

NICU Database
MANDATED CHANGES

2019 Birth Year

Table of Contents

INTRODUCTION	3
HRIF AND CCS – No CHANGES FOR 2019	3
BIG BABY ELIGIBILITY	4
DATA FINALIZATION CLOSE-OUT CHECKLIST	4
TRANSPORT DATA SET (TRS).....	5
PATIENT DIAGNOSIS (TAB 1, ITEMS C.1-C.2):	5
Item C.2. Indication for Transport [T_TRANSCODE]	5
NICU ADMISSION DISCHARGE (A/D) AND DELIVERY ROOM DEATH (DRD) FORM	5
DEMOGRAPHICS (TAB 1, ITEMS 1-8):	5
Item 2. Head Circumference at Birth [BHEADCIR]	5
MATERNAL HISTORY AND DELIVERY (TAB 2, ITEMS 9-18):	5
Item 12. Group B Strep Positive [GROUPBSTREP]	5
DELIVERY ROOM AND FIRST HOUR AFTER BIRTH (TAB 3, ITEMS 19-23):	6
Item 19b. How long was umbilical cord clamping delayed?	6
Item 20. APGAR Scores [AP1, AP5, AP10]	6
RESPIRATORY (TAB 4, ITEMS 24-39):	6
Item 25. Respiratory Support After Initial Resuscitation	6
Item 30. Pneumothorax [PNTX].....	6
Item 34. Inhaled Nitric Oxide > 4 hours [NITRICO]	7
Item 36b. CLD (chronic lung disease) [POSTERCLD].....	8
Item 38. Respiratory Support after 36 weeks	8
Item 39. Respiratory Monitoring and Support Devices at Discharge	8
Item 39a. Apnea/Cardio-Respiratory Monitor [ACFINAL].....	8
INFECTIONS (TAB 5, ITEMS 40-42):	9
Item 40. Early Bacterial Sepsis and/or Meningitis on or Before Day 3 of Life [EBSEPS] [EBSEPSCD1-3]	9
Item 41a. Late Sepsis and/or Meningitis after Day 3 of life – Bacterial Pathogen [LBPATH] [LBPATHCD1-3].....	9
Item 41a. Late Bacterial Sepsis and/or Meningitis [LBPATH] [LBPATHCD1-3]	11
Item 41b. Coagulase Negative Staph [CNEGSTAPH]	11
Item 41c. Fungal [FUNGAL]	12
Item 42. Congenital Infection [VIRAL].....	13
OTHER DIAGNOSES, SURGERIES (TAB 6, ITEMS 43-47)	14
Item 44b. Necrotizing Enterocolitis [NEC].....	14
Item 45. Focal Intestinal Perforation [GIPERF]	15
Item 47b Surgery Code [SRGCD1-10]	15
NEUROLOGICAL (TAB 7, ITEMS 48-51)	15
Item 48c. If Periventricular – Intraventricular Hemorrhage, PIH (Grades 1 to 4) where first occurred [PIHHEMLOC].....	15
DISPOSITION (TAB 9, ITEMS 56-60)	16
Item 59. Head Circumference at Initial Disposition [HEADCIRC]	16

INTRODUCTION

We never stop working to improve care for California’s most vulnerable infants and children, and we know you don’t either. So every year, CPQCC staff, members, experts and volunteers review and reconsider the data elements being collected to be sure we’re staying on the cutting edge of neonatal quality improvement care. Elements are sometimes added, removed, or renamed and renumbered.

In addition, other groups often make changes to data elements or definitions that necessitate changes to CPQCC data collection:

- High Risk Infant Follow-up (HRIF)
- California Perinatal Transport Systems (CPeTS)
- California Children’s Services (CCS)
- Vermont Oxford Network (VON)

This document describes the changes that have been made to the 2019 **NICU and transport data sets**.

HRIF and CCS – No Changes for 2019

We are happy to report that there are no changes for 2019 to:

- HRIF data set
- CCS Supplemental Form and Report.

The reporting of total birth weight and gestational age specific NICU activity, morbidity and mortality through CPQCC has been mandated by the CCS, while the systematic review and reporting of neonatal transports in California has been mandated through the CPeTS. It is also the responsibility of the discharging to home CCS NICU/Hospital or the last CCS NICU/Hospital providing care to make referrals to the HRIF Program. This means that one must be a member of CPQCC and report the required elements using the CPQCC/VON, the CPQCC/CPeTS, CPQCC/HRIF, and the CPQCC/CCS data formats. The compliance with the dataset changes is required for a CCS-approved NICU to meet this mandate.

BIG BABY ELIGIBILITY

CHANGE: The following changes have been made to the Big Baby eligibility criteria for inclusion the NICU Database:

- “Acute Transport” no longer includes staffing/census (“bed availability”) issues or insurance restrictions.
- Seizures has been added as an eligibility criterion.

Updated 2019 Definition - Acute Transport (CPeTS): An acute transport is movement of an infant from one in-patient setting to another in-patient setting for a higher level of care on or before Day 28 of life (i.e. medical, diagnostic, or surgical therapy that cannot be provided at the sending hospital.)

New 2019 Definition – Seizures: Seizures are defined as compelling clinical evidence of seizures, or of focal or multifocal clonic or tonic seizures. Also check Yes if there is EEG evidence of seizures regardless of clinical status.

The updated Big Baby Eligibility criteria for 2019 now include all of the following:

1. Infant Death, or
2. Acute transport in, or
3. Acute transport out or
4. Surgery, or
5. Intubated Assisted Ventilation for > 4 continuous hours, or
6. Nasal IMV/SIMV (or any other form of non-intubated assisted ventilation) for > 4 continuous hours or
7. Early bacterial sepsis, or
8. Previously discharged home and readmitted to your hospital for exchange transfusion and/or bilirubinemia level ≥ 25 mg/dL AND birth weight > 1,500 grams who was born or admitted to your hospital within 28 days of birth, or
9. Suspected encephalopathy or suspected perinatal asphyxia, or
10. Active therapeutic hypothermia, or
11. **Seizures**

DATA FINALIZATION CLOSE-OUT CHECKLIST

CHANGE:

- Starting with the 2018 Data Finalization, the deliverable for Confirmed Unknown must be <3% for inborn babies only.
- The VON/CPQCC Contact Report will be moved up from Item 7 to Item 3 and will now be due on February 1st.

TRANSPORT DATA SET (TRS)

Patient Diagnosis (tab 1, items C.1-C.2):

Item C.2. Indication for Transport [T_TRANSCODE]

CHANGE: The definition for **Acute Transport** now excludes staffing/census issues (sometimes referred to as “bed availability”) or insurance restrictions. These choices have been removed from **Item C.2 Indication for Transport [T_TRANSCODE]**.

2019 Updated CPeTS Definition: An acute transport is movement of an infant from one in-patient setting to another in-patient setting for a higher level of care on or before Day 28 of life (i.e. medical, diagnostic, or surgical therapy that is not provided.)

- Select **Medical services** if the infant was transported for medical problems that require acute resolution.
- Select **Surgery** if the infant was transported primarily for major invasive surgery (requiring general anesthesia or its equivalent).

NICU ADMISSION DISCHARGE (A/D) AND DELIVERY ROOM DEATH (DRD) FORM

Demographics (tab 1, items 1-8):

Item 2. Head Circumference at Birth [BHEADCIR]

CHANGE: Added the option to indicate “not done” if the head circumference was not measured on the day of birth or the following day.

Updated 2019 Definition: If the head circumference was not recorded on the day of birth, record the first head circumference measurement taken on the following day. The head circumference entries allowed should be between 10.0cm and 70.0cm. If the head circumference was not measured on the day of birth or on the following day, select **Not Done**. Specify **Unknown** if this information cannot be obtained.

Maternal History and Delivery (tab 2, items 9-18):

Item 12. Group B Strep Positive [GROUPEBSTREP]

CHANGE: Added “urine culture if performed” to the possible tests for Group B Streptococcus.

Updated 2019 Definition: Select **Yes** if either a maternal vaginal or anal **or urine culture** was positive for Group B Streptococcus (GBS). Select **No** if a maternal culture(s) for GBS was/were done (vaginal, anal **or urine cultures**) and was/were negative for Group B Streptococcus (GBS). Select **Not Done** if a maternal culture for GBS (vaginal, anal **or urine culture**) was not performed. Select **Unknown** if this information cannot be obtained.

Delivery Room and First Hour after Birth (tab 3, items 19-23):

Item 19b. How long was umbilical cord clamping delayed?

CHANGE: Add options if delayed cord clamping was performed for 61-120 or >120 seconds

Updated 2019 Definition:

- Select **30 to 60 seconds** if delayed umbilical cord clamping was performed for 30 to 60 seconds.
- Select **61 to 120 seconds** if delayed umbilical cord clamping was performed for greater than 61 seconds to 120 seconds.
- Select **> 120 seconds** if delayed umbilical cord clamping was performed for greater than 120 seconds.

Item 20. APGAR Scores [AP1, AP5, AP10]

CHANGE: Added the option to indicate **not done** for any Apgar scores that were not collected.

Updated 2019 Definition:

Enter the Apgar score at 1 minute and at 5 minutes as noted in the Labor and Delivery record, if available. Enter the 10-minute Apgar score, if available. Select **Not Done** for any score if that score was not done. Select **Unknown** for any score that is unknown.

Respiratory (tab 4, items 24-39):

Item 25. Respiratory Support After Initial Resuscitation

CHANGE: Added the option to indicate **None** on the online form.

Item 30. Pneumothorax [PNTX]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: Select **Yes, here** if the infant had extrapleural air diagnosed by chest radiograph or needle aspiration (thoracentesis) at YOUR hospital prior to Initial Disposition, and/or

at YOUR hospital four (4) or more hours following readmission after initial transport. This includes infants who had thoracic surgery and then later developed extrapleural air diagnosed by CXR or needle thoracentesis.

Select **Yes, elsewhere** if the infant had extrapleural air diagnosed by chest radiograph or needle aspiration (thoracentesis) that occurred within four (4) hours of admission to your hospital and the infant was at another hospital before being admitted to your hospital, and/or at the hospital where the infant was initially transported if the infant was initially transported and then readmitted to your hospital after initial transport. This includes infants who had thoracic surgery who later developed extrapleural air diagnosed by CXR or needle thoracentesis.

Select **Yes, here and elsewhere** if the infant had extrapleural air diagnosed by chest radiograph or needle aspiration (thoracentesis) at BOTH your hospital AND another hospital. This includes infants who had thoracic surgery who later developed extrapleural air diagnosed by CXR or needle thoracentesis.

Select **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 the infant was not treated with a chest tube, check No.

Select **Unknown** if this information cannot be obtained.

Item 34. Inhaled Nitric Oxide > 4 hours [NITRICO]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: Select **Yes, Here** if infant received Inhaled Nitric Oxide (iNO) > 4 hours

- at YOUR hospital prior to Initial Disposition, and/or
- at YOUR hospital following readmission after initial transport.

Select **Yes, Elsewhere** if infant received Inhaled Nitric Oxide (iNO) > 4 hours

- at another hospital before being admitted to your hospital, and/or
- at the hospital where the infant was initially transported, if the infant was initially transported and then readmitted to your hospital after initial transport.

Select **Yes, Here and Elsewhere** if infant received Inhaled Nitric Oxide (iNO) > 4 hours BOTH at your hospital AND another hospital as defined above.

Select **No** if infant did not receive Inhaled Nitric Oxide (iNO) > 4 hours during this admission or during transport from a referring hospital or prior to admission at another hospital.

Select **Unknown** if this information cannot be obtained.

Item 36b. CLD (chronic lung disease) [POSTERCLD]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: If postnatal systemic corticosteroids were given, check all indications for steroid treatment that applied. CLD (chronic lung disease) [POSTERCLD].

Select **Yes, here** if steroids were administered to treat or prevent bronchopulmonary dysplasia (BPD) or chronic lung disease:

- at YOUR hospital prior to Initial Disposition, and/or
- at YOUR hospital following readmission after initial transport.

Select **Yes, elsewhere** if steroids were administered to treat or prevent bronchopulmonary dysplasia (BPD) or chronic lung disease:

- at another hospital before being admitted to your hospital, and/or
- at the hospital where the infant was initially transported, if the infant was initially transported and then readmitted to your hospital after initial transport.

Select **Yes, here and elsewhere** if steroids were administered to treat or prevent bronchopulmonary dysplasia (BPD) or chronic lung disease BOTH at your AND at another hospital.

Select **No** if steroids were not administered to specifically treat or prevent bronchopulmonary dysplasia (BPD) or chronic lung disease.

Select **Unknown** if this information cannot be obtained.

Item 38. Respiratory Support after 36 weeks

CHANGE: Added the option to indicate **None** on the online form.

Item 39. Respiratory Monitoring and Support Devices at Discharge

CHANGE: Added the option to indicate **None** on the online form.

Item 39a. Apnea/Cardio-Respiratory Monitor [ACFINAL]

CHANGE: Updated to match VON's definition, removing the following: Answer **Yes** if arrangements were made to provide cardio-respiratory or apnea monitoring at home following discharge, even if the infant was not actually on the monitor at the time he/she left your hospital.

Updated 2019 Definition: Select **Yes** if the infant was discharged home or transferred on an Apnea Monitor or Cardio-Respiratory Monitor.

Select **No** if the infant was not discharged on an Apnea or Cardio-Respiratory Monitor

Select **Unknown** if this information cannot be obtained.

Notes:

- For infants who remained in your Center on his/her first birthday, select **Yes** if the infant was on an Apnea Monitor or Cardio-Respiratory Monitor on the date of the infant's first birthday.
- Select **No** if the infant was not on an Apnea or Cardio-Respiratory Monitor on his/her first birthday.
- Select **Unknown** if this information cannot be obtained.
- For infants who die prior to discharge, select **Yes** if infant was on an Apnea Monitor or Cardio-Respiratory Monitor at any time on the day of death.
- Select **No** if the infant was not on an Apnea or Cardio-Respiratory Monitor at any time on the day of death.
- Select **Unknown** if this information cannot be obtained.

Infections (tab 5, items 40-42):

Item 40. Early Bacterial Sepsis and/or Meningitis on or Before Day 3 of Life [EBSEPS] [EBSEPSCD1-3]

Item 41a. Late Sepsis and/or Meningitis after Day 3 of life – Bacterial Pathogen [LBPATH] [LBPATHCD1-3]

CHANGE: Updated to add choice **Other** (with **Other Description** [EBSEPSDESC] and [LBPATHDESC]) to the drop-down list of pathogen choices for both items. You can select up to three Bacterial Pathogen codes from Appendix B of the 2019 NICU Database Manual.

Updated 2018 Definition:

Select **Other**, if a bacterial pathogen NOT from the listed bacterial pathogens is recovered from a blood and/or cerebrospinal fluid culture obtained on Day 1, 2 or 3 of life. Please review the list of bacterial pathogens falling under the CPQCC definition. If Other is chosen from the drop-down list, use the description field to specify the pathogen.

Select **Other**, if a bacterial pathogen NOT from the listed bacterial pathogens is recovered from a blood and/or cerebrospinal fluid culture obtained after Day 3 of life. Please review the list of bacterial pathogens falling under the CPQCC definition. If Other is chosen from the drop-down list, use the description field to specify the pathogen.

Bacterial Infection Pathogens List

101	Achromobacter species [including <i>A. xylosoxidans</i> (also known as <i>Alcaligenes xylosoxidans</i>) and others]
102	Acinetobacter species including multidrug-resistant Acinetobacter
103	Aeromonas species
104	Alcaligenes species [<i>A. xylosoxidans</i> and others]
201	Bacteroides species
202	Burkholderia species [<i>B. caepicia</i> and others]
301	Campylobacter species [<i>C. fetus</i> , <i>C. jejuni</i> and others] including drug-resistant Campylobacter
302	Chryseobacterium species
303	Citrobacter species [<i>C. diversus</i> , <i>C. freundii</i> , <i>C. koseri</i> and others]
304	Clostridium species
501	Enterobacter species [<i>E. aerogenes</i> , <i>E. cloacae</i> , and others] including Carbapenem-resistant Enterobacter
502	Enterococcus species [<i>E. faecalis</i> (also known as <i>Streptococcus faecalis</i>), <i>E. faecium</i> , and others] including Vancomycin-resistant Enterococcus
503	Escherichia coli including Carbapenem-resistant Escherichia coli
601	Flavobacterium species
801	Haemophilus species [<i>H. influenzae</i> and others]
1101	Klebsiella species [<i>K. oxytoca</i> , <i>K. pneumoniae</i> and others] including Carbapenem-resistant Klebsiella and Cephalosporin-resistant Klebsiella
1201	Listeria monocytogenes
1301	Moraxella species [<i>M. catarrhalis</i> (also known as <i>Branhamella catarrhalis</i>) and others]
1302	Morganella morganii
1401	Neisseria species [<i>N. meningitidis</i> , <i>N. gonorrhoeae</i> and others] including drug-resistant <i>N. gonorrhoeae</i>
1601	Pantoea"
1602	Pasteurella species
1603	Prevotella species
1604	Proteus species [<i>P. mirabilis</i> , <i>P. vulgaris</i> and others]
1605	Providencia species [<i>P. rettgeri</i> and others]
1606	Pseudomonas species [<i>P. aeruginosa</i> and others] including multidrug-resistant <i>Pseudomonas aeruginosa</i>
1801	Ralstonia species
1901	Salmonella species including drug-resistant Salmonella serotype Typhi
1902	Serratia species [<i>S. liquefaciens</i> , <i>S. marcescens</i> and others]
1903	Staphylococcus coagulase positive [aureus] including Methicillin-resistant Staphylococcus aureus and Vancomycin-resistant Staphylococcus aureus
1904	Stenotrophomonas maltophilia
1905	Group B Streptococcus or GBS [also known as <i>Streptococcus agalactiae</i>]
1906	Streptococcus anginosus [formerly <i>Streptococcus milleri</i>]
1907	Streptococcus pneumoniae
1908	Streptococcus pyogenes [Group A Streptococcus]

Item 41a. Late Bacterial Sepsis and/or Meningitis [LBPATH] [LBPATHCD1-3]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: Select **Yes, Here** if a bacterial pathogen from the list of Bacterial Pathogens was recovered from a blood and/or cerebrospinal fluid culture obtained after Day 3 of life

- at YOUR hospital prior to initial disposition, and/or
- at YOUR hospital four (4) or more hours following readmission after initial transport

Select **Yes, Elsewhere** if a bacterial pathogen from the list of Bacterial Pathogens was recovered from a blood and/or cerebrospinal fluid culture obtained after Day 3 of life either at a prior stay at another hospital or within four (4) hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, and/or
- initially transported and then readmitted to your hospital after initial transport.

Select **Yes, Here and Elsewhere** if a bacteria pathogen from the list of Bacterial Pathogens was recovered from a blood and/or cerebrospinal fluid culture obtained after Day 3 of life BOTH at your hospital AND another hospital prior to initial disposition or following readmission after initial transport.

Select **No** if a bacterial pathogen from the list of Bacterial Pathogens was not recovered from a blood and/or cerebrospinal fluid culture, or if no blood or cerebrospinal fluid cultures were obtained after Day 3 of life.

Select **Not Applicable** if any of the following applies:

- The infant is discharged home or dies on or before Day 3 of life; OR
- The infant is transported from your center to another hospital on or before day 3 of life and either is not readmitted to your center before discharge home, death or first birthday or, is transported a second time on or before the Day 3 of life.

Select **Unknown** if this information cannot be obtained.

Item 41b. Coagulase Negative Staph [CNEGSTAPH]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: For verifying the presence of a Coagulase Negative Staph infection, the infant should meet all 3 of the following conditions after Day 3 of life:

1. 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
2. Signs of generalized infection (such as apnea, temperature instability, feeding intolerance, worsening respiratory distress or hemodynamic instability); AND
3. Treatment with 5 or more days of intravenous antibiotics after the above cultures were obtained.

Select **Yes, Here** if Coagulase Negative Staph occurred:

- at your hospital prior to initial disposition, and/or
- at your hospital four (4) or more hours following readmission after initial transport

Select **Yes, Elsewhere** if Coagulase Negative Staphylococcal Infection after Day 3 of life was diagnosed at a prior stay at another hospital or within four (4) hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, and/or
- initially transported and then readmitted to your hospital after initial transport.

Select **Yes, Here and Elsewhere** if Coagulase Negative Staph occurred BOTH at your hospital AND another hospital.

Select **No** if the criteria for Coagulase Negative Staph are not met and the item applies.

Select **Not Applicable** if any of the following applies:

- The infant is discharged home or dies on or before Day 3 of life; OR
- The infant is transported from your center to another hospital on or before Day 3 of life and either is not readmitted to your center before discharge home, death or first birthday or, is transported a second time on or before the Day 3 of life.

Select **Unknown** if this information cannot be obtained.

Item 41c. Fungal [FUNGAL]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: Select **Yes, Here** if a fungus was recovered from a blood culture obtained from either a central line or peripheral blood sample and/or was recovered from cerebrospinal fluid obtained by lumbar puncture, ventricular tap or ventricular drain after Day 3 of life

- at your hospital prior to initial disposition, and/or
- at your hospital four (4) or more hours following readmission after initial transport

Select **Yes, Elsewhere** if a fungus was recovered from a blood culture obtained from either a central line or peripheral blood sample and/or was recovered from cerebrospinal fluid obtained

by lumbar puncture, ventricular tap or ventricular drain after Day 3 of life at a prior stay at another hospital or within four (4) hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, and/or
- initially transported and then readmitted to your hospital after initial transport

Select **Yes, Here and Elsewhere** if a fungus was 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 after Day 3 of life BOTH at your hospital AND another hospital.

Select **No** if a fungus was not recovered from a blood culture obtained from either a central line or peripheral blood sample or if no blood cultures were obtained after Day 3 of life. Also check No if a fungus was not recovered from cerebrospinal fluid obtained by lumbar puncture, ventricular tap or ventricular drain after Day 3 of life.

Select **Not Applicable** if any of the following applies:

- The infant is discharged home or dies on or before Day 3 of life; OR
- The infant is transported from your center to another hospital on or before Day 3 of life and either is not readmitted to your center before discharge home, death or first birthday or, is transported a second time on or before the Day 3 of life.

Select **Unknown** if this information cannot be obtained.

Item 42. Congenital Infection [VIRAL]

CHANGE: Updated to add choice **Other** (with **Other Description** [VIRALDESC])to the drop-down list of Congenital Infection choices for this item. You can select up to three Congenital Infection Pathogen codes from Appendix E of the 2019 NICU Database Manual.

Updated 2018 Definition: Select **Other**, if a congenital infection pathogen NOT from the listed congenital infection pathogen list is acquired in utero or during birth. Please review the list of congenital infection pathogens falling under the CPQCC definition. If Other is chosen from the drop-down list, use the description field to specify the pathogen.

Congenital Infections Pathogen List	
101	Toxoplasmosis (<i>Toxoplasma gondii</i>)
102	Rubella virus
103	Syphilis (<i>Treponema pallidum</i>)
104	Cytomegalovirus
105	Herpes simplex
106	Parvovirus B19
107	Zika virus
108	Varicella zoster virus
8888	Other

Other Diagnoses, Surgeries (tab 6, items 43-47)

Item 44b. Necrotizing Enterocolitis [NEC]

CHANGE: Updated to match VON's definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: Determine if the infant had (a) Necrotizing Enterocolitis (NEC) diagnosed at surgery, or (b) NEC diagnosed at postmortem examination, or (c) NEC diagnosed clinically and radiographically using the following criteria:

1. One or more of the following clinical signs present:
 - Bilious gastric aspirate or emesis
 - Abdominal distention
 - Occult or gross blood in stool with no apparent rectal fissure

AND

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

Select **Yes, Here** if NEC was diagnosed:

- at your hospital prior to initial disposition and/or
- at your hospital four (4) or more hours following readmission after initial transport.

Select **Yes, Elsewhere** if NEC was diagnosed at a prior stay at another hospital or within 4 hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, and/or
- initially transported and then readmitted to your hospital after initial transporttransported

Select **Yes, Here and Elsewhere** if NEC occurred BOTH at your hospital AND at another hospital as defined above.

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

Select **Unknown** if this information cannot be obtained.

Item 45. Focal Intestinal Perforation [GIPERF]

CHANGE: Updated to match VON’s definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition: The diagnosis for Focal Gastrointestinal Perforation is 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.

Select **Yes, Here** if Focal Gastrointestinal Perforation (as defined above) occurred

- at your hospital prior to initial disposition, and/or
- at your hospital four (4) or more hours following readmission after initial transport

Select **Yes, Elsewhere** if Focal Intestinal Perforation was diagnosed during a prior stay at another hospital or within four (4) hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, and/or
- initially transported and then readmitted to your hospital after initial transport

Select **Yes, Here and Elsewhere** if Focal Gastrointestinal Perforation (as defined above) occurred BOTH at your hospital AND another hospital.

Select **No** if the infant did not have a Focal Gastrointestinal Perforation as defined above.

Select **Unknown** if this information cannot be obtained.

Item 47b Surgery Code [SRGCD1-10]

CHANGE: The description was changed for surgery code: S515 from “Open thoracotomy for patent ductus arteriosus closure” to “Open thoracotomy / sternotomy for patent ductus arteriosus closure.”

Neurological (tab 7, items 48-51)

Item 48c. If Periventricular – Intraventricular Hemorrhage, PIH (Grades 1 to 4) where first occurred [PIHHEMLOC]

CHANGE: Updated to match VON’s definition, to specify timing of the outcome in relation to when the infant was admitted or readmitted to the hospital.

Updated 2019 Definition:

If the infant had a Periventricular-Intraventricular Hemorrhage (PIH grades 1 to 4) documented on an ultrasound, CT, or MRI on or before day 28, indicate where the 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.

Select **Yes, and First Here** if PIH (grades 1 to 4 as defined above) first occurred at:

- at your hospital prior to initial disposition, or
- at your hospital four (4) or more hours following readmission after initial transport

Select **Yes, and First Elsewhere** if PIH (grades 1 to 4 as defined above) was first diagnosed during a prior stay at another hospital or within four (4) hours of admission to your hospital and the infant was:

- at another hospital before being admitted to your hospital, or
- initially transported and then readmitted to your hospital after initial transport

Select **N/A** if no ultrasound, CT or MRI was done on or before day 28 or if no PIH occurred.

Select **Unknown** if this information cannot be obtained.

Disposition (tab 9, items 56-60)

Item 59. Head Circumference at Initial Disposition [HEADCIRC]

CHANGE: Definition updated to include **Not Done** and head circumference measured **up to 7 days** prior to discharge.

Updated 2019 Definition: Enter the head circumference as recorded in the chart or clinical flow sheets on the Date of Initial Disposition (Item W8 on the Patient Identification Worksheet). If the head circumference is not recorded on the Date of Initial Disposition, record the most recent head circumference measured up to 7 days prior to discharge.

Record the head circumference at discharge (transport, death, home or 1st birthday) to the nearest tenth of a centimeter. Record 31.24 as "31.2", Record 31.25 as "31.3". You must not leave the tenth of a centimeter blank. If the medical record states that the head circumference is 32 centimeters, please enter "32.0" on the data form.

Select **Not Done**, if head circumference at discharge or up to 7 days prior to discharge was not measured.

Select **Unknown** if this information cannot be obtained.