onset bacterial sepsis or pneumonia requires a positive blood culture obtained within 72 hours of birth.

Answer "**No**" if all 5 of the criteria for Meconium Aspiration Syndrome are not satisfied.

ITEM S2.B.2: Tracheal Suctioning for Meconium Attempted in the DR

If Meconium Aspiration Syndrome was diagnosed, answer "**Yes**" if tracheal suctioning through an endotracheal tube or suction catheter in the trachea was performed in the delivery room or initial resuscitation area in an attempt to remove meconium. If suctioning was performed, the answer is "**Yes**" even if no meconium was recovered.

Answer "**No**" if Meconium Aspiration Syndrome was diagnosed and tracheal suctioning in the delivery room was not attempted.

Answer "**N/A**" if Meconium Aspiration was not diagnosed.

NOTE: This item is applicable to all infants diagnosed with Meconium Aspiration Syndrome, including infants who meet the delivery room death criteria.

ITEM S2.C: Seizures

Answer "**Yes**" if there is clinical evidence of subtle seizures or of focal or multifocal clonic or tonic seizures within the first 3 days after birth.

Answer "**No**" if there was no evidence of seizures.

Answer "**N/A**" if the infant meets the delivery room death criteria.

NOTE: The delivery room death criteria are described in Part 1 of this manual.

End of Supplemental Data Form Definitions

APPENDICES

Appendix A Logs, Worksheets, and Data Form Booklets

Appendix B Bacterial Pathogens

Appendix C Birth Defect Codes

Appendix D Surgery Codes

Appendix E Timeline for Database Activities

APPENDIX A

Logs, Worksheets, and Data Form Booklets

Patient Data Booklet

Center Number: _____

Network ID Number:

LENGTH OF STAY CALCULATION WORKSHEET FOR INFANTS BORN IN 2011

Protected Health Care Information. **DO NOT SUBMIT** this Worksheet to Vermont Oxford Network.

Use items W5, W8 and W9 from the Patient Identification Worksheet when completing this form.

Find the day numbers corresponding to dates using the Day Number Chart for 2011-2012 (www.vtoxford.org).

Part A. Initial Length Of Stay

Enter Date of Initial Discharge, Transfer or Death (W8): ____/____/____ Day #

Subtract Date of Admission to Your Hospital (W5): ____/____/____ - Day #

For inborn infants, the date of admission is the Date of Birth.
For outborn infants, the date of admission is the date the infant was admitted to your hospital.

Add 1: + 1

L1. INITIAL LENGTH OF STAY = Days

Note: the maximum value of Initial Length of Stay is 366 (or 367 if leap day must be added), because tracking ends on the infant's first birthday.

Part B. Total Length Of Stay

Only For Infants Transferred From Your Hospital to Another Hospital.

Enter Date of Final Discharge or Death (W9): ____/____/____ Day #

Subtract Date of Admission (W5): ____/____/____ - Day #

For inborn infants, the date of admission is the Date of Birth.
For outborn infants, the date of admission is the date the infant was admitted to your hospital.

Add 1: + 1

L2. TOTAL LENGTH OF STAY = Days

Note: the maximum value of Total Length of Stay is 366 (or 367 if leap day must be added), because tracking ends on the infant's first birthday.

SAMPLE CALCULATION OF INITIAL LENGTH OF STAY

Enter Date of Initial Discharge, Transfer or Death: 02 / 26 / 2011 57 Day #

Subtract Date of Admission: 01 / 13 / 2011 - 13 Day #

Add 1: _____ + 1

L1. INITIAL LENGTH OF STAY = _____ 45 Days

Explanation: Date of 02/26/2011 is Day Number 57. Date of 01/13/2011 is Day Number 13. The day numbers for each date are found in the 2011-2012 Day Number Chart on the Network web site, www.vtoxford.org.

PLEASE DO NOT SUBMIT THIS WORKSHEET

Protected Health Care Information

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28 DAY FORM - For Infants Born in 2011



Center Number: _____ Center Name: _____

Network ID Number: Year of Birth: _____

1. Birth Weight:	_____ grams	
2. Gestational Age:	a) Weeks _____	b) Days (0-6) _____
3. Died in Delivery Room:	<input type="checkbox"/> Yes <input type="checkbox"/> No	(If Yes, Use Delivery Room Death Form.)
4. a) Location of Birth:	<input type="checkbox"/> Inborn <input type="checkbox"/> Outborn	
	b) If Outborn, Day of Admission to Your Hospital (Range: 1 to 28. Date of Birth is Day 1): _____	
	c) If Outborn, Transfer Code of Center from which Infant Transferred: _____	
5. Head Circumference at Birth (in cm to nearest 10 th):	<input type="text"/> <input type="text"/> . <input type="text"/>	
6. Maternal Ethnicity/Race (Answer both a and b):		
a) Ethnicity of Mother:	<input type="checkbox"/> Hispanic <input type="checkbox"/> Not Hispanic	
b) Race of Mother:	<input type="checkbox"/> Black <input type="checkbox"/> White <input type="checkbox"/> Asian or Pacific Islander	
	<input type="checkbox"/> Native American <input type="checkbox"/> Other	
7. Prenatal Care:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
8. Antenatal Steroids:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
9. Chorioamnionitis:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
10. Maternal Hypertension, Chronic or Pregnancy-Induced:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
11. Mode of Delivery:	<input type="checkbox"/> Vaginal <input type="checkbox"/> Cesarean Section	
12. Sex of Infant:	<input type="checkbox"/> Male <input type="checkbox"/> Female	
13. a) Multiple Gestation:	<input type="checkbox"/> Yes <input type="checkbox"/> No	b) If Yes, Number of Infants Delivered: _____
14. APGAR Scores:	a) 1 minute _____	b) 5 minutes _____
15. Initial Resuscitation:		
a) Oxygen:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
b) Face Mask Vent:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
c) Endotracheal Tube Vent:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
d) Epinephrine:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
e) Cardiac Compression:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
f) Nasal CPAP	<input type="checkbox"/> Yes <input type="checkbox"/> No	
16. a) Temperature Measured within the First Hour after Admission to <u>Your</u> NICU:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
b) If Yes, first Temperature after Admission (in degrees <i>centigrade</i> to nearest 10 th):	<input type="text"/> <input type="text"/> . <input type="text"/>	
17. Bacterial Sepsis on or before Day 3:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
18. Oxygen on Day 28:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (See Manual for N/A criteria)	
19. Periventricular-Intraventricular Hemorrhage (PIH):		
a) Cranial Imaging (US/CT/MRI) on or before Day 28:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
b) If Yes, Worst Grade of PIH (0-4):	_____	
c) If PIH, Where PIH First Occurred:	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> N/A	
20. Died Within 12 Hours of Admission to Your NICU:	<input type="checkbox"/> Yes <input type="checkbox"/> No	

DISCHARGE FORM - For Infants Born in 2011

PAGE 1



Center Number: _____ Center Name: _____

Network ID Number:

Year of Birth: _____

INTERVENTIONS

21. Respiratory Support (at any time after leaving the delivery room/initial resuscitation area):

a) Oxygen after Initial Resuscitation: Yes No

b) Conventional Ventilation after Initial Resuscitation: Yes No

c) High Frequency Ventilation after Initial Resuscitation: Yes No

d) High Flow Nasal Cannula after Initial Resuscitation: Yes No

e) Nasal IMV or Nasal SIMV after Initial Resuscitation: Yes No

22. a) Nasal CPAP after Initial Resuscitation: Yes No

b) *If Yes*, NCPAP before ETT Vent: Yes No

23. a) Surfactant during Initial Resuscitation: Yes No

b) Surfactant at Any Time: Yes No (Item 23.b must be Yes if Item 23.a is Yes)

If Yes, Age at First Dose: _____ c) Hours _____ d) Minutes (0-59) _____

24. a) Inhaled Nitric Oxide: Yes No

b) *If Yes*, where given: Your Hospital Other Hospital Both

25. Respiratory Support at 36 Weeks (See Manual for N/A criteria):

a) Oxygen at 36 Weeks: Yes No N/A

b) Conventional Ventilation at 36 Weeks: Yes No N/A

c) High Frequency Ventilation at 36 Weeks: Yes No N/A

d) High Flow Nasal Cannula at 36 Weeks: Yes No N/A

e) Nasal IMV or SIMV at 36 Weeks: Yes No N/A

f) Nasal CPAP at 36 Weeks: Yes No N/A

26. a) Steroids for CLD: Yes No

b) *If Yes*, Where Given: Your Hospital Other Hospital Both

27. Indomethacin for Any Reason: Yes No

28. Ibuprofen for PDA: Yes No

29. a) PDA Ligation: Yes No

b) *If Yes*, Where Done: Your Hospital Other Hospital Both

30. a) ROP Surgery: Yes No

b) *If Yes*, Where Done: Your Hospital Other Hospital Both

31. NEC Surgery: Yes No (If Yes, a Surgery Code is Required in item 33a)

32. Other Surgery: Yes No (If Yes, a Surgery Code is Required in item 33a)

33a. If Yes to NEC Surgery or Other Surgery, Surgical Codes (See Appendix D): If NEC Surgery, one or more of the following codes is required: S302, S303, S307, S308, S309, S333. Indicate location of surgery for each surgery code.

Surgery Code 1: _____ Your Hospital Other Hospital Both

Surgery Code 2: _____ Your Hospital Other Hospital Both

Surgery Code 3: _____ Your Hospital Other Hospital Both

Surgery Code 4: _____ Your Hospital Other Hospital Both

Surgery Code 5: _____ Your Hospital Other Hospital Both

Surgery Code 6: _____ Your Hospital Other Hospital Both

Surgery Code 7: _____ Your Hospital Other Hospital Both

Surgery Code 8: _____ Your Hospital Other Hospital Both

Surgery Code 9: _____ Your Hospital Other Hospital Both

Surgery Code 10: _____ Your Hospital Other Hospital Both

33b. Include description for codes S100, S200, S300, S400, S500, S600, S700, S800, S900, S1000 & S1001:

DISCHARGE FORM - For Infants Born in 2011

PAGE 2



Center Number: _____ Center Name: _____

Network ID Number:

Year of Birth: _____

DIAGNOSES	34. Respiratory Distress Syndrome:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	35. a) Pneumothorax:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both
	36. Patent Ductus Arteriosus:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	37. a) Necrotizing Enterocolitis:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both
	38. a) Gastrointestinal Perforation:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both
	Sepsis and/or Meningitis, Late (after day 3 of life): (See Manual for N/A criteria)	
	39. a) Bacterial Pathogen:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both
	40. a) Coagulase Negative Staph:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
	b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both
	41. a) Fungal Infection:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A
b) <i>If Yes, Where Occurred:</i>	<input type="checkbox"/> Your Hospital <input type="checkbox"/> Other Hospital <input type="checkbox"/> Both	
42. Cystic Periventricular Leukomalacia:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A (see Manual for N/A criteria)	
43. ROP: a) Retinal Exam Done:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
b) <i>If Yes, Worst Stage of ROP (0-5):</i>	_____	
44. Major Birth Defect:	<input type="checkbox"/> Yes <input type="checkbox"/> No	
<i>If Yes, enter codes:</i> _____		
Include description for Codes 100, 504, 601, 605, 901, 902, 903, 904 & 907: _____		
DISCHARGE	45. Enteral Feeding at Discharge:	<input type="checkbox"/> None <input type="checkbox"/> Human Milk Only <input type="checkbox"/> Formula Only <input type="checkbox"/> Human milk in combination with either fortifier or formula
	46. Oxygen and Monitor at Discharge:	
	a) Oxygen at Discharge:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	b) Monitor at Discharge:	<input type="checkbox"/> Yes <input type="checkbox"/> No
	47. Initial Disposition (check only one):	<input type="checkbox"/> Home <input type="checkbox"/> Died <input type="checkbox"/> Transferred to another Hospital (★ Complete Transfer and Readmission Form) <input type="checkbox"/> Still Hospitalized as of First Birthday
	48. Weight at Initial Disposition: _____	grams
	49. Head Circumference at Initial Disposition (in cm to nearest 10th):	<input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>
50. Initial Length of Stay: _____	day(s) (Item L1 on Length of Stay Calculation Worksheet)	

TRANSFER & READMISSION FORM - For Infants Born in 2011



Center Number: _____ Center Name: _____

Network ID Number:

Year of Birth: _____

Part A. Complete for ALL Transferred Infants

If an infant is transferred to another hospital, complete Items 51 - 53. Post Transfer Disposition (Item 53) refers to the infant's disposition upon leaving the "transferred to" hospital.

51. Reason for Transfer: (Check Only One) Growth/Discharge Planning Medical/Diagnostic Services
 Surgery ECMO Chronic Care Other

52. Transfer Code of Center to which Infant Transferred: _____ (List available at www.vtoxford.org)

53. Post Transfer Disposition (check only one):

- Home *Skip Parts B and C. Complete Part D.*
- Transferred Again to Another Hospital (2nd Transfer) *Skip Part B. Complete Parts C and D when data are available.*
- Died *Skip Parts B and C. Complete Part D.*
- Readmitted to Any Location in Your Hospital *Complete Parts B and D (and C if applicable) when data are available.*
- Still Hospitalized as of First Birthday *Skip Parts B and C. Complete Part D.*

Part B. Complete ONLY for Readmitted Infants

If a patient is readmitted to your center after transferring once to another hospital without having been home, answer Items 54 - 55. When infants are readmitted to your center, continue to update Items 17 - 19 on the 28 Day Form, and Items 21 - 46 on the Discharge Form based on all events at both hospitals until the date of Disposition after Readmission. If your hospital participates in the Expanded Database and definition criteria are met, update Items S1.B, S1.C1, S1.C2, S1.A1, S2.A2 and S2.C based on events that occur following transfer and readmission.

54. Disposition after Readmission (check only one):

- Home *Skip Part C. Complete Part D.*
- Died *Skip Part C. Complete Part D.*
- Transferred Again to Another Hospital *Complete Parts C and D when data are available.*
- Still Hospitalized as of First Birthday *Skip Part C. Complete Part D.*

55. Weight at Disposition after Readmission: _____ grams

Part C. Complete ONLY for Infants Who Transferred More Than Once

Answer Item 56 if an infant transferred from your center to another hospital and was then either (1) transferred again to another hospital, or (2) readmitted to your center and then transferred again to another hospital.

56. Ultimate Disposition (check only one):

- Home *Complete Part D.*
- Died *Complete Part D.*
- Still Hospitalized as of First Birthday *Complete Part D.*

Part D. Complete for ALL Transferred Infants

Complete this item when the infant has been discharged Home, Died or is Still Hospitalized as of First Birthday, whichever comes first.

57. Total Length of Stay: _____ day(s) (Item L2 on Length of Stay Calculation Worksheet)

SUPPLEMENTAL DATA FORM - *For Infants Born in 2011* (Expanded Database Hospitals)

Center Number: _____ Center Name: _____

Network ID Number:

Year of Birth: _____

S1. Treatments:

A. 1. Duration of Assisted Ventilation:

None <4 hours 4-24 hours > 24 hours N/A

2. If > 24 hours, Total Days of Assisted Ventilation: _____

B. ECMO at your Hospital:

Yes No N/A

C. Hypothermic Therapy at Your Hospital:

1. Was Hypothermic Therapy Performed at Your Hospital: Yes No

2. If Yes, Cooling Method: Selective Head Whole Body

S2. Diagnoses:

A. 1. Hypoxic-Ischemic Encephalopathy: Yes No N/A

2. HIE Severity (check one): Mild Moderate Severe N/A

B. 1. Meconium Aspiration: Yes No

2. Tracheal Suction for Meconium Attempted in the DR:
 Yes No N/A

C. Seizures: Yes No N/A

Delivery Room Death Booklet

Center Number: _____

Network ID Number:

VERMONT OXFORD NETWORK DELIVERY ROOM DEATH BOOKLET FOR INFANTS BORN IN 2011

Use the Delivery Room Death Booklet for eligible inborn infants who die in the delivery room or at any other location in your hospital within 12 hours of birth and prior to admission to the NICU.

The Delivery Room Death Patient Identification Worksheet contains personal patient identifiers and must NOT be submitted to the Vermont Oxford Network. The Vermont Oxford Network does not accept protected health care information.

Contents:

Page 1: Patient Identification Worksheet

Page 2: Delivery Room Death Form

DELIVERY ROOM DEATH PATIENT IDENTIFICATION WORKSHEET

W1. Patient's Name: _____

W2. Mother's Name: _____

W3. Patient's Medical Record Number: _____

W4. Date of Birth: / /
 MM DD YYYY

PLEASE DO NOT SUBMIT THIS WORKSHEET
Protected Health Care Information



1

DELIVERY ROOM DEATH FORM – For Infants Born in 2011



Center Number: _____ Center Name: _____

Network ID Number:

Year of Birth: _____

1. Birth Weight:	_____ grams		
2. Gestational Age:	a) Weeks _____	b) Days (0-6) _____	
3. Died in Delivery Room:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	<i>(If NO, do not use this Form)</i>
4. a) Location of Birth:	<input type="checkbox"/> Inborn	<input type="checkbox"/> Outborn	<i>(If OUTBORN, do not use this Form)</i>
b and c: Not Applicable			
5. Head Circumference at Birth (in cm to the nearest 10 th):	<input type="checkbox"/> <input type="checkbox"/>	.	<input type="checkbox"/> <input type="checkbox"/>
6. Maternal Ethnicity/Race: (answer both a and b)			
a) Ethnicity of Mother:	<input type="checkbox"/> Hispanic	<input type="checkbox"/> Not Hispanic	
b) Race of Mother:	<input type="checkbox"/> Black	<input type="checkbox"/> White	<input type="checkbox"/> Asian or Pacific Islander
	<input type="checkbox"/> Native American	<input type="checkbox"/> Other	
7. Prenatal Care:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
8. Antenatal Steroids:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
9. Chorioamnionitis:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
10. Maternal Hypertension, Chronic or Pregnancy-Induced:	<input type="checkbox"/> Yes		<input type="checkbox"/> No
11. Mode of Delivery:	<input type="checkbox"/> Vaginal	<input type="checkbox"/> Cesarean Section	
12. Sex of Infant:	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
13. a) Multiple Gestation:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
b) <i>If Yes, Number of Infants Delivered:</i>	_____		
14. APGAR Scores:	a) 1 minute _____	b) 5 minutes _____	
15. Initial Resuscitation:			
a) Oxygen:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
b) Facial Mask Vent:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
c) Endotracheal Tube Vent:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
d) Epinephrine:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
e) Cardiac Compression:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
f) Nasal CPAP:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
16 – 22: Not Applicable			
23. Surfactant Treatment:			
a) Surfactant in the DR:	<input type="checkbox"/> Yes	<input type="checkbox"/> No	
b) Surfactant at Any Time:	<input type="checkbox"/> Yes	<input type="checkbox"/> No <i>(Part b must be answered "Yes" if Part a is "Yes")</i>	
<i>If Yes, Age at First Dose:</i>	c) hours _____	d) minutes (0-59) _____	
24 – 43: Not Applicable			
44. Major Birth Defect: <input type="checkbox"/> Yes <input type="checkbox"/> No <i>If Yes, enter codes</i> _____			
Include description for Codes 100, 504, 601, 605, 901, 902, 903, 904 & 907: _____			
45 – 57: Not Applicable			
If your center participates in the Expanded Database, answer Items S2. B1 and S2. B2 from the Supplemental Data Form. Items S1.A. to S1.C. and Items S2.A and S2.C are not applicable.			
S2. B. 1. Meconium Aspiration:		<input type="checkbox"/> Yes	<input type="checkbox"/> No
B. 2. Tracheal Suction for Meconium Attempted in the DR:		<input type="checkbox"/> Yes	<input type="checkbox"/> No

APPENDIX B

Bacterial Pathogens

1. *Achromobacter* species [including *Achromobacter xylosoxidans* (also known as *Alcaligenes xylosoxidans*) and others]
2. *Acinetobacter* species
3. *Aeromonas* species
4. *Alcaligenes* species [*Alcaligenes xylosoxidans* and others]
5. *Bacteroides* species
6. *Burkholderia* species [*Burkholderia capeczia* and others]
7. *Campylobacter* species [*Campylobacter fetus*, *C. jejuni* and others]
8. *Chryseobacterium* species
9. *Citrobacter* species [*Citrobacter diversus*, *C. freundii*, *C. koseri* and others]
10. *Clostridium* species
11. *Enterobacter* species [*Enterobacter aerogenes*, *E. cloacae*, and others]
12. *Enterococcus* species [*Enterococcus faecalis* (also known as *Streptococcus faecalis*), *E. faecium*, and other *Enterococcus* species]
13. *Escherichia coli*
14. *Flavobacterium* species
15. *Haemophilus* species [*Haemophilus influenzae* and others]
16. *Klebsiella* species [*Klebsiella oxytoca*, *K. pneumoniae* and others]
17. *Listeria monocytogenes*
18. *Moraxella* species [*Moraxella catarrhalis* (also known as *Branhamella catarrhalis*) and others]
19. *Neisseria* species [*Neisseria meningitidis*, *N. gonorrhoeae* and others]
20. *Pasteurella* species
21. *Prevotella* species
22. *Proteus* species [*Proteus mirabilis*, *P. vulgaris* and others]
23. *Providencia* species [*Providencia rettgeri*, and others]
24. *Pseudomonas* species [*Pseudomonas aeruginosa* and others]
25. *Ralstonia* species
26. *Salmonella* species
27. *Serratia* species [*Serratia liquefaciens*, *S. marcescens* and others]
28. *Staphylococcus coagulase positive* [*aureus*]
29. *Stenotrophomonas maltophilia*
30. *Streptococcus* species [including *Streptococcus* Group A, *Streptococcus* Group B, *Streptococcus* Group D, *Streptococcus pneumoniae*, *Strep milleri* and others]

APPENDIX C

Birth Defect Codes

Central Nervous System Defects

<u>Code</u>	<u>Description</u>
101	Anencephaly
102	Meningomyelocele
103	Hydranencephaly
104	Congenital Hydrocephalus
105	Holoprosencephaly
901	Other lethal or life threatening central nervous system defects not listed above (description required)

Congenital Heart Defects

<u>Code</u>	<u>Description</u>
201	Truncus Arteriosus
202	Transposition of the Great Vessels
203	Tetralogy of Fallot with or without Pulmonary Atresia
204	Single Ventricle
205	Double Outlet Right Ventricle
206	Complete Atrio-Ventricular Canal
207	Pulmonary Atresia with intact ventricular septum
208	Tricuspid Atresia
209	Hypoplastic Left Heart Syndromes
210	Interrupted Aortic Arch
211	Total Anomalous Pulmonary Venous Return
212	Penalogy of Cantrell (Thoraco-Abdominal Ectopia Cordis)
902	Other lethal or life threatening congenital heart defects not listed above (description required)

Gastro-Intestinal Defects

<u>Code</u>	<u>Description</u>
301	Cleft Palate
302	Tracheo-Esophageal Fistula
303	Esophageal Atresia
304	Duodenal Atresia
305	Jejunal Atresia
306	Ileal Atresia
307	Atresia of Large Bowel or Rectum
308	Imperforate Anus
309	Omphalocele
310	Gastroschisis
311	Biliary Atresia
903	Other lethal or life threatening gastro-intestinal defects not listed above (description required)

APPENDIX C, Birth Defect Codes (continued)

Genito-Urinary Defects

<u>Code</u>	<u>Description</u>
401	Bilateral Renal Agenesis
402	Bilateral Polycystic, Multicystic, or Dysplastic Kidneys
403	Obstructive Uropathy with Congenital Hydronephrosis
404	Exstrophy of the Urinary Bladder
904	Other lethal or life threatening Genito-Urinary defects not listed above (description required)

Chromosomal Abnormalities

<u>Code</u>	<u>Description</u>
501	Trisomy 13
502	Trisomy 18
503	Trisomy 21
504	Other Chromosomal Anomaly (description required)
505	Triploidy

Other Birth Defects

<u>Code</u>	<u>Description</u>
601	Skeletal Dysplasia (description required)
602	Congenital Diaphragmatic Hernia
603	Hydrops Fetalis with anasarca and one or more of the following: ascites, pleural effusion, pericardial effusion
604	Oligohydramnios sequence including <u>all</u> 3 of the following: (1) Oligohydramnios documented by antenatal ultrasound 5 or more days prior to delivery, (2) evidence of fetal constraint on postnatal physical exam (such as Potter's facies, contractures, or positional deformities of limbs), and (3) postnatal respiratory failure requiring endotracheal intubation and assisted ventilation.
605	Inborn Error of Metabolism (description required)
606	Myotonic Dystrophy requiring endotracheal intubation and assisted ventilation
607	Conjoined Twins
608	Tracheal Agenesis or Atresia
609	Thanatophoric Dysplasia Types 1 and 2
610	Hemoglobin Barts

Pulmonary Abnormalities

<u>Code</u>	<u>Description</u>
701	Congenital Cystic Adenomatoid Malformation of the Lung
907	Other lethal or life threatening pulmonary malformation (description required)

Other Lethal or Life Threatening Birth Defects

<u>Code</u>	<u>Description</u>
100	Other lethal or life threatening birth defects, which are not listed above (description required).

APPENDIX D

Surgery Codes

NOTE: If NEC Surgery and/or Other Surgery on the Discharge Form are checked "Yes", record all applicable codes in Item 33a of the Discharge Form.

Head and Neck

<u>Code</u>	<u>Description</u>
S101	Tracheostomy/Tracheotomy
S102	Cricoid split
S103	Ophthalmologic surgery OTHER THAN laser or cryosurgery for ROP

NOTE: Record ROP surgery in Item 30. Do not record ROP surgery in Item 33.

S104	Cleft lip or palate repair
S105	Branchial cleft sinus excision
S106	Thyroglossal duct excision
S107	Palliative or definitive repair of choanal atresia
S108	Mandibular (jaw) distraction
S109	Craniotomy
S100	Other head and neck surgery requiring general or spinal anesthesia (description required)

Thorax

<u>Code</u>	<u>Description</u>
S201	Tracheal Resection
S202	Aortopexy
S203	Tracheoesophageal atresia and/or fistula repair
S204	Thoracoscopy (with or without pleuridesis or pleurectomy)
S205	Thoracotomy (with or without pleural or lung biopsy)
S206	Thoracotomy (or thoracoscopy) with pneumonectomy, lobectomy or partial lobectomy
S207	Resection of pulmonary sequestration (intrathoracic or extrathoracic)
S208	Resection of mediastinal mass
S209	Resection of chest wall
S210	Bronchoscopy (with or without biopsy)
S211	Esophagoscopy (with or without biopsy)
S212	Surgery for Congenital Cystic Adenomatoid Malformation of the Lung
S213	Lung transplant
S214	Sternal closure
S200	Other thoracic surgery requiring general or spinal anesthesia (description required)

APPENDIX D, Surgery Codes (continued)

Abdomen

<u>Code</u>	<u>Description</u>
S301	Rectal biopsy with or without anoscopy
S302	Laparoscopy (diagnostic, with/without biopsy)
S303	Laparotomy (diagnostic or exploratory, with/without biopsy)
S304	Fundoplication
S305	Pyloromyotomy
S306	Pyloroplasty
S307	Jejunostomy, ileostomy, enterostomy, colostomy for intestinal diversion (with or without bowel resection, with or without fistula creation)
S308	Small bowel resection with or without primary anastomosis
S309	Large bowel resection
S310	Duodenal atresia/stenosis/web repair
S311	Jejunal, ileal, or colonic atresia repair (or repair of multiple intestinal atresias)
S312	Excision of Meckel's diverticulum
S313	Drainage of intra-abdominal abscess (not as primary treatment for NEC, see code S 333)
S314	Surgery for meconium ileus
S315	Excision of omphalomesenteric duct or duct remnant
S316	Gastroschisis repair (primary or staged)
S317	Omphalocele repair (primary or staged)
S318	Lysis of adhesions
S319	Repair of imperforate anus (with or without vaginal, urethral, or vesicle fistula)
S320	Pull through for Hirschsprung's disease (any technique)
S321	Pancreatectomy (partial, near total or total)
S322	Splenectomy or splenorraphy (partial or complete)
S323	Resection of retroperitoneal tumor
S324	Resection of sacrococcygeal tumor
S325	Repair of diaphragmatic hernia
S326	Plication of the diaphragm
S327	Gastrostomy/jejunostomy tube
S328	Upper endoscopy (stomach or duodenum, with or without biopsy)
S329	Colonoscopy/sigmoidoscopy (with or without biopsy)
S330	Takedown of ostomy and/or reanastomosis of bowel (small or large bowel)
S331	Ladd's or other procedure for correction of malrotation
S332	Appendectomy
S333	Primary peritoneal drainage for NEC, suspected NEC or intestinal perforation (If infant subsequently has other applicable surgical procedures, code those also.)
S334	Anoplasty
S335	Kasai procedure
S336	Liver biopsy done during laparotomy or laparoscopy (includes wedge or needle techniques)
S337	Umbilical hernia repair
S300	Other abdominal surgery requiring general or spinal anesthesia (description required)

Note: The code for Inguinal Hernia Repair is S410 (see Genito-Urinary section).

APPENDIX D, Surgery Codes (continued)

Genito-Urinary

<u>Code</u>	<u>Description</u>
S401	Cystoscopy (diagnostic, with or without biopsy)
S402	Adrenalectomy
S403	Nephrectomy
S404	Nephrostomy
S405	Ureterostomy
S406	Resection of urachal cyst
S407	Cystostomy
S408	Closure of bladder exstrophy
S409	Resection of posterior urethral valves
S410	Inguinal hernia repair
S411	Orchiopexy
S412	Orchiectomy
S413	Drainage, excision or removal of ovarian cyst
S414	Oophorectomy (partial or complete)
S416	Pyeloplasty
S417	Renal transplant
S400	Other genito-urinary surgery requiring general or spinal anesthesia (description required)

Open Heart or Vascular Procedures

NOTE: PDA ligation is recorded in Item 29. Do not record PDA Ligation in Item 33.

<u>Code</u>	<u>Description</u>
S501	Vascular Ring division
S502	Repair of coarctation of the aorta
S503	Repair of major vascular injury
S504	Repair or palliation of congenital heart disease
S505	Heart transplant
S506	Implanted pacemaker (permanent – do not use code for temporary pacemakers)
S500	Other open heart or vascular surgery requiring general or spinal anesthesia (description required)

Diagnostic or interventional cardiac catheterization

<u>Code</u>	<u>Description</u>
S601	Diagnostic cardiac catheterization
S602	Interventional catheterization with balloon septostomy
S603	Interventional catheterization with aortic valvuloplasty
S604	Interventional catheterization with pulmonary valvuloplasty
S600	Other interventional catheterization <u>whether or not anesthesia was required</u> (description required)

APPENDIX D, Surgery Codes (continued)

Skin and Soft Tissue

<u>Code</u>	<u>Description</u>
S700	Skin or soft tissue surgery requiring general or spinal anesthesia (description required)

Musculoskeletal System

<u>Code</u>	<u>Description</u>
S800	Other musculoskeletal surgery requiring general or spinal anesthesia (description required)

Central Nervous System

<u>Code</u>	<u>Description</u>
S901	Ventriculoperitoneal or other ventricular shunt
S902	External ventricular drain
S903	Ventricular drain with reservoir placement or removal
S904	Meningocele or myelomeningocele repair
S905	Encephalocele repair
S900	Other central nervous system surgery requiring general or spinal anesthesia (description required)

Fetal Surgery (record if fetal surgery was done at your hospital or another hospital)

<u>Code</u>	<u>Description</u>
S1000	Fetal surgery at your hospital (description required)
S1001	Fetal surgery at another hospital (description required)

Conjoined Twins

<u>Code</u>	<u>Description</u>
S1101	Separation of conjoined twins

APPENDIX E

Timeline for Database Activities, 2011

- January 1, 2011: Start using new data forms for infants born in the year 2011.
Centers submitting data electronically begin using the 2011 file format.
- January 7, 2011: Deadline for submitting data to be included in the Fourth Quarter Report for 2010.
- January 2011: Fourth Quarter Report for 2010 sent to your hospital.
2010 Membership Survey sent to participating hospitals.
Data Finalization Guidelines sent to hospitals submitting data in 2010 – includes deadlines to assure that all infant data are complete and correct for the annual reports.
- April 8, 2011: Deadline for submitting data to be included in the First Quarter Report for 2011.
- April 2011: First Quarter Report for 2011 sent to participating hospitals.
2010 Membership Survey due from participating Database Members.
- July 8, 2011: Deadline for submitting data to be included in the Second Quarter Report for 2011.
- July 2011: Second Quarter Report for 2011 sent to participating hospitals.
- September 2011: Annual NICU Quality Management Report for 2010 sent to hospitals that finalized their 2010 data.
- October 7, 2011: Deadline for submitting data to be included in the Third Quarter Report for 2011.
- October 2011: Third Quarter Report for 2011 sent to participating hospitals.
- January 6, 2012: Deadline for submitting data to be included in the Fourth Quarter Report for 2011 data.

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