

# Injectafer (ferric carboxymaltose) PAM – 049

| Iowa Medicaid Program | Prior Authorization                  | Effective Date | 10/01/2022 |
|-----------------------|--------------------------------------|----------------|------------|
| Revision Number       | 3                                    | Last Reviewed  | 01/17/2025 |
| Reviewed By           | Medicaid Medical Director            | Next Review    | 01/16/2026 |
| Approved By           | Medicaid Clinical Advisory Committee | Approved Date  | 01/20/2023 |

# Overview

| Medication: <sup>1</sup>       | ferric carbo   | ferric carboxymaltose  |  |  |   |   |  |
|--------------------------------|--|--|--|--|---|---|--|
| Brand Name:                    | Injectafer®  | Injectafer®  |  |  |   |   |  |
| Pharmacologic<br>Category:     | Electrolyte/   | Mineral R  | eplaceme   | ents: Iron R   | eplaceme                                      | ent Produc  | t                                      |
| FDA-Approved<br>Indication(s): | Iron replace<br>1. Iron defic<br>• Adults a<br>intolerar<br>• Adult pa<br>disease.<br>2. Iron defic<br>Association   | <ul> <li>Iron replacement product indicated for the treatment of:</li> <li>1. Iron deficiency anemia (IDA) in: <ul> <li>Adults and pediatric patients 1 year of age and older who have either intolerance to oral iron or an unsatisfactory response to oral iron.</li> <li>Adult patients who have non-dialysis dependent chronic kidney disease.</li> </ul> </li> <li>2. Iron deficiency in adult patients with heart failure and New York Heart Association class II/III to improve exercise capacity.</li> </ul> |  |  |   |   |  |
| How Supplied:                  | Injection: 50<br>• 100 mg i<br>• 750 mg<br>• 1,000 mg  | Injection: 50 mg/mL in a single-dose vial. Three available vial sizes:<br>• 100 mg iron/2 mL<br>• 750 mg iron/15 mL<br>• 1.000 mg iron/20 ml   |  |  |   |   |  |
| Dosage and<br>Administration:  | <ol> <li>Iron Deficiency Anemia         <ul> <li>Patient weight ≥ 50 kg: 750 mg via intravenous infusion in 2 doses separated by at least 7 days for a total cumulative dose of 1,500 mg of iron per course. For adult patients weighing 50 kg or more, an alternative dose of 15 mg/kg up to a maximum of 1,000 mg may be administered intravenously as a single-dose treatment course.</li> <li>Patient weight &lt; 50 kg: 15 mg/kg in 2 doses separated by at least 7 days per course.</li> </ul> </li> </ol> |  |  |  |   |   |  |
|                                |  | Weigl  | ht less tha  | n 70 kg  | Weig  | ght 70 kg o   | r more                                 |
|                                |  | Hemo   | oglobin (Hl  | o), g/dL   | Hem   | oglobin (Hk   | o), g/dL                               |
|                                | D. 1   | < 10   | 10 to 14   | > 14 to < 15   | < 10  | 10 to 14  | > 14 to < 15                           |
|                                | Day I<br>Week 6  | 500 mg   | No dose  | SUU mg   | 1,000 mg                                      | 1,000 mg  | SUU mg                                 |
| Benefit Category:              | Admini<br>weeks<br>ng/mL<br>availab  | ster a ma<br>if serum<br>with tran<br>le to guio   | aintenanc<br>ferritin <<br>sferrin sa<br>le dosing | e dose of 5<br>100 ng/mL<br>Ituration <<br>beyond 36 | 00 mg at<br>or serum<br>20 %. The<br>weeks or | 12, 24 and<br>ferritin 10<br>re are no<br>with Hb > | d 36<br>90 – 300<br>data<br>> 15 g/dL. |
| Deneric Outegory.              | meandat  |  |  |  |   |   |  |

### Abbreviations

- **CKD** chronic kidney disease
- CV cardiovascular
- **EPO** erythropoietin
- ESA erythropoiesis-stimulating agents TIBC total iron binding capacity
- **HgB** hemoglobin
- **IDA** iron deficiency anemia

- MCHC mean corpuscular HgB concentration
- MCV mean corpuscular volume
- RBC red blood cell
- **TSAT** transferrin saturation
- WHO World Health Organization

### **Descriptive Narrative**

Iron deficiency affects greater than 12 percent of the world's population, especially women, children, and individuals living in under-resourced and middle-income countries. In men and postmenopausal women, the most frequent cause is chronic occult bleeding, usually from the gastrointestinal tract. In premenopausal women, cumulative menstrual blood loss is a common cause. While blood loss is the most common cause, iron deficiency may also be due to hemolysis, malabsorption, or increased demand for iron. (e.g., in pregnancy, lactation, or periods of rapid growth in children).

The usual presenting symptoms in adults with iron deficiency are primarily due to anemia. Individuals may have mild to severe symptoms, ranging from fatigue, shortness of breath, and chest pain to heart failure and developmental delays in children.<sup>2</sup>

The development of iron deficiency occurs in progressive stages. In the first stage, iron requirement exceeds intake, causing progressive depletion of bone marrow iron stores. As stores decrease, absorption of dietary iron increases in compensation. During later stages, deficiency impairs red blood cell (RBC) synthesis, ultimately causing anemia. Severe and prolonged iron deficiency may also cause dysfunction of iron-containing cellular enzymes.<sup>3</sup>

Anemia is a complication that affects a majority of individuals with advanced chronic kidney disease (CKD). The prevalence of anemia increases across the advancing stages of CKD, with estimates anywhere from 7 percent to over 50 percent in the more advanced stages of the disease.

Multiple mechanisms contribute to the development of anemia in CKD, the most important being relative deficiency of erythropoietin (EPO). As such, erythropoiesis-stimulating agents (ESAs) have been considered a staple for the management of anemia in patients with CKD. Several well conducted studies in patients with CKD indicate that use of ESAs to normalize Hgb in patients with CKD may worsen cardiovascular (CV) outcomes. Thus, the current guidelines advise a target Hgb below the definition of normal in patients with CKD.

Many patients with anemia and CKD suffer from iron-deficiency anemia (IDA). This is due to both scarcity of iron stores (absolute iron deficiency) and inefficient utilization of iron stores (functional iron deficiency). Underlying chronic inflammation contributes to the functional iron deficiency. Repletion of iron stores is often necessary in patients with CKD for the treatment of IDA and to maximize the efficacy of ESAs.<sup>4</sup>

Limitation of exercise capacity is one of the cardinal manifestations of heart failure, varying directly with the severity of the disease. Symptoms of anemia such as dyspnea and fatigue may be difficult to distinguish from symptoms of heart failure. In patients with heart failure, oxygen delivery may be impaired due to reduced cardiac output, and thus symptoms may arise at higher hemoglobin levels in patients with anemia and heart failure.<sup>5</sup> The CONFIRM-HF trial evaluated the efficacy and safety of Injectafer<sup>®</sup> in adults with chronic heart failure and iron deficiency. In the study, results showed that treatment with Injectafer<sup>®</sup> significantly improved exercise capacity compared with placebo in iron-deficient patients with heart failure.<sup>6</sup>

# **Development Stages of Iron Deficiency**

The development of iron deficiency occurs in progressive stages. RED font illustrates the progression of changes and the tests most likely to define the various stages of iron deficiency. Decreased serum ferritin and absent bone marrow iron are the earliest changes, followed by decreases in transferrin saturation (TSAT).

|   | Normal                                    | Iron deficiency<br>without anemia         | Iron deficiency with<br>mild anemia                          | Iron deficiency with severe anemia   |  |
|---|---|---|--|--|--|
| Hemoglobin  | Normal range *                            | Normal range *                            | 9-12 g/dL (90-120 g/L)                                       | 6-7 g/dL (60-70 g/L)   |  |
| Red blood cell size<br>and appearance                 | Normal                                    | Normal                                    | Normal or slight<br>hypochromia (slight<br>decrease in MCHC) | Microcytosis<br>(decrease in MCV)<br>and hypochromia<br>(decrease in MCHC) |  |
| Serum ferritin  | 40-200 ng/mL<br>(40-200 mcg/L)            | <40 ng/mL<br>(<40 mcg/L)                  | <20 ng/mL<br>(<20 mcg/L)                                     | <10 ng/mL<br>(<20 mcg/L)   |  |
| Serum iron  | 60-150 mcg/dL<br>(10.7-26.7<br>microM/L)  | 60-150 mcg/dL<br>(10.7-26.7<br>microM/L)  | <60 mcg/dL<br>(<10.7 microM/L)                               | <40 mcg/dL<br>(<7.1 microM/L)  |  |
| Total iron-binding<br>capacity<br>(TIBC; transferrin) | 300-360 mcg/dL<br>(53.7-64.4<br>microM/L) | 300-390 mcg/dL<br>(53.7-69.8<br>microM/L) | 350-400 mcg/dL<br>(62.6-71.6 microM/L)                       | >410 mcg/dL<br>(>73.4 microM/L)  |  |
| Transferrin saturation<br>(serum iron/TIBC)           | 20 to 50%                                 | 20%                                       | <15%   | <10%   |  |
| Reticulocyte<br>hemoglobin                            | 30.6-35.4 pg                              | 22.3-34.7 pg                              | 14.8-34.0 pg   | Data not available   |  |
| Bone marrow iron<br>stain                             | Adequate<br>iron present                  | Iron absent                               | Iron absent  | Iron absent  |  |
| Erythrocyte zinc<br>protoporphyrin                    | 30-70 ng/mL RBC                           | 30-70 ng/mL RBC                           | 100-200 ng/mL RBC  | 100-200 ng/mL RBC  |  |

| * Normal ranges for hemoglobin (g/dL) | lower limit       | upper limit |
|---------------------------------------|-------------------|-------------|
| Adult male                            | 14.0              | 17.5        |
| Adult female                          | 12.3              | 15.3        |
| Pediatric (6 months to < 2 years)     | 11.0 ‡            | 13.5        |
| Pediatric (2 to 6 years)              | 11.0 <sup>‡</sup> | 13.7        |
| Pediatric (6 to 12 years)             | 11.2              | 14.5        |
| Adolescent male (12 to < 18 years)    | 12.4              | 16.4        |
| Adolescent female (12 to < 18 years)  | 11.4              | 14.7        |

<sup>‡</sup> The lower limit of normal for HgB (i.e., 2.5<sup>th</sup> percentile) at these ages is slightly less than 11 g/dL. However, for the purposes of screening for iron deficiency anemia in infants and young children, many experts use a cutoff of HgB <11 g/dL to define an abnormal screen.

#### Laboratory Findings in Iron Deficiency

Serum iron may be low in anemia of chronic disease or increased by a recent meal or normal diurnal variation and by itself cannot be used to diagnose iron deficiency.

Serum ferritin may be increased by other conditions such as acute inflammation, liver disease, and idiopathic pulmonary hemosiderosis.

Transferrin saturation (TSAT) is the ratio of serum iron to total iron binding capacity (TIBC). If there is concern that oral iron intake has affected the serum iron level, using a fasting sample may be helpful. Bone marrow iron stain (the gold standard) and erythrocyte zinc protoporphyrin (a nonspecific finding) are not routinely used in the evaluation or diagnosis of iron deficiency.

## Guidelines

Guidelines regarding IDA have been developed by multiple organizations.

- World Health Organization (WHO) guideline on use of ferritin concentrations to assess iron status in individuals and populations (2020)<sup>7</sup>
- Patient Blood Management: Recommendations From the 2018 Frankfurt Consensus Conference<sup>8</sup>
- Kidney Disease Improving Global Outcomes (KDIGO) Clinical Practice Guideline for Anemia in Chronic Kidney Disease (2012)<sup>9</sup>
   KDIGO is in the process of creating an update to this guideline.

## Screening for Iron Deficiency: Recommendations

Iron deficiency is increasingly recognized as an important condition to identify before anemia develops, and practice guidelines are shifting to recommend screening in more populations at risk for iron deficiency. A new guideline from the European Hematology Association recommends screening in numerous populations, regardless of symptoms or the presence or absence of anemia.<sup>10</sup>

| Adolescent and adult population   | Adolescent and adult populations for whom screening for iron deficiency is recommended * |  |  |  |
|-----------------------------------|--|--|--|--|
| Target population                 | Rationale  |  |  |  |
| Children and adolescents          | Increased iron requirements, especially during growth spurt                              |  |  |  |
| Athletes                          | Increased iron losses from sweat and blood loss from GI bleeding                         |  |  |  |
| Vegetarians                       | Decreased iron intake, especially heme iron  |  |  |  |
| Socioeconomically disadvantaged   | Decreased iron intake  |  |  |  |
| persons                           |  |  |  |  |
| Regular blood donors              | Blood loss   |  |  |  |
| Menstruating persons              | Blood loss, especially with heavy menstrual bleeding                                     |  |  |  |
| Pregnant persons                  | Blood loss and iron transfer to the fetus; potential for fetal,                          |  |  |  |
|                                   | neonatal, and maternal adverse events  |  |  |  |
| Older adults, especially with CKD | Decreased iron absorption due to chronic inflammation;                                   |  |  |  |
| or heart failure                  | decreased utility of the MCV as a marker of iron deficiency                              |  |  |  |
|                                   | due to concomitant vitamin B12 or folate deficiency                                      |  |  |  |

| Adolescent and adult populations for whom screening for iron deficiency is recommended $\star$              |   |  |  |
|---|---|--|--|
| Target population   | Rationale   |  |  |
| Patients with bleeding disorders<br>(hemophilia, VWD)   | Blood loss  |  |  |
| Medications (anticoagulants, anti-<br>inflammatory drugs, antiplatelet<br>drugs, or proton pump inhibitors) | Blood loss; gastric irritation and GI bleeding with NSAIDs, reduced iron absorption with PPIs |  |  |

\* Adapted from: Iolascon A, Andolfo I, Russo R, et al. Recommendations for diagnosis, treatment, and prevention of iron deficiency and iron deficiency anemia. Hemasphere 2024; 8:e108.

- Iron deficiency can progress to iron deficiency anemia if not identified and treated, including administration of iron and treatment of the underlying cause of the deficiency.
- GI: gastrointestinal; MCV: mean corpuscular volume; NSAID: nonsteroidal anti-inflammatory drug; PPI: proton pump inhibitor; VWD: von Willebrand disease.

### Criteria

Prior authorization is required.

#### Iron deficiency anemia in adults and pediatric patients 1 year of age

Injectafer<sup>®</sup> is considered medically necessary when <u>ALL</u> of the following are met:

- 1. Diagnosis of iron deficiency anemia (IDA); AND
- 2. IDA diagnosis is confirmed by any of the following within the past month:
  - a. Serum ferritin < 15 ng/mL (or 30 ng/mL if pregnant); or
  - b. Serum ferritin < 41 ng/mL **AND** hemoglobin (HgB) is either < 12 g/dL (women) or < 13 g/dL (men); or
  - c. Transferrin saturation (TSAT) < 20 percent; or
  - d. Absence of stainable iron in bone marrow; AND
- 3. Documentation that member has had an inadequate response, or tolerance to, oral iron supplementation  $^{\Delta}$  after a minimum four (4) week trial: AND
- 4. Member is one (1) year of age or older; **AND**
- 5. Dose prescribed meets **ONE** of the following (a, b, or c, depending on member age and weight):
  - a. Member weight < 50 kg and dose does not exceed 15 mg/kg in 2 doses separated by at least 7 days (2 dose treatment course); **OR**
  - b. Member weight > 50 kg and dose is 750 mg in 2 doses separated by at least 7 days (2 dose treatment course); OR
  - c. Member is an adult weighing 50 kg or more and dose is 15 mg/kg (up to a maximum of 1,000 mg) given as a single-dose treatment course.

- Transferrin saturation (TSAT) < 12 %</li>
   Severe or ongoing blood loss
- Hemoglobin (HgB) < 7 g/dL</li>
- Symptomatic anemia
- Oral iron intolerance

- Unable to achieve therapeutic targets with oral iron
- Co-existing condition that may be refractory to oral iron therapy

<sup>&</sup>lt;sup>Δ</sup> <u>Oral iron therapy may not be considered optimal if any of the following exist:</u>

# Iron deficiency anemia in adults with non-dialysis dependent chronic kidney disease (CKD)

Injectafer<sup>®</sup> is considered medically necessary when **ALL** of the following are met:

- 1. Diagnosis of iron deficiency anemia (IDA); **AND**
- 2. IDA diagnosis is confirmed by any of the following within the past month:
  - a. Serum ferritin < 100 ng/mL; OR
  - b. Transferrin saturation (TSAT) < 20 percent; OR
  - c. Serum ferritin < 500 ng/mL when TSAT < 30 percent; **AND**
- 3. Member has chronically impaired renal function, but is not dependent on dialysis: **AND**
- 4. Documentation that member has had an inadequate response, or tolerance to, oral iron supplementation  $^{\Delta}$  after a minimum four (4) week trial; **AND**
- 5. Member is 18 years of age or older; AND
- 6. Dose prescribed meets **ONE** of the following (a or b, depending on member weight):
  - a. Member weight < 50 kg and dose does not exceed 15 mg/kg in 2 doses separated by at least 7 days; OR
  - b. Member weight > 50 kg and dose is either 750 mg in 2 doses (separated by at least 7 days), **OR** 15 mg/kg (maximum 1,000 mg) given as a single-dose treatment course.

<sup>Δ</sup> <u>Oral iron therapy may not be considered optimal if any of the following exist:</u>

- Transferrin saturation (TSAT) < 12 %</li>
   Severe or ongoing blood loss
- Hemoglobin (HgB) < 7 g/dL</li>
- Symptomatic anemia • Oral iron intolerance
- Unable to achieve therapeutic targets with oral iron
- Co-existing condition that may be refractory to oral iron therapy

# Iron deficiency in adults with heart failure and NYHA II/III to improve exercise capacity

Injectafer<sup>®</sup> is considered medically necessary when <u>ALL</u> of the following are met:

- 1. Diagnosis of iron deficiency anemia (IDA) confirmed by one of the following (a or b):
  - a. Serum ferritin levels less than 100  $\mu$ g/L; or
  - b. Transferrin saturation (TSAT) levels < 20 percent and ferritin level 100–300 µg/L; **AND**
- 2. Diagnosis of chronic heart failure and member meets ALL of the following:
  - a. Heart failure is classified as New York Heart Association (NYHA) class II or class III; AND
  - b. Left ventricular ejection fraction (LVEF) is less than 45 percent; **AND**
  - c. Hemoglobin (Hb) is less than 15 g/dL; **AND**
- 3. Member is 18 years of age or older; AND
- 4. Member is using to improve exercise capacity; **AND**
- 5. Dose does not exceed 1,000 mg per infusion/injection.

# **Continuation Criteria**

Injectafer<sup>®</sup> is considered medically necessary for continuation of therapy if:

- 1. Diagnosis of Iron Deficiency Anemia and all of the following are met:
  - a. Documentation of lab results and chart notes supporting additional need due to continued low hemoglobin levels; **AND**
  - Member has not experienced intolerable adverse effects or drug toxicity; <u>AND</u>
  - c. Request meets one of the following (i or ii):
    - i. Regimen prescribed does not exceed FDA-approved dosing; or
    - ii. Regimen is supported by clinical practice guidelines. Supporting clinical documentation must be provided with any request for which regimen prescribed does not align with FDA-approved labeling.

### 

- 2. Diagnosis of **Iron Deficiency with Heart Failure** and all of the following are met:
  - a. Documentation of lab results and chart notes supporting additional need due to one of the following:
    - i. Continued hemoglobin less than 15 g/dL <u>AND</u> ferritin less than 100 ng/mL; or
    - ii. Ferritin less than or equal to 300 ng/mL when transferrin saturation (TSAT) is less than 20 percent; <u>AND</u>
  - b. Member has not experienced intolerable adverse effects or drug toxicity; <u>AND</u>
  - c. Dose does not exceed 1,000 mg per infusion/injection; AND
  - d. Continuation will be for no longer than 6 months (no data available to guide dosing beyond 36 weeks for iron deficiency with heart failure).

|  | IRON DEFICIENCY ANEMIA |   |   |   |  |  |
|--|------------------------|---|---|---|--|--|
| Age  | Member<br>Weight       | Approval Duration                           | # of Doses<br>per Course                                      | Dosage Limits   |  |  |
| Pediatrics<br>(ages 1-17)                  | < 50 kg                | 3 months (up to<br>one treatment<br>course) | 2<br>• 15 mg/kg per dose<br>• 2 doses separated by at least 7 |   |  |  |
|  | <u>&gt;</u> 50 kg      | 3 months (up to<br>one treatment<br>course) | 2   | <ul> <li>750 mg per dose</li> <li>2 doses separated by at least 7 days</li> </ul>   |  |  |
|  | < 50 kg                | 3 months (up to<br>one treatment<br>course) | 2   | <ul> <li>15 mg/kg per dose</li> <li>2 doses separated by at least 7 days</li> </ul> |  |  |
| Adults<br>(ages 18+)                       |                        | 3 months (up to                             | 2   | <ul><li>750 mg per dose</li><li>2 doses separated by at least 7 days</li></ul>      |  |  |
|  | <u>&gt;</u> 50 kg      | one treatment                               | OR  |   |  |  |
|  | course)                | course)                                     | 1   | <ul> <li>15 mg/kg (max 1,000 mg) as one-<br/>time dose</li> </ul>                   |  |  |
| Continuation Duration (all ages): 3 months |                        |   |   |   |  |  |

# Approval Duration and Quantity Limits

| IRON DEFICIENCY IN ADULTS WITH HEART FAILURE AND NYHA II/III |                           |  |  |
|--|---------------------------|--|--|
|  | Initial Authorization     | Continuation Authorization                     |  |
| Quantity Limits  | Maximum 1,000 mg per dose | 3 months                                       |  |
| Approval Duration  | Maximum 1,000 mg per dose | Not to exceed a total of 6 months of treatment |  |

## Coding and Product Information

The following list(s) of codes and product information are provided for reference purposes only and may not be all inclusive. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment, nor does the exclusion of a code imply that its association to the HCPCS code is inappropriate.

| HCPCS | Description                            |
|-------|--|
| J1439 | Injection, ferric carboxymaltose, 1 mg |
|       |  |

| ICD-10        | Description                                     |
|---------------|---|
| D50.0 - D50.9 | Iron deficiency anemia                          |
| D63.0 - D63.8 | Anemia in chronic diseases classified elsewhere |
| 150 – 150.9   | Heart failure                                   |
| N18.1 – N18.5 | Chronic kidney disease, stages I - V            |

| NDC (Strength)                    | Labeler                       | Dosage | Pkg<br>Size | Pkg<br>Qty | Units/<br>Pkg |
|-----------------------------------|-------------------------------|--------|-------------|------------|---------------|
| 00517-0602-01<br>(100 mg/2 mL)    | American Regent, Inc. (00517) | 1 mg   | 1           | EA         | 100           |
| 00517-0650-01<br>(750 mg/15 mL)   | American Regent, Inc. (00517) | 1 mg   | 1           | EA         | 750           |
| 00517-0620-01<br>(1,000 mg/20 mL) | American Regent, Inc. (00517) | 1 mg   | 1           | EA         | 1,000         |

## Compliance

- 1. Should conflict exist between the policy and applicable statute, the applicable statute shall supersede.
- 2. Federal and State law, as well as contract language, including definitions and specific contract provisions or exclusions, take precedence over medical policy and must be considered first in determining eligibility for coverage.
- 3. Medical technology is constantly evolving, and Iowa Medicaid reserves the right to review and update medical policy on an annual or as-needed basis.

Medical necessity guidelines have been developed for determining coverage for member benefits and are published to provide a better understanding of the basis upon which coverage decisions are made. Medical necessity guidelines are developed for selected physician-administered medications found to be safe and proven to be effective in a limited, defined population or clinical circumstances. They include concise clinical coverage criteria based on current literature review, consultation with practicing physicians in the service area who are medical experts in the particular field, FDA and other government agency policies, and standards adopted by national accreditation organizations. Criteria are revised and updated annually, or more frequently if new evidence becomes available that suggests needed revisions.

# References

<sup>1</sup> Injectafer<sup>®</sup> prescribing information (05/2023). American Regent, Inc.: Shirley, NY. Available online: <u>injectaferhcp.com</u>. Accessed November 2, 2024.

<sup>2</sup> Iron-Deficiency Anemia. National Heart, Lung, and Blood Institute (NHLBI). 2022. Available online at <u>www.nhlbi.nih.gov/health/anemia/iron-deficiency-anemia</u>. Accessed January 7, 2023.

<sup>3</sup> Braunstein EM. Iron Deficiency Anemia (Anemia of Chronic Blood Loss; Chlorosis). Merck Manual, Professional Version. Available online at <u>www.merckmanuals.com/professional/ hematology-and-oncology/anemias-</u> <u>caused-by-deficient-erythropoiesis/iron-deficiency-anemia</u>. Accessed January 6, 2023.

<sup>4</sup> Batchelor EK, Kapitsinou P, et al. Iron Deficiency in Chronic Kidney Disease: Updates on Pathophysiology, Diagnosis, and Treatment. J Am Soc Nephrol. 2020 Mar;31(3):456-468. Epub 2020 Feb 10. PMID: 32041774.

<sup>5</sup> Colucci WS. Evaluation and management of anemia and iron deficiency in adults with heart failure. Dardas TF and Tirnauer JS, ed. UpToDate. Waltham, MA: UpToDate Inc. <u>www.uptodate.com</u>. Accessed December 17, 2023.

<sup>6</sup> A Study to Compare the Use of Ferric Carboxymaltose with Placebo in Patients with Chronic Heart Failure and Iron Deficiency (CONFIRM-HF). ClinicalTrials.gov identifier: NCT01453608. Updated March 8, 2015. <u>www.clinicaltrials.gov/study/NCT01453608</u>. Accessed December 17, 2023.

<sup>7</sup> WHO guideline on use of ferritin concentrations to assess iron status in individuals and populations. Geneva: World Health Organization; 2020. PMID: 33909381.

<sup>8</sup> Mueller MM, Van Remoortel H, et al; ICC PBM Frankfurt 2018 Group. Patient Blood Management: Recommendations From the 2018 Frankfurt Consensus Conference. JAMA. 2019 Mar 12;321(10):983-997. PMID: 30860564.

<sup>9</sup> Kidney Disease: Improving Global Outcomes (KDIGO) Anemia Work Group. KDIGO Clinical Practice Guideline for Anemia in Chronic Kidney Disease. Kidney Inter. 2012; Suppl 2: 279–335. <sup>10</sup> Aeurbach M, DeLoughery TG. Causes and diagnosis of iron deficiency and iron deficiency anemia in adults. Tirnauer JS, Givens J, ed. UpToDate. Waltham, MA: UpToDate Inc. <u>www.uptodate.com</u>. Accessed December 16, 2024.

Development of utilization management criteria may also involve research into other state Medicaid programs, other payer policies, consultation with experts and review by the Medicaid Clinical Advisory Committee (CAC). These sources may not be referenced individually unless they are specifically published and are otherwise applicable to the criteria at issue.

| Criteria Chai                         | nge History |   |     |
|---------------------------------------|-------------|---|-----|
| Change Date                           | Changed By  | Description of Change Vers  | ion |
| [mm/dd/yyyy]                          | CAC         |   |     |
| Signature                             |             |   |     |
| Change Date                           | Changed By  | Description of Change Vers  | ion |
| [mm/dd/yyyy]                          | CAC         |   |     |
| Signature                             |             |   |     |
| Change Date                           | Changed By  | Description of Change Vers  | ion |
| 01/17/2025                            | CAC         | Annual review. Added screening recommendations from the   | 3   |
|                                       |             | section. Updated references.  |     |
| Signature                             |             | 0.000000  |     |
| William (Bill) Ja                     | agiello, DO | /V/VVVVQm   |     |
| Change Date                           | Changed By  | Description of Change Vers  | ion |
| 01/19/2024                            | CAC         | Annual review. New indication for iron deficiency in adult<br>patients with heart failure and NYHA II/III to improve<br>exercise capacity (FDA-approved 5/31/23) – updated<br>overview table and added criteria for new indication. Added<br>continuation criteria for all indications. Updated Quantity<br>Limits and Authorization Duration tables for all indications. | 2   |
| <b>Signature</b><br>William (Bill) Ja | agiello, DO | Mmgm  |     |
| Change Date                           | Changed By  | Description of Change Vers  | ion |
| 01/20/2023                            | CAC         | Criteria implementation.  | 1   |
| <b>Signature</b><br>William (Bill) Ja | agiello, DO | Mmgm  |     |

CAC = Medicaid Clinical Advisory Committee