

Hematology

Akido Labs | MCG Care Guidelines, 30th Edition

1. MCG Criteria Used

Clinical Criteria: MCG Care Guidelines, 30th Edition

- Anemia: Inpatient Admission (MCG ORG: M-35 ISC, 30th Edition)

Applicable CPT / HCPCS Codes:

CPT / HCPCS Code	Description
85025, 85027, 85610	Hematologic laboratory testing: complete blood count, automated differential, prothrombin time
86850-86923	Blood bank services: type and crossmatch, antibody identification, compatibility testing
36430, 36440, P9010-P9022	Blood product transfusions: red blood cells, fresh frozen plasma, platelets, cryoprecipitate
96360-96365	Intravenous infusion: iron infusion and erythropoiesis-stimulating agent administration
88104-89398	Specialized hematologic studies and bone marrow evaluation
99213-99215, 99231-99233	Evaluation and management: outpatient and inpatient visits for anemia evaluation and management

2. Statement of Rationale

Akido Labs uses the criteria in MCG Care Guidelines (30th Edition) to supplement the general Medicare criteria regarding hematology services, including inpatient admissions for management of acute anemia with hemodynamic instability, symptomatic severe anemia, and progressive hemolytic anemia unresponsive to outpatient therapy, where Medicare coverage criteria are not fully established or require additional clinical specificity. MCG criteria are used to ensure consistency in reviewing the conditions to be met for coverage of inpatient hematology services and to determine when such services are medically necessary. Anemia is among the most common hematologic conditions encountered in the Medicare Advantage population, where chronic kidney disease, heart failure, gastrointestinal malignancy, and myelodysplastic syndrome substantially increase both prevalence and severity. Analysis of national hospital discharge data shows 42.8% of Medicare-insured patients presenting to the emergency department with a principal diagnosis of anemia are admitted to inpatient care, compared with 19.2% of commercially insured patients, reflecting the substantially higher clinical complexity of older adults with anemia. The mean inpatient length of stay is 3.8 days. Absent consistent, evidence-based criteria, there is material risk of both inappropriate denial of inpatient-necessary anemia management and inappropriate authorization of inpatient admission for patients who could be safely managed with outpatient or observation-level care.

Potential Clinical Harms:

Inappropriate denial: Denial of inpatient admission for a patient with anemia and hemodynamic instability, active bleeding, chest pain, dyspnea, syncope, or altered mental status could result in

cardiovascular collapse, myocardial infarction, or death outside a monitored setting. Patients with active upper or lower GI hemorrhage and severe anemia (hemoglobin below 7 g/dL with hemodynamic instability) require urgent inpatient evaluation, resuscitation, and red blood cell transfusion. Patients with autoimmune hemolytic anemia progressing despite outpatient corticosteroid therapy require inpatient immunosuppressive management and monitoring for hemolytic crisis. Denial of inpatient status for these presentations increases risk of fatal cardiovascular decompensation in a population with reduced physiologic reserve.

Inappropriate approval: Authorization of inpatient admission for anemia without hemodynamic instability, active bleeding, or symptomatic cardiovascular compromise in patients who can receive transfusion safely in an outpatient infusion center or observation setting exposes patients unnecessarily to hospital-acquired infections, delirium, and polypharmacy risks without clinical benefit. MCG criteria identify that most presentations of anemia do not require immediate inpatient treatment and can be evaluated on an outpatient basis, reducing unnecessary inpatient utilization in the Medicare Advantage population.

Clinical Benefits:

Evidence-based hemodynamic admission thresholds: MCG M-35 criteria specify inpatient admission thresholds for anemia with hemodynamic instability (tachycardia, hypotension, orthostatic changes), active hemorrhage requiring urgent transfusion, and symptomatic presentations including chest pain, dyspnea, syncope, and altered mental status. Evidence from major clinical trials (TRICC, TRISS, FOCUS) demonstrates that restrictive transfusion strategies (hemoglobin threshold 7 to 8 g/dL) reduce transfusion-related complications without increasing mortality in stable patients, directly addressing the harm of inappropriate approval described above, while patients with hemodynamic instability or active cardiac ischemia require inpatient-level resuscitation and monitoring.

Hemolytic anemia evidence-based management: MCG criteria incorporate evidence-based recommendations for progressive hemolytic anemia unresponsive to outpatient therapy, requiring inpatient admission for escalated immunosuppressive management (high-dose corticosteroids, IVIG, rituximab) and monitoring for hemolytic crisis. A narrative review included in the MCG M-35 guideline supports inpatient admission for this population based on the risk of precipitous hemoglobin decline and cardiovascular decompensation requiring urgent intervention that cannot be safely managed outside a monitored setting.

Transfusion threshold standardization: MCG criteria apply validated transfusion thresholds from major clinical trials (TRICC, TRISS, FOCUS) reducing unnecessary inpatient transfusion while ensuring appropriate blood product administration for high-risk patients. For patients with active cardiac ischemia, the ACC/AHA guideline threshold of 8 to 9 g/dL is incorporated, ensuring evidence-based differentiation of transfusion requirements across the Medicare Advantage population's diverse cardiovascular comorbidity profile.

Reduction of unwarranted variation: Standardized MCG criteria reduce care disparities by applying consistent evidence-based thresholds across diverse patient populations, facilities, and geographic regions, supporting equitable coverage determinations for inpatient hematology services in the Medicare Advantage population. The clinical benefits of using MCG Care Guidelines are highly likely to outweigh any clinical harms, including delayed or decreased access to services. The criteria incorporate validated hemodynamic thresholds and transfusion guidelines drawn directly from current emergency medicine and hematology specialty society standards and are unlikely to lead to inappropriate denials. Use of these criteria ensures patients receive the most clinically appropriate level of care and decreases inappropriate denials by applying a consistent, objective, evidence-based set of review criteria across the Medicare Advantage population.

3. Explanation of Supplementation

Basis for Use: Original Medicare clinical criteria are not fully established and require supplementation to ensure consistent medical necessity determinations for inpatient hematology services, including admission for acute symptomatic anemia, hemolytic anemia unresponsive to outpatient therapy, and transfusion-dependent anemia with cardiovascular compromise. While Medicare statutes establish the general reasonable and necessary standard, they do not specify the hemoglobin thresholds, hemodynamic parameters, or symptom severity criteria required to distinguish inpatient-appropriate from observation-appropriate or outpatient-appropriate anemia presentations.

Applicable Medicare References: Social Security Act Section 1862(a)(1): Reasonable and necessary standard Medicare Benefit Policy Manual, Chapter 1: Inpatient Hospital Services Covered Under Part A (CMS IOM Publication 100-02) Medicare Benefit Policy Manual, Chapter 6: Hospital Services Covered Under Part B (CMS IOM Publication 100-02) Medicare Benefit Policy Manual, Chapter 15: Covered Medical and Other Health Services (CMS IOM Publication 100-02) Medicare Program Integrity Manual, Chapter 6, Section 6.5: Medical Review of Inpatient Hospital Claims for Part A Payment (CMS IOM Publication 100-08) Code of Federal Regulations: 42 CFR 412.3; 42 CFR 419.22; 42 CFR 422.101 Conditions of Participation: Discharge Planning (42 CFR 482.43) No specific NCD or LCD fully establishes clinical thresholds for these services. Original Medicare criteria are not fully established, requiring supplementation. Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx> Within the above statutes and regulations, coverage criteria for inpatient hematology services are not fully established, and the use of MCG Care Guidelines is necessary to provide additional clinical specificity. Specifically, MCG criteria assist in determining: Patient stability for inpatient admission versus alternatives (observation care, outpatient transfusion, outpatient hematology evaluation) for anemia, based on hemodynamic parameters, symptom severity, and active bleeding status; Appropriateness of inpatient versus outpatient or observation-level transfusion, based on hemodynamic stability, symptom severity, and rate of hemoglobin decline; Medical necessity of inpatient management for hemolytic anemia requiring escalated immunosuppressive therapy and monitoring for hemolytic crisis; Expected clinical course and medical necessity of continued inpatient stay, including identification of underlying etiologies (active GI bleeding, hemolytic anemia, bone marrow failure) requiring stay extensions; Appropriateness of outpatient alternatives including IV iron infusion, erythropoiesis-stimulating agents, and outpatient hematology follow-up for stable anemic patients. The use of MCG Care Guidelines ensures consistency in reviewing the conditions to be met for coverage of inpatient hematology services. Use of these criteria to supplement the coverage criteria noted above provides clinical benefits by helping ensure inpatient anemia management is not incorrectly denied when medically appropriate, nor incorrectly approved when not reasonable and necessary. The clinical benefits of using these criteria are highly likely to outweigh any clinical harms, including from inappropriate denials, because the criteria are unlikely to lead to inappropriate denials and will decrease unwarranted variation through a consistent set of evidence-based review criteria.

4. Summary of Clinical Evidence

Note: The following evidence summary is derived directly from MCG Care Guidelines, 30th Edition (ISC guideline M-35). The reference list below is drawn from the MCG M-35 guideline. Background Anemia is defined as a hemoglobin level below the normal range for age and sex, most commonly below 12 g/dL in women and 13 g/dL in men, resulting from reduced red blood cell production, increased destruction, or acute blood loss. In the Medicare Advantage population, anemia is highly prevalent due to chronic kidney disease, nutritional deficiencies (iron, B12,

folate), chronic inflammatory conditions, and hematologic malignancies. Analysis of national hospital discharge data shows 42.8% of Medicare-insured patients presenting to the emergency department with a principal diagnosis of anemia are admitted to inpatient care, compared with 19.2% in a commercially insured population, reflecting the substantially higher disease severity and comorbidity burden of older adults with anemia. Analysis of an all-payer database shows a mean length of stay of 3.8 days for inpatient anemia admissions. Evidence Summary The MCG Anemia guideline (30th Edition, ORG: M-35 ISC) is supported by 6 published peer-reviewed articles, 1 specialty society or other evidence-based guideline, and 4 book sections. Key evidence includes: Analysis of national hospital discharge data for a Medicare-insured population shows 42.8% of patients presenting to the emergency department with a principal diagnosis of anemia were admitted to inpatient care, compared with 19.2% of commercially insured patients, demonstrating the substantially higher clinical acuity in the Medicare Advantage population. An emergency medicine textbook states that admission to inpatient care for patients with anemia and hemodynamic instability is necessary for urgent resuscitation, and recommends admission for patients with clinical signs or symptoms related to anemia such as chest pain, dyspnea, syncope, near syncope, or altered mental status. A narrative review recommends admission to inpatient care for patients with progressive hemolytic anemia that does not respond to outpatient therapy, based on risk of precipitous hemoglobin decline and cardiovascular decompensation requiring urgent intervention. Evidence from major clinical trials (TRICC, TRISS, FOCUS) supports restrictive transfusion strategies (hemoglobin threshold 7 to 8 g/dL) in hemodynamically stable patients, while patients with active cardiac ischemia or hemodynamic instability require higher thresholds and inpatient-level monitoring, directly informing the MCG M-35 admission criteria. Analysis of national hospital discharge data shows 73% of hospitalized patients with a principal diagnosis of anemia were discharged in 2 days or less, and 42% of hospitalized adult patients with a principal diagnosis of anemia were discharged in 2 days or less in a separate national database analysis, supporting the MCG goal length of stay of 2 days. Rationale (from MCG) Use of this MCG care guideline helps the clinician identify patient-specific complex clinical factors that make it reasonable to expect a necessity for hospital care across 2 or more midnights. The evidence-based clinical criteria assist the clinician in the decision to appropriately admit a patient to inpatient care. For Medicare enrollees, MCG care guidelines also support the clinician in the decision to appropriately admit a patient to inpatient care when there is not an expectation of 2 or more midnights of hospital care (e.g., CMS Two-Midnight Rule exceptions). Use of these evidence-based clinical criteria ensures patients receive the most appropriate care for their specific condition, reduces unnecessary risks, promotes recovery, and provides a standard that can reduce disparities in care. These guidelines supplement but do not replace, modify, or supersede existing Medicare regulations or applicable National Coverage Determinations (NCDs) or Local Coverage Determinations (LCDs).

Related CMS Coverage Guidance (as cited in MCG 30th Edition): Code of Federal Regulations (CFR): 42 CFR 412.3; 42 CFR 419.22; 42 CFR 422.101 CMS IOM Publication 100-02, Medicare Benefit Policy Manual: Chapter 1 (Inpatient Hospital Services); Chapter 6 (Hospital Services Under Part B); Chapter 15 (Covered Medical and Other Health Services) CMS IOM Publication 100-08, Medicare Program Integrity Manual, Chapter 6, Section 6.5 Medicare Coverage Database: <https://www.cms.gov/medicare-coverage-database/search.aspx> References with Citation Summary -- Anemia (MCG ORG: M-35 ISC, 30th Edition) Proprietary health insurance data sources, 2024; and Medicare 5% Standard Analytical File, 2023. Premier PINC AI™ Healthcare Database (PHD), 01/01/2023-12/31/2024. Premier, Inc. Verbillion MB, Dupre AA. Anemia and polycythemia. In: Walls RM, editor. Rosen's Emergency Medicine: Concepts and Clinical Practice. 10th ed. Elsevier; 2023:1462-1479.e2. Berentsen S, Barcellini W. Autoimmune hemolytic anemias. New England Journal of Medicine 2021;385(15):1407-1419. DOI: 1056/NEJMr2033982. Nelson A. Anemia. In: Gershel JC, Rauch DA, editors. Caring for the Hospitalized Child: A Handbook of Inpatient Pediatrics. 3rd ed. Elk Grove Village, IL: American Academy of Pediatrics; 2023:325-331. Coz Yataco AO, et al. Red blood cell transfusion in critically ill adults: an American College of Chest physicians clinical practice guideline. Chest

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5. Public Accessibility

Transparency Tool URL: <https://akido.access.mcg.com/index>

Coverage Summaries URL: <https://www.myfamilymg.com/medical-necessity-supplementation-criteria/documents>

Navigation Instructions: To access these coverage summaries, navigate to the UM Criteria page, scroll to the bottom of the page, and click the Medical Necessity Supplementation Criteria link. All summaries are organized alphabetically by category.

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