



## Neonatal Levels of Care and Inpatient Management

LOB(s): <input checked="" type="checkbox"/> Commercial  <input checked="" type="checkbox"/> Medicare  <input checked="" type="checkbox"/> Medicaid	State(s): <input checked="" type="checkbox"/> Idaho <input checked="" type="checkbox"/> Montana <input checked="" type="checkbox"/> Oregon <input checked="" type="checkbox"/> Washington <input type="checkbox"/> Other:  <input checked="" type="checkbox"/> Oregon <input type="checkbox"/> Washington
---	--

### Enterprise Policy

PacificSource is committed to assessing and applying current regulatory standards, widely-used treatment guidelines, and evidenced-based clinical literature when developing clinical criteria for coverage determination. Each policy contains a list of sources (references) that serves as the summary of evidence used in the development and adoption of the criteria. The evidence was considered to ensure the criteria provide clinical benefits that promote patient safety and/or access to appropriate care. Each clinical policy is reviewed, updated as needed, and readopted, at least annually, to reflect changes in regulation, new evidence, and advancements in healthcare.

Clinical Guidelines are written when necessary to provide guidance to providers and members in order to outline and clarify coverage criteria in accordance with the terms of the Member's policy. This Clinical Guideline only applies to PacificSource Health Plans, PacificSource Community Health Plans, and PacificSource Community Solutions in Idaho, Montana, Oregon, and Washington. Because of the changing nature of medicine, this list is subject to revision and update without notice. This document is designed for informational purposes only and is not an authorization or contract. Coverage determinations are made on a case-by-case basis and subject to the terms, conditions, limitations, and exclusions of the Member's policy. Member policies differ in benefits and to the extent a conflict exists between the Clinical Guideline and the Member's policy, the Member's policy language shall control. Clinical Guidelines do not constitute medical advice nor guarantee coverage.

### Background

There are four levels of neonatal care (newborn nursery (level I), neonatal intensive care unit (levels II, III, IV) defined by The American Academy of Pediatrics (AAP). Facilities are required to know their NICU level certification and provide care accordingly. The American Hospital Association identified four billing codes (0171, 0172, 0173, 0174) that correspond to the clinical care provided to neonates at each level. These four codes address the quantity and intensity of medical care and services the newborn requires on a given day.

### Criteria

#### Commercial

PacificSource considers admission and continued stay in appropriate neonatal levels of care medically necessary for appropriate care of the neonatal (up to 28 days old) member.

#### I. Level I- Routine newborn care (Revenue Code 0171)

This billing code can be utilized by facilities approved to provide Level I, II, III and IV care. PacificSource considers the coverage of infants for Level I medically necessary when **ONE** of the following conditions is met:

- A. Hypoglycemia requiring oral (nipple) feedings or oral glucose

- B. Routine tests (e.g., bilirubin, blood glucose, blood type and Coombs, direct antiglobulin test (DAT), complete blood count (CBC) or oximetry)
- C. Routine care for physiologically stable infants (i.e., room air, stable or declining medications, no temperature instability) to monitor weight gain, advance to full volume feeds bottle/nipple, or establish safe discharge plan
- D. Thermoregulation surveillance only **OR** use of a warmer until transfer to higher level of care

## II. Level II: NICU (Revenue Code: 0172)

This billing code can be utilized by Level II, III and IV facilities. PacificSource considers the coverage of infants for NICU Level II medically necessary when **ONE** of the following conditions is met:

- A. Tube feeding or medications (e.g., orogastric, nasogastric, nasojejunal or gastrostomy tube).
- B. Apneic and/or bradycardic episodes requiring evaluation and treatment with oral pharmacologic or mild stimulation
- C. Hypoglycemia requiring intravenous glucose for less than 24 hours
- D. Sepsis evaluation (in otherwise clinically stable neonate)
- E. Intravenous medications, fluids, and/or intramuscular medication (in otherwise clinically stable neonate)
- F. Total Parenteral Nutrition (TPN) via peripheral line
- G. Conditions requiring oxygen via oxygen hood, nasal cannula  $\leq 3$ /lpm, high-flow nasal canula  $\leq 3$ /lpm, humidified O<sub>2</sub>  $\leq 3$ /lpm
- H. Neonatal Abstinence Syndrome (withdrawal) scores less than 8
- I. Hyperbilirubinemia requiring phototherapy requiring light bank or bili-blanket
- J. Thermoregulation, including weaning, via an incubator/warmer in an otherwise physiologically stable infant
- K. Initial medical or surgical sub-specialty consultation
- L. Support for unstable neonate until higher level care transfer (or higher level as appropriate)

## III. Level III: NICU (Revenue Code: 0173)

This billing code can be utilized by Level III and IV facilities. PacificSource considers the coverage of infants for NICU Level III medically necessary when **ONE** of the following conditions is met:

- A. Infants less than 32 weeks gestational age or less than 1500 grams
- B. Intravenous therapy for clinical instability; including monitoring and frequent titration of Intravenous Therapy fluids or medications
- C. Hypoglycemia requiring ongoing intravenous therapy glucose greater than 24 hours
- D. Seizure requiring intravenous medications
- E. Apneic and/or bradycardic episodes requiring intravenous medications
- F. Total parenteral nutrition (TPN) via PICC, UAC, UVC, CVC

- G. Blood/blood product transfusions or partial/complete exchange transfusions (including 48 hours post- exchange)
- H. Noninvasive ventilatory assistance (e.g., CPAP, NIPPV) via mask, nasal canula >3/lpm, humidified O2 >3/lpm (e.g., bubble device, Vapotherm)
- I. Invasive ventilatory support (endotracheal or tracheostomy tube) and 24 hours post-ventilator care
- J. Conditions requiring invasive intervention for airway protection (e.g., Replogle tube)
- K. Conditions requiring a chest tube
- L. Conditions requiring surgical intervention with general anesthesia, including up to two days post-op
- M. Retinopathy of Prematurity (ROP) requiring surgical intervention or therapies
- N. Neonatal Abstinence Syndrome (withdrawal) scores greater than or equal to 8
- O. Umbilical Artery Catheters (UACs), Peripheral Artery Catheters (PACs), Umbilical Vein Catheters (UVCs) and/or Central Vein Catheters (CVCs), Peripherally Inserted Central Catheter (PICC) line
- P. Peritoneal Dialysis
- Q. Withdrawal of life support, end of life care, or palliative care

**Note:** Immediate post-delivery intubation in the delivery room [DR] (when the endotracheal tube is removed prior to leaving the DR), brief intubation for administration of surfactant, or deep tracheal suctioning does not meet level III criteria for intubation.

#### IV. Level IV: NICU (Revenue Code: 0174)

This billing code can be utilized by Level IV facilities only. PacificSource considers the coverage of infants for NICU Level IV medically necessary when **ONE** of the following conditions is met:

- A. Invasive hemodynamic monitoring / **OR** central nervous system (CNS) pressure monitoring
- B. High frequency ventilation (oscillatory, positive pressure, jet, percussive)
- C. Extracorporeal Membrane Oxygenation (ECMO) / Nitric Oxide (NO)
- D. Hypothermia therapy for anoxic damage, including selective head cooling
- E. Hemodialysis
- F. Encephalopathy, coma, or other acute neurologic abnormality
- G. CPR in the last 24 hours
- H. Continuous intravenous infusion or intravenous medications requiring close monitoring or dose adjustment including **one (1) or more** of the following:
  1. Antiarrhythmic agents
  2. Neuromuscular blocking agents (e.g., pancuronium, vecuronium)
  3. Beta-blockers
  4. Calcium channel blocking agents
  5. Inotropic or chronotropic drugs

## 6. Intravenous prostaglandin therapy

### Medicaid

PacificSource Community Solutions follows Oregon Administrative Rules (OAR) 410-125-0000 through 2080, 410-151-0000 through 0003, and MCG care guidelines 28<sup>th</sup> edition for coverage of Neonatal Levels of Care and Inpatient Management.

### Medicare

PacificSource Medicare follows this policy for coverage of Neonatal Levels of Care and Inpatient Management.

### Coding Information

---

The following list of codes are for informational purposes only and may not be all-inclusive. Deleted codes and codes which are not effective at the time the service is rendered may not be eligible for reimbursement.

0170	Room and Board Nursery
0171	Newborn Level I
0172	Newborn Level II
0173	Newborn Level III
0174	Newborn Level IV

**NOTE:** Facilities will be reimbursed for ongoing care based on their NICU level credentialing only (i.e., facility must be credentialed to provide NICU level 3 care to be reimbursed NICU level 3).

- Revenue code 0179 is not an accepted billing level.

### Definitions

---

**Apnea of Prematurity (AOP)** - specifies a pause of breathing for more than 15–20 s, or accompanied by oxygen desaturation ( $SpO_2 \leq 80\%$  for  $\geq 4$  s) and bradycardia (heart rate  $< 2/3$  of baseline for  $\geq 4$ s), in infants born less than 37 weeks of gestation

**Bubble CPAP** - A CPAP that uses nasal prongs or a nasal mask as the delivery device and creates positive pressure by immersing the expiratory limb of the circuit into a fluid column to the desired depth (cmH<sub>2</sub>O) to achieve the desired end-expiratory pressure.

**Continuous Positive Airway Pressure (CPAP)** - A treatment modality used to maintain continuous positive pressure during both inspiratory and expiratory phases when the infant is breathing spontaneously.

**Exchange Transfusion** - A potentially life-saving procedure that is done to counteract the effects of serious jaundice or changes in the blood due to diseases such as sickle cell anemia or Hemolytic Disease of the Newborn (HDN). The procedure involves slowly removing the patient's blood and replacing it with fresh donor blood or plasma. In most cases, this involves placing one or more thin tubes, called catheters, into a blood vessel.

**(ECMO) Extracorporeal membrane oxygenation** - A treatment that uses a pump to circulate blood through an artificial lung back into the bloodstream of a very ill baby. This system provides heart-

lung bypass support outside of the baby's body. The purpose of ECMO is to provide enough oxygen to the baby while allowing time for the lungs and heart to rest or heal.

**Gastroschisis** - A herniation (displacement) of the intestines through an abdominal wall defect, usually on the right side of the umbilical cord.

**Neonatal Abstinence Syndrome** - group of problems that occur when a pregnant woman takes addictive illicit or prescription drugs such as: Amphetamines, Barbiturates, Benzodiazepines (diazepam, clonazepam), Cocaine, Marijuana, Opiates/Narcotics (heroin, methadone, and codeine). These and other substances pass through the placenta to the baby during pregnancy. The placenta is the organ that connects the baby to its mother in the womb. The baby becomes addicted along with the mother. At birth, the baby is still dependent on the drug. Because the baby is no longer getting the drug after birth, symptoms of withdrawal may occur.

**Respiratory Distress Syndrome (RDS)** - The disease is mainly caused by a lack of a slippery substance in the lungs called surfactant. This substance helps the lungs fill with air and keeps the air sacs from deflating. Surfactant is present when the lungs are fully developed. Neonatal RDS can also be due to genetic problems with lung development. Most cases of RDS occur in babies born before 37 weeks. The less the lungs are developed, the higher the chance of RDS after birth. The problem is uncommon in babies born full-term (at 40 weeks).

## Related Policies

---

Nutritional Support and Supplies

## References

---

American Academy of Pediatrics (AAP) Committee on Fetus and Newborn, (2012). Levels of neonatal care. *Pediatrics*, 130(3): 587-597. <https://doi.org/10.1542/peds.2012-1999>

ACOG COMMITTEE OPINION Number 712, August 2017. <https://www.acog.org/clinical/clinical-guidance/committee-opinion/articles/2017/08/intrapartum-management-of-intraamniotic-infection>

American Academy of Pediatrics (AAP) Committee on Fetus and Newborn (2012). Neonatal Drug Withdrawal. *Pediatrics*, 129(2): e540-e560. <http://pediatrics.aappublications.org/content/129/2/e540.full>

Barfield, W.D., et al. (August 24, 2020). Late preterm infants. UpToDate.

[https://www.uptodate.com/contents/late-preterm-infants?search=late%20preterm%20infants&source=search\\_result&selectedTitle=1~78&usage\\_type=default&display\\_rank=1](https://www.uptodate.com/contents/late-preterm-infants?search=late%20preterm%20infants&source=search_result&selectedTitle=1~78&usage_type=default&display_rank=1)

Engle, W. A., Tomashek, K. M., Wallman, C., & Committee on Fetus and Newborn, American Academy of Pediatrics (2007). "Late-preterm" infants: a population at risk. *Pediatrics*, 120(6), 1390–1401.

<http://pediatrics.aappublications.org/content/120/6/1390.full.pdf+html>

Intensive Care NSW. (2023, March 27). Breathing support. Intensive Care NSW.

<https://www.mylifeaftericu.com/children-in-picu/breathing-support/u>

Murthy, P., & Kumar, A. (2022, September 29). High frequency ventilation - statpearls - NCBI bookshelf. National Library of Medicine. <https://www.ncbi.nlm.nih.gov/books/NBK563151/>

National Institutes of Health (NIH). (May 9, 2023). Preterm Labor and Birth.

<https://www.nichd.nih.gov/health/topics/preterm/conditioninfo/default>

Pavel, A. M., Rennie, J. M., de Vries, L. S., Blennow, M., Foran, A., Shah, D. K., Pressler, R. M., Kapellou, O., Dempsey, E. M., Mathieson, S. R., Pavlidis, E., Weeke, L. C., Livingstone, V., Murray, D. M., Marnane, W. P., & Boylan, G. B. (2022). Neonatal Seizure Management: Is the Timing of Treatment Critical. *The Journal of pediatrics*, 243, 61–68.e2. <https://doi.org/10.1016/j.jpeds.2021.09.058>

Rennie, J. M., de Vries, L. S., Blennow, M., Foran, A., Shah, D. K., Livingstone, V., van Huffelen, A. C., Mathieson, S. R., Pavlidis, E., Weeke, L. C., Toet, M. C., Finder, M., Pinnamaneni, R. M., Murray, D. M., Ryan, A. C., Marnane, W. P., & Boylan, G. B. (2019). Characterisation of neonatal seizures and their treatment using continuous EEG monitoring: a multicentre experience. *Archives of disease in childhood. Fetal and neonatal edition*, 104(5), F493–F501. <https://doi.org/10.1136/archdischild-2018-315624>

Specification Manual for Joint Commission National Quality Measures [\(v2023B1\) Admissions to NICU](#). Accessed May 5, 2024. <https://manual.jointcommission.org/releases/TJC2023B1/PerinatalCare.html>

Zhao, J., Gonzalez, F., & Mu, D. (2011). Apnea of prematurity: from cause to treatment. *European journal of pediatrics*, 170(9), 1097–1105. <https://doi.org/10.1007/s00431-011-1409-6>

## Appendix

---

### Policy Number:

**Effective:** 8/1/2020

**Next review:** 9/1/2025

**Policy type:** Enterprise

**Author(s):**

**Depts.:** Health Services

**Applicable regulation(s):** OARs 410-125-0000 through 2080, 410-151-0000 through 0003.

**Commercial Ops:** 8/2024

**Government Ops:** 8/2024