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Coding and Documentation for Gastrointestinal Failure in the NICU

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The decision to code for critical care is based on the severity of the patient's illness and the intensity of services rendered by the medical provider. The CPT coding definition states the patient's illness or injury must "acutely impact one or more vital organ systems. There is a high probability of imminent or life-threatening deterioration in the patient's condition. The care provided involves high-complexity decision-making to assess, manipulate, and support vital system function to treat vital organ system failure and/or prevent further life-threatening deterioration of the patient's condition. It often requires interpretation of multiple physiological parameters and/or application of advanced technology" (1,2).

Organ failure is a common criterion used by clinicians when coding for critical care in the Neonatal Intensive Care Unit (NICU). Failure occurs when the organ or organ system cannot functionally meet the body's demands. Most neonatologists agree respiratory failure is relatively well-defined and occurs when a patient cannot oxygenate or ventilate to meet metabolic demands. Common clinical signs in neonates include respiratory distress or apnea with a sustained SaO_2 < 90%, paO_2 < 60 or a $paCO_2$ > 50 (acute). To maintain respiratory homeostasis, patients require invasive or non-invasive ventilation, CPAP, or high flow nasal cannula > 2lpm (1). In these cases, patient acuity and service intensity are easily justified in the documentation. Consider this scenario:

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A 2-day-old 880-gm SGA 29-week female infant has RDS requiring CPAP. The neonatologist is called to evaluate the infant because she has worsening respiratory distress and requires more oxygen. The neonatologist intubates the infant, gives surfactant, and initiates mechanical ventilation.

The correct CPT code for this encounter is 99469: subsequent critical care, neonate 28 days or less. This scenario meets the definition of critical care based on the presence of worsening respiratory failure due to RDS that required intervention with ventilation to prevent life-threatening deterioration. The care provided involved high complexity decision-making and the use of advanced technology.

The definition of "failure" is not as clear when applied to other organ systems such as the gastrointestinal (GI) system. Definitions are inconsistent and commonly based on diagnoses rather than function (3,4). Because of this, GI failure is not included in many clinical acuity scores despite its independent effects on mortality (5). GI failure is associated with worse ICU and 90-day outcomes in adults (6) and a mortality rate of 25% in children (3). Neonates with GI-specific diagnoses that result in failure, such as necrotizing enterocolitis, have increased mortality rates and poor neurodevelopmental outcomes (6). GI failure leads to a "high probability of imminent or life-threatening deterioration in the patient's condition," meeting the definition of critical care. Although medical providers recognize this, they often fail to document this association when describing a patient with GI failure in the medical record.

Adult GI failure is defined in multiple ways and may include specific GI disorders, ileus, hemorrhage, or food intolerance (4,5). In contrast, there is greater consensus for a common functionally based definition for pediatric intestinal failure. This is driven by the need to evaluate treatments for short bowel syndrome (3,7,8). According to O'Keefe, GI failure "results from obstruction, dysmotility, surgical resection, a congenital defect, or disease-associated loss of absorption and is characterized by the inability to maintain protein-energy, fluid, electrolyte, or micronutrient balance" (7). Goulet published a similar definition stating GI failure is "a reduction of functional gut mass below the minimal amount necessary for digestion and absorption adequate to supply nutrient and fluid requirements for maintenance in adults and growth in children" (9). Examples include short bowel syndrome, gastrointestinal motility disorders, and congenital enterocyte disorders (7,8,9). Based on these two definitions, GI failure occurs when the current state of the GI system is functionally unable to meet the body's nutritional, fluid, and/or energy demands, which is consistent with "organ failure." Clinical indicators that demonstrate inadequate function and lack of homeostasis support the definition of "failure" and should be documented in the medical record when managing a case.

T*he infant described above is now 16 days old and weighs 930-gms. She has apnea of prematurity that is managed with caffeine and 1 lpm of room airflow by nasal canula. She is tolerating goal-gavage breastmilk feedings. The neonatologist is called to the bedside secondary to abdominal distention, oliguria, poor perfusion, and hematochezia. An abdominal radiograph shows right lower quadrant pneumatosis and distended bowel consistent with NEC. The neonatologist volume resuscitates the infant, decompresses the abdomen with continuous gastric suction, initiates antibiotics after obtaining cultures and laboratory studies, and follows serial radiographs. Although her respiratory status remains stable, the neonatologist monitors her condition closely.*

The correct CPT code for this encounter is 99469: subsequent critical care, neonate 28 days or less. Note that this patient does not have respiratory failure. Rather, the infant presents with hemodynamic compromise due to NEC. Evidence of GI functional

failure includes abdominal distention, feeding intolerance, pneumatosis, and shock, putting the patient at high risk for bowel perforation and death. Clinical management requires high complexity decision-making and interpretation of multiple parameters to prevent life-threatening deterioration. Documenting the level of decision-making and risk of mortality supports using a critical care code.

This scenario is different from other encounters involving organ failure because "advanced technology" was not required to prevent life-threatening decompensation. Advanced technology is not a common term to describe therapeutic interventions for GI failure. Management of GI failure often involves judicious serial assessments of vital signs, physical exams, radiographs, fluid status, electrolyte balance, and growth. Common treatments are continuous gastric decompression, antibiotics, bowel rest, parenteral nutrition, and fluid replacement. The keyword in the CPT critical care definition is "often." Critical care requires high-level decision-making. But the application of advanced technology and interpretation of multiple physiologic parameters are not "always" required. Thus, management of GI failure can be considered high intensity despite the lack of "advanced technologic" treatment options. This specific scenario is "critical" because it requires high complexity decision-making and evaluation of multiple parameters to prevent life-threatening deterioration. High complexity decision making is defined by three elements: 1) the number and acuity of managed problems, 2) the amount and type of interpreted data, and 3) the patient's risk of mortality[2]. Documentation of two of these three elements supports the complex decision-making required for critical care coding.

Not all organ failure, however, requires critical care. As clinical status improves and the organ system recovers, the mortality risk, decision-making complexity, and intensity of interventions decrease, which means critical care services may not be necessary to support the patient's needs.

The infant described above is now 32 days old and weighs 1200 gms. Her clinical status is improved. She is tolerating room air and requires caffeine for intermittent cardiorespiratory events. Nutrition consists of parenteral nutrition via a PICC line and 40ml/kg/day of human milk gavage feedings. She is well-perfused and resting comfortably in an incubator. Abdominal exam and electrolytes are normal. Weight gain over the past 4 days is 18gm/kg/day. The neonatologist increases the enteral feedings by 20ml/kg/day and adjusts the parenteral nutrition to maintain fluid, electrolyte, and nutritional balance.

The appropriate CPT code for this scenario is 99478: Subsequent intensive care, infant, < 1500 gram. In contrast to the patient's initial presentation of NEC, the medical decision-making in this scenario is less complex. Although the patient requires slow feeding advancements after recovering from NEC, functional GI "failure" is improved based on patient stability and lack of clinical indicators. This scenario does not meet the definition of critical care based on the severity of illness and intensity of services provided. Determining when a patient's condition no longer requires critical care is indistinct and individualized. When coding for critical care, documentation should reflect the patient acuity and risk, level of decision-making, and interventions required to prevent life-threatening decompensation.

Consider these documentation tips when caring for a patient with GI failure who requires critical care services:

1) Describe the clinical indicators and laboratory/test evidence demonstrating a failure of function and risk of life-threatening decompensation due to nutritional, energy, fluid and/or electrolyte imbalance.

2) Document the high complexity of decision-making required to manage the patient's current state and prevent life-threatening decompensation and or/death.

3) Be consistent: consider a group definition to clarify the definition and critical care management of GI failure. Varying CPT codes among providers without documented patient conditions or treatment changes put practices at risk for audits.

4) Use ICD-10 codes for the specific GI condition/disease. If unknown, use a symptom code before using the unspecified codes, such as P78.9: Perinatal digestive system disorder, unspecified or K59.9: Functional intestinal disorder, unspecified (use for patients > 28 days or when the condition originates outside the perinatal period) (10).

5) Although prematurity is an abnormal physiologic state, GI failure is not intrinsic to its definition. Dependence on parenteral nutrition secondary to prematurity does not qualify as GI failure.

References:

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