Higher-Weighted Diagnosis Related Groups (HWDRG) Validation – Sepsis DRGs

Livanta is the national Medicare Claim Review Services contractor under the Beneficiary and Family Centered Care – Quality Improvement Organization (BFCC-QIO) Program. As the Claim Review Services contractor, Livanta validates the diagnosis related group (DRG) on hospital claims that have been adjusted to pay at a higher weight. The adjusted claim is reviewed to ensure that the diagnoses, procedures, and discharge status of the patient reported on the hospital’s claim are supported by the documentation in the patient’s medical record. Livanta’s highly-trained credentialed coding auditors adhere to the accepted principles of coding practices to validate the accuracy of the hospital codes that affect the DRG payment. When needed, actively practicing physicians review for medical necessity and clinical validity based on the presence of supporting documentation and clinical indicators.

Post-payment review of these HWDRG adjustments is mandated under statute and in the Centers for Medicare & Medicaid Services (CMS) QIO Manual: Perform DRG validation on prospective payment system (PPS) cases (including hospital-requested higher-weighted DRG assignments), as appropriate (see §1866(a)(1)(F) of the Act and 42 CFR 476.71(a)(4)).

Read more: CMS, Quality Improvement Organization Manual, Chapter 4 - Case Review

HWDRG Case Examples as a Learning Tool

This month’s issue of The Livanta Claims Review Advisor includes case examples in which a sepsis DRG was requested by the hospital. Livanta has identified sepsis as the most prevalent DRG error found in HWDRG reviews. Livanta shares these case examples to describe common situations where the principal diagnosis was adjusted to sepsis without documentation in the medical record to support this change. By offering these examples, Livanta hopes to provide hospitals with knowledge of documentation guidelines and the proper coding of sepsis.
Sepsis is defined as a relatively common but overwhelming and life-threatening response to infection. Severe sepsis occurs when the response triggers a cascade of changes that damage multiple organ systems, leading them to fail, and in some cases causing death. The risk of death is 30 percent for sepsis, 50 percent for severe sepsis, and 80 percent for septic shock. Sepsis is often diagnosed by the application of the quick Sequential Organ Failure Assessment Score (qSOFA) criteria, along with laboratory findings and related symptoms analysis. The Medicare DRG review of the supporting documentation relies, in particular, on physician documentation of the pertinent clinical findings on and after admission, including the location of the underlying infection, as well as the causative organism, if known. Documentation of whether sepsis was present on admission and whether it was related to medical care such as central line placement and management are also key factors that impact proper coding. The HWDRG review outcome is based on the submitted supporting clinical documentation related to components below.

- Document specific clinical indicators that support the diagnosis of sepsis such as:
  - Fever (above 101 degrees Fahrenheit)
  - Confusion or encephalopathy
  - Diaphoresis
  - Tachycardia (>90 beats per minute)
  - Tachypnea (>20 breaths per minute)
• Hypotension (systolic <100 mm Hg)
• Lactic acidosis
• Acute organ failure (most often renal failure, respiratory failure, and/or septic shock)

• Document results of all work-up:
  • Blood cultures
  • Complete blood count
  • Radiological studies to determine underlying infection
  • Comprehensive metabolic profile
  • qSOFA score

• Document any treatment given:
  • Antibiotics/antifungals/antivirals depending on cause
  • Oxygen
  • Intravenous (IV) fluids
  • Vaspressors
  • Steroids
  • Mechanical ventilation

• Document the cause, if known:
  • Infectious organism
    o Specific aerobic or anaerobic organism
    o Fungus or yeast
    o Parasite
  • Site of related localized infection
    o Wound infection
    o Pneumonia
    o Urinary tract infection
    o Diverticulitis
    o Peritonitis
    o Pancreatitis
    o Cholecystitis

• If sepsis is related to medical care, document this as well:
  • Central line infection
  • Foley catheter infection
  • Postoperative sepsis
  • Sepsis due to any specific device, implant, or graft

• If the cause and/or site is not known, document the suspected cause and/or site, including all clinical information that supports it, at the time of discharge.

• Document the presence or absence of severe sepsis and septic shock.

References
• ICD-10 Official Coding Guidelines, Section I.C.18: Symptoms, Signs, and Abnormal Clinical Findings NEC
• AHA Coding Clinic for ICD-10-CM/PCS, Third Quarter 2016, page 8: Sepsis Coding Issues
• AHA Coding Clinic for ICD-10-CM/PCS, First Quarter 2019, page 14: Sepsis due to Central Line Catheter Infection
• See qSOFA in EBMedicine, Updates and Controversies in the Early Management of Sepsis and Septic Shock. Available at:
Reimbursement for Sepsis DRGs

A principal diagnosis of sepsis will group to one of several DRGs. These DRGs are among the most cited when it comes to coding errors and DRG changes found in audits. Most of these DRGs are associated with a higher-than-average weight as well, so it is doubly important to ensure that sepsis is coded correctly and in accordance with physician documentation and coding guidelines.

The DRGs for sepsis as a principal diagnosis are as follows:

- 872 – Sepsis without mechanical ventilation >96 hours, without MCC
- 871 – Sepsis without mechanical ventilation >96 hours, with MCC
- 870 – Sepsis with mechanical ventilation > 96 hours
- 855 – Infectious and parasitic diseases with OR procedure without CC/MCC
- 854 – Infectious and parasitic diseases with OR procedure with CC
- 853 – Infectious and parasitic diseases with OR procedure with MCC

Section 1886(d) of the Social Security Act legislated the establishment of the inpatient discharge codes and payments under the Inpatient Prospective Payment System (IPPS) that resulted in what are now the Medicare Severity Diagnosis Related Groups (MS-DRGs) and companion codes, regulations, requirements, and software that CMS and its contractors follow. For more information, see https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/MS-DRG-Classifications-and-Software.

Accordingly, correct DRG assignment requires the following:

- Accurate principal diagnosis assignment that meets the definition of principal diagnosis
- Complications/co-morbidities (CCs) that are supported by documentation and clinical indicators
- Major complications/co-morbidities (MCCs) supported by documentation and clinical indicators
- Accurate counting of any mechanical ventilation time
- The presence or absence of an operating room (OR) procedure

Reference

- ICD-10 Official Coding Guidelines, Section II: Selection of Principal Diagnosis

Did you miss the April 2022 Livanta Claims Review Advisor related to Principal Diagnosis? Click here to catch up: https://conta.cc/38GH1l0

Chapter-Specific Coding Guidelines for Sepsis

Below are guidelines specific to sepsis according to the Official Coding Guidelines Section I.C.1.d:
• Sequence the underlying systemic infection first, meaning the sepsis code (A40.0 – A41.9) ONLY when sepsis meets the definition of principal diagnosis. Otherwise, if it developed after admission, it would be a secondary code.
• Assign an additional code from subcategory R65.2 if severe sepsis is documented, or if acute organ dysfunction is linked to sepsis by the provider.
• Assign additional codes for any acute organ dysfunction, as well as documented septic shock.
• Assign R65.21 for severe sepsis with septic shock. When septic shock is present, both sepsis and severe sepsis should be reported.
• Neither severe sepsis nor septic shock may be sequenced as the principal diagnosis.
• If sepsis is due to a non-infectious condition, either code may be assigned as principal diagnosis if both are present on admission.
• When a non-infectious condition leads to an infection that leads to severe sepsis, assign the appropriate code from R65.2, severe sepsis. Do not assign a code from R65.1, SIRS of non-infectious origin.
• Negative or inconclusive blood cultures do not preclude a diagnosis of sepsis, but the physician should be queried to determine whether sepsis was ruled out.
• No code is available for a diagnosis of “urosepsis.” The provider must be queried for clarification. Urosepsis could denote a severe UTI without presence of sepsis.

References
• ICD-10 Official Coding Guidelines, Section I.C.1.d: Sepsis, Severe Sepsis, and Septic Shock (Chapter-Specific Coding Guidelines)
• ICD-10 Official Coding Guidelines, Section I.C.1.g.1: COVID-19 Infections
Hints for the Correct Coding of Sepsis

• Verify that sepsis was present on admission before sequencing it as the principal diagnosis. If this is not clearly evident/documentated, a query may be necessary.
• Query when there is ambiguous documentation or there is any question to the validity of the diagnosis of sepsis. This includes cases where the blood cultures are negative.
• Look for the cause of sepsis—if postoperative, post-traumatic, or due to a device, the sepsis code, and its associated DRG, changes.
• If the etiology of sepsis is not documented, and the physician has not documented a suspected etiology at the time of discharge, a query should be submitted to determine if there is a known cause.
• Bacteremia (in the absence of sepsis) is defined as an asymptomatic laboratory finding. It rarely qualifies as a principal diagnosis.

Special Coding Scenarios for Sepsis

Noted below are coding scenarios from AHA Coding Clinic for ICD-10-CM/PCS. Assume that all listed conditions were present on admission. The diagnosis listed first should be the principal diagnosis.

• Sepsis due to COVID-19 – Sequencing depends on the circumstances of admission. Sequence viral sepsis as the principal diagnosis when the sepsis is present on admission, followed by U07.1 for the COVID-19.
• Sepsis due to aspiration pneumonia – A41.9 (sepsis NOS), J18.9 (pneumonia, unspecified organism), and J69.0 (aspiration pneumonia)
• Sepsis due to dialysis catheter – T80.211A (bloodstream infection due to central venous catheter, initial encounter) and A41.9 (sepsis NOS)
• Sepsis due to ventilator-associated pneumonia – A41.9 (sepsis NOS) and J95.851 (ventilator associated pneumonia)

References
• ICD-10 Official Coding Guidelines, Section I.C.18: Symptoms, Signs, and Abnormal Clinical Findings NEC
• ICD-10 Official Coding Guidelines, Section I.C.1.g.1: COVID-19 Infections
• AHA Coding Clinic for ICD-10-CM/PCS, Third Quarter 2016, page 8: Sepsis Coding Issues

Case Examples of Sepsis DRG Changes

The most common HWDRG change Livanta reviews involves adjusted claims re-billed with sepsis as the new principal diagnosis when sepsis had not been previously billed. This is often done when a positive response to a post-discharge query cites sepsis even though no elements supporting the occurrence or treatment of sepsis are documented in the medical record during the entire hospital stay. These cases are often rejected by Livanta physician reviewers due to a lack of clinical evidence and documentation supporting sepsis as the reason for admission and focus of care. After all, how
could sepsis have been the reason for admission and focus of care when it was never documented in the record? While sepsis can, at times, be validated through a post-discharge query, a physician explanation as to why sepsis was not previously mentioned is required.

Reference

• AHA Coding Clinic for ICD-10-CM/PCS, Second Quarter 2020, Page 17 – Sepsis due to Ventilator-Associated Pneumonia

Did you miss the February 2022 Livanta Claims Review Advisor related to Physician Queries? Click here to catch up:
https://conta.cc/36AjN5b

The following are case examples of sepsis DRG changes that Livanta has seen in recent reviews:

Case Review Summary: Sepsis as a Complication.
The patient was recently admitted for acute cholecystitis. This was treated by way of an open cholecystectomy, followed by IV antibiotics for 24 hours. The patient returned to the hospital four days after discharge with complaints of high fever, chills, and severe upper abdominal pain. He had significant leukocytosis and lactic acidosis. He was admitted for sepsis. Computed tomography (CT) scan indicated acute peritonitis at the surgical site. Intravenous antibiotics were ordered. Blood cultures were positive x 2. The final diagnosis was documented as sepsis due to postoperative peritonitis.

Because the sepsis was linked to a postoperative complication, the principal diagnosis must be a complication code, specifically T81.44XA (sepsis following a procedure, initial episode). This principal diagnosis groups the case into DRG 862 – Postoperative and post-traumatic infections with MCC, instead of the usual sepsis DRG. The sepsis code itself should be assigned as an additional diagnosis and serves as an MCC.
Case Review Summary: Sepsis developing after Admission.

A 71-year-old patient came in complaining of shortness of breath. She had a known history of end-stage congestive heart failure (CHF) with an ejection fraction of 26 percent. In the emergency department, her labs showed a normal complete blood count (CBC), normal metabolic profile, and an elevated pro b-type natriuretic peptide (ProBNP) of 12,650. Her vital signs were normal aside from tachypnea (22 breaths per minute) and a pulse oximetry reading of 92 percent. A chest x-ray showed moderate pulmonary edema, but otherwise clear. The patient was admitted to the inpatient unit with a diagnosis of acute exacerbation of systolic heart failure and started on IV furosemide. The next morning, the patient developed new signs and symptoms of fever, leukocytosis, tachycardia, and lactic acidosis. The follow-up chest x-ray showed a new pulmonary infiltrate. The patient was diagnosed with sepsis and IV antibiotics were started.

The final diagnoses were listed and coded as sepsis with pneumonia and exacerbation of systolic heart failure. However, sepsis was not clinically present on admission. Rather, that diagnosis emerged the day following the admission; therefore, sepsis did not occasion this admission. Only the CHF, which was present on admission, qualified as the principal diagnosis and sepsis qualifies as a secondary diagnosis with a present on admission (POA) indicator of “No.”

Conclusion

Based on HWDRG claim reviews conducted by Livanta, many hospitals could benefit from focused training on the proper documentation and coding of sepsis as well as the query requirements regarding code changes related to this diagnosis. Accurate coding supported by thorough documentation in the medical record ensures proper claim submission and payment.

Questions?

Should you have questions, please email ClaimReview@Livanta.com.

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