Intravenous Iron Replacement Therapy (Feraheme®, Injectafer®, & Monoferric®)

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Instructions for Use

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Community Plan Policy

- Intravenous Iron Replacement Therapy (Feraheme®, Injectafer®, & Monoferric®)

Coverage Rationale

See Benefit Considerations

This policy refers to the following intravenous iron replacements:

- Feraheme® (ferumoxytol)
- Injectafer® (ferric carboxymaltose)
- Monoferric® (ferric derisomaltose)

The following intravenous iron replacements are not subject to the coverage criteria in this section:

- Ferrlecit (sodium ferric gluconate complex)
- Infed® (iron dextran)
- Venofer® (iron sucrose)

Feraheme (ferumoxytol), Injectafer (ferric carboxymaltose), and Monoferric (ferric derisomaltose) are proven for the following indications:

Iron Deficiency Anemia (IDA) Without Chronic Kidney Disease (CKD)

Feraheme, Injectafer, and Monoferric are medically necessary when the following criteria are met:

- For initial therapy, all of the following:
  - Submission of medical records (e.g., lab values, chart notes, etc.) supporting the diagnosis of IDA; and
  - Patient does not have CKD; and
  - History of failure, contraindication, or intolerance, to oral iron therapy; and
  - One of the following: (For Medicare reviews, refer to the CMS section.*)
    - Both of the following:

- Submission of laboratory values demonstrating treatment failure after at least 3 weeks of therapy, to at least two of the following intravenous iron therapies each (Note: Laboratory values should be obtained within 1 to 3 weeks following the last dose of intravenous iron in a treatment course):
  - Infed® (iron dextran)
  - Ferrlecit (sodium ferric gluconate complex)
  - Venofer® (iron sucrose)

  and
- Physician attests that in their clinical opinion, the clinical response would be expected to be superior with Feraheme, Injectafer, or Monoferric than experienced with the other products

or

- Both of the following:
  - History of intolerance, contraindication, or severe adverse event, to all of the following intravenous iron therapies not previously tried and experienced treatment failure:
    - Infed® (iron dextran)
    - Ferrlecit (sodium ferric gluconate complex)
    - Venofer® (iron sucrose)

    and
  - Physician attests that in their clinical opinion, the same intolerance, contraindication, or severe adverse event would not be expected to occur with Feraheme, Injectafer, or Monoferric than experienced with the other products

and

- One of the following:
  - Feraheme dose does not exceed 510 mg elemental iron per dose and 2.04g elemental iron per course; or
  - Injectafer dose does not exceed 750 mg elemental iron per dose and 1500mg elemental iron per course; or
  - Monoferric dose does not exceed 1000 mg elemental iron per dose/course

  and
- Initial authorization will be for no longer than 3 months.

- For continuation of therapy, all of the following:
  - Coverage has previously been provided by UnitedHealthcare for Feraheme, Injectafer, or Monoferric for the treatment of IDA; and
  - Submission of recent laboratory results (within the past 4 weeks) since the last Feraheme, Injectafer, or Monoferric administration to demonstrate need for additional therapy; and
  - Patient does not have CKD; and
  - One of the following:
    - Feraheme dose does not exceed 510 mg elemental iron per dose and 2.04g elemental iron per course; or
    - Injectafer dose does not exceed 750 mg elemental iron per dose and 1500mg elemental iron per course; or
    - Monoferric dose does not exceed 1000 mg elemental iron per dose/course

    and
  - Continuation authorization will be for no longer than 3 months.

Iron Deficiency Anemia (IDA) Associated With Chronic Kidney Disease (CKD), Without End Stage Renal Disease (ESRD)

Feraheme, Injectafer, and Monoferric are medically necessary when the following criteria are met:

- For initial therapy, all of the following:
  - Diagnosis of IDA and CKD; and
  - Submission of medical records (e.g., lab values, chart notes, etc.) supporting the diagnosis of IDA; and
  - Patient does not have ESRD; and
  - One of the following:
    - Patient's CKD requires hemodialysis or peritoneal dialysis treatment; or
    - Both of the following:
      - Patient's CKD does not require hemodialysis or peritoneal dialysis treatment; and
      - History of failure, contraindication, or intolerance, to oral iron therapy

    and
  - One of the following: (For Medicare reviews, refer to the CMS section.*)
    - Both of the following:

- Submission of laboratory values demonstrating treatment failure after at least 3 weeks of therapy, to at least two of the following intravenous iron therapies each (Note: Laboratory values should be obtained within 1 to 3 weeks following the last dose of intravenous iron in a treatment course):
  - Infed® (iron dextran)
  - Ferrlecit (sodium ferric gluconate complex)
  - Venofer® (iron sucrose)

  and
- Physician attests that in their clinical opinion, the clinical response would be expected to be superior with Feraheme, Injectafer, or Monoferric than experienced with the other products

or

- Both of the following:
  - History of intolerance, contraindication, or severe adverse event, to all of the following intravenous iron therapies not previously tried and experienced treatment failure:
    - Infed® (iron dextran)
    - Ferrlecit (sodium ferric gluconate complex)
    - Venofer® (iron sucrose)

    and
  - Physician attests that in their clinical opinion, the same intolerance, contraindication, or severe adverse event would not be expected to occur with Feraheme, Injectafer, or Monoferric than experienced with the other products

and

- One of the following:
  - Feraheme dose does not exceed 510 mg elemental iron per dose and 2.04g elemental iron per course; or
  - Injectafer dose does not exceed 750 mg elemental iron per dose and 1500mg elemental iron per course; or
  - Monoferric dose does not exceed 1000 mg elemental iron per dose/course

  and
- Initial authorization will be for no longer than 3 months.

- For continuation of therapy, all of the following:
  - Coverage has previously been provided by UnitedHealthcare for Feraheme, Injectafer, or Monoferric for the treatment of IDA with CKD; and
  - Patient does not have ESRD; and
  - Submission of recent laboratory results (within the past 4 weeks) since the last Feraheme, Injectafer, or Monoferric administration to demonstrate need for additional therapy; and
  - One of the following:
    - Feraheme dose does not exceed 510 mg elemental iron per dose and 2.04g elemental iron per course; or
    - Injectafer dose does not exceed 750 mg elemental iron per dose and 1500mg elemental iron per course; or
    - Monoferric dose does not exceed 1000 mg elemental iron per dose/course

    and
  - Continuation authorization will be for no longer than 3 months.

Definitions

For the purposes of this policy, Iron Deficiency Anemia is defined as:

- Iron Deficiency Anemia (IDA) Without Chronic Kidney Disease (CKD) or Acute or Chronic Inflammatory Conditions: Serum ferritin <30 ng/mL or transferrin saturation (TSAT) <20% or an absence of stainable iron in bone marrow. [3,4,7,11,18]
- Iron Deficiency Anemia (IDA) With CKD or Acute or Chronic Inflammatory Conditions: Serum ferritin <100 ng/mL or TSAT <20%. If serum ferritin is 100-300 ng/mL, TSAT <20% is required to confirm iron deficiency.[3,4,7,11,18]

Applicable Codes

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may

require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies and Guidelines may apply.

HCPCS Code	Description
J1437	Injection, ferric derisomaltose, 10 mg
J1439	Injection, ferric carboxymaltose, 1 mg
Q0138	Injection, ferumoxytol, for treatment of iron deficiency anemia, 1 mg (non-ESRD use)

Diagnosis Code	Description
D50.0	Iron deficiency anemia secondary to blood loss (chronic)
D50.1	Sideropenic dysphagia
D50.8	Other iron deficiency anemias
D50.9	Iron deficiency anemia, unspecified
D63.1	Anemia in chronic kidney disease
N18.1	Chronic kidney disease, stage 1
N18.2	Chronic kidney disease, stage 2 (mild)
N18.30	Chronic kidney disease, stage 3 unspecified
N18.31	Chronic kidney disease, stage 3a
N18.32	Chronic kidney disease, stage 3b
N18.4	Chronic kidney disease, stage 4 (severe)
N18.5	Chronic kidney disease, stage 5
I12.9	Hypertensive chronic kidney disease with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I13.0	Hypertensive heart and chronic kidney disease with heart failure and stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease
I13.10	Hypertensive heart and chronic kidney disease without heart failure, with stage 1 through stage 4 chronic kidney disease, or unspecified chronic kidney disease

Background

The major causes of iron deficiency are decreased dietary intake, reduced iron absorption, and blood loss. In countries with abundant resources, such as the United States, the most common cause of iron deficiency is blood loss, either overt or occult bleeding. Iron replacement, either taken orally or parenterally, provides supplemental iron and thereby increasing iron and ferritin levels, increasing iron stores, and decreasing total iron binding capacity. Iron supplementation can usually result in higher hemoglobin and hematocrit values, and often can decrease the need for epoetin in patients with anemia and chronic kidney disease.

Benefit Considerations

Some Certificates of Coverage allow for coverage of experimental/investigational/unproven treatments for life-threatening illnesses when certain conditions are met. The member specific benefit plan document must be consulted to make coverage decisions for this service. Some states mandate benefit coverage for off-label use of medications for some diagnoses or under some circumstances when certain conditions are met. Where such mandates apply, they supersede language in the benefit document or in the medical or drug policy. Benefit coverage for an otherwise unproven service for the treatment of serious rare diseases may occur when certain conditions are met. See the Policy and Procedure addressing the treatment of serious rare diseases.

Iron Deficiency Anemia

Ferric carboxymaltose and ferumoxytol are indicated for the treatment of iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron or who have chronic kidney disease (CKD).[1,2]

Technology Assessments

De Franceshi et al, published a systematic review on the advances in diagnosis and treatment in the clinical management of iron deficiency anemia in adults. The authors performed their systematic review using specific search strategy, carried out the review of PubMed database, Cochrane Database of systemic reviews and international guidelines on diagnosis and clinical management of ID from 2010 to 2016. International guidelines were limited to those with peer-review process and published in journal present in citation index database. The eligible studies show that serum ferritin and transferrin saturation are the key tests in early decision-making process to identify iron deficiency anemia (IDA). Of the over 7,000 titles screened, 195 articles were manually reviewed and 58 were selected as relevant to the analysis. For the treatment of IDA, the analysis observed the following outcomes:

- The choice on iron supplementation is based on Hgb levels, the tolerance to oral iron supplementation and the presence of concomitant disease, which might affect iron absorption.
- Intravenous iron administration is definitively more effective in correction of ID since it by-passes the iron absorption step. It offers advantages over oral iron such as:
  - Rapid repletion of iron stores;
  - Single dose sufficient for most of the new IV formulation with a reduction in hospital visits
- Follow-up schedule of iron-supplementation therapy is based on the evaluation of Hgb levels at 4weeks of treatment. Day 14 Hgb levels have been proposed in decision-making process to move patient from oral to IV administration in case of failure.
- In CKD, iron oral supplementation is recommended in patients with IDA not receiving ESAs and not on hemodialysis (HD).
- IV iron should be proposed to patients on ESAs treatment and/or on HD, based on the evidence that oral iron does not sufficiently support ESAs stimulated erythropoiesis.
- Iron supplementation should be always considered as part of clinical management of CHF patients.
- In iron restricted iron deficiency anemia (IRIDA) patients, oral iron administration usually does not solve the problem, whereas IV iron temporally ameliorates this condition. Ferritin levels could be reduced or normal after iron treatment.

Peyrin-Biroulet and colleagues performed a systematic review of guidelines on the diagnosis and treatment of iron deficiency across several indications. In this review 127 guidelines were identified in a search of PubMed, Cochrane, and EMBASE and in main professional society websites. Overall 29 guidelines were selected that involved multiple professional societies internationally. A total of 22 and 27 guidelines provided recommendations on diagnosis and treatment of iron deficiency (ID), respectively. To define ID, all guidelines recommended a concentration for serum ferritin. One-half of them (10 of 22) proposed transferrin saturation (TSAT) as an alternative or complementary diagnostic test. To treat ID, most of the guidelines (18 of 27) recommended preferentially the oral route if possible, particularly in children and in women in the pre- or post-pregnancy period. Iron supplementation should be administered intravenously according to 13 of 27 guidelines, particularly in patients with chronic kidney disease (CKD) (n = 7) and chemotherapy-induced anemia (n = 5). Treatment targets for ID included an increase in hemoglobin concentrations to 10–12 g/dL or normalization (n = 8) and serum ferritin >100 µg/L (n = 7) or 200 µg/L (n = 4). For the latter, in some situations, such as CKD, ferritin concentrations should not exceed 500 µg/L (n = 5) or 800 µg/L (n = 5). Only 9 guidelines recommended TSAT as a target, proposing various thresholds ranging from 20% to 50%. The authors conclude that for the diagnosis of ID, a cutoff of 100 µg/L for serum ferritin concentration should be considered in most conditions and 20% for TSAT, except in particular situations, including young healthy women with heavy menstrual flow. New indications of intravenous iron supplementation are emerging.

Professional Societies

In 2018, the European Society for Medical Oncology (ESMO) published their clinical practice guidelines for the management of anemia and iron deficiency in patients with cancer. In regards to the diagnosis and treatment of iron deficiency anemia, the guidelines state:

- Patients receiving ongoing chemotherapy who present with anemia (Hgb ≤ 11 g/dL or Hgb decrease ≥ 2 g/dL from a baseline level ≤ 12 g/dL) and absolute iron deficiency (ID) (serum ferritin < 100 ng/mL) should receive iron treatment with

an intravenous (IV) iron preparation to correct ID. If erythropoiesis-stimulating agent (ESA) treatment is considered, iron treatment should be given before the initiation of and/or during ESA therapy in the case of functional ID (TSAT < 20% and serum ferritin > 100 ng/mL).
- IV iron without additional anemia therapy may be considered in individual patients with functional ID (TSAT < 20% and serum ferritin > 100 ng/mL).
- Iron treatment should be limited to patients on chemotherapy. In patients receiving cardiotoxic chemotherapy, IV iron should either be given before or after (not on the same day) administration of chemotherapy or at the end of a treatment cycle.
- Patients with confirmed functional ID should receive a dose of 1000 mg iron given as single dose or multiple doses according to the label of available IV iron formulations. Patients with confirmed absolute ID should receive IV iron doses according to the approved labels of available products until correction of ID.

In 2015, the European Crohn's and Colitis Organization published European consensus guidelines for the diagnosis, treatment, and prevention of iron deficiency and iron deficiency anemia, as well as for non-iron deficiency anemia and associated conditions. In regards to iron deficiency anemia, the guidelines recommend:
- Diagnostic criteria for iron deficiency depend on the level of inflammation. In patients without clinical, endoscopic, or biochemical evidence of active disease, serum ferritin <30 µg/L is an appropriate criterion. In the presence of inflammation, a serum ferritin up to 100 µg/L may still be consistent with iron deficiency
- In the presence of biochemical or clinical evidence of inflammation, the diagnostic criteria for anemia of chronic disease (ACD) are a serum ferritin >100 µg/L and TfS <20%. If the serum ferritin level is between 30 and 100 µg/L, a combination of true iron deficiency and ACD is likely.
- Iron supplementation is recommended in all inflammatory bowel disease (IBD) patients when iron deficiency anemia (IDA) is present.
- The goal of iron supplementation is to normalize hemoglobin levels and iron stores.
- Intravenous iron should be considered as first line treatment in patients with clinically active IBD, with previous intolerance to oral iron, with hemoglobin below 10g/dL, and in patients who need erythropoiesis-stimulating agents (ESAs).
- Oral iron is effective in patients with IBD and may be used in patients with mild anemia, whose disease is clinically inactive, and who have not been previously intolerant to oral iron.
- No more than 100mg elemental iron per day is recommended in patients with IBD.
- Patients with IBD should be monitored for recurrent iron deficiency every 3 months for at least a year after correction, and between 6 and 12 months thereafter.
- After successful treatment of iron deficiency anemia with intravenous iron, re-treatment with intravenous iron should be initiated as soon as serum ferritin drops below 100 µg/L or hemoglobin below 12 or 13g/dL (according to gender).

In 2012, the Kidney Disease Improving Global Outcomes (KDIGO) clinical practice guideline for anemia in CKD was published. In regards to diagnosis and treatment, the guideline recommends:
- Diagnosis of anemia:
  - Diagnose anemia in adults and children >15 years with CKD when the Hb concentration is <13.0 g/dl (<130 g/l) in males and <12.0 g/dl (<120 g/l) in females. (Not Graded)
  - Diagnose anemia in children with CKD if Hb concentration is <11.0 g/dl (<110 g/l) in children 0.5–5 years, <11.5 g/dl (115 g/l) in children 5–12 years, and <12.0 g/dl (120 g/l) in children 12–15 years. (Not Graded)
- Investigation of anemia:
  - In patients with CKD and anemia (regardless of age and CKD stage), include the following tests in initial evaluation of the anemia (Not Graded):
    - Complete blood count (CBC), which should include Hb concentration, red cell indices, white blood cell count and differential, and platelet count
    - Absolute reticulocyte count
    - Serum ferritin level
    - Serum transferrin saturation (TSAT)
    - Serum vitamin B12 and folate levels
- Treatment with iron agents:
  - When prescribing iron therapy, balance the potential benefits of avoiding or minimizing blood transfusions, ESA therapy, and anemia-related symptoms against the risks of harm in individual patients (e.g., anaphylactoid and other acute reactions, unknown long-term risks). (Not Graded)

- For adult CKD patients with anemia not on iron or ESA therapy we suggest a trial of IV iron (or in CKD ND patients alternatively a 1–3 month trial of oral iron therapy) if (2C):
  - an increase in Hb concentration without starting ESA treatment is desired; and
  - TSAT is ≤30% and ferritin is ≤500 ng/ml (≤500 mg/l)
- For adult CKD patients on ESA therapy who are not receiving iron supplementation, we suggest a trial of IV iron (or in CKD ND patients alternatively a 1–3 month trial of oral iron therapy) if (2C):
  - an increase in Hb concentration or a decrease in ESA dose is desired; and
  - TSAT is ≤30% and ferritin is ≤500 ng/ml (≤500 mg/l)
- For CKD ND patients who require iron supplementation, select the route of iron administration based on the severity of iron deficiency, availability of venous access, response to prior oral iron therapy, side effects with prior oral or IV iron therapy, patient compliance, and cost. (Not Graded)
- Guide subsequent iron administration in CKD patients based on Hb responses to recent iron therapy, as well as ongoing blood losses, iron status tests (TSAT and ferritin), Hb concentration, ESA responsiveness and ESA dose in ESA treated patients, trends in each parameter, and the patient's clinical status. (Not Graded)
- For all pediatric CKD patients with anemia not on iron or ESA therapy, we recommend oral iron (or IV iron in CKD HD patients) administration when TSAT is ≤20% and ferritin is ≤100 ng/ml (≤100 lg/l). (1D)
- For all pediatric CKD patients on ESA therapy who are not receiving iron supplementation, we recommend oral iron (or IV iron in CKD HD patients) administration to maintain TSAT >20% and ferritin >100 ng/ml (>100 lg/l). (1D)

- Iron status evaluation:
  - Evaluate iron status (TSAT and ferritin) at least every 3 months during ESA therapy, including the decision to start or continue iron therapy. (Not Graded)
  - Test iron status (TSAT and ferritin) more frequently when initiating or increasing ESA dose, when there is blood loss, when monitoring response after a course of IV iron, and in other circumstances where iron stores may become depleted. (Not Graded)
- Cautions regarding iron therapy:
  - When the initial dose of IV iron dextran is administered, we recommend (1B) and when the initial dose of IV non-dextran iron is administered, we suggest (2C) that patients be monitored for 60 minutes after the infusion, and that resuscitative facilities (including medications) and personnel trained to evaluate and treat serious adverse reactions be available.

In 2011, the British Society of Gastroenterology published their guidelines for the management of iron deficiency anemia. In regards to treatment, the guideline recommends:

- All patients should have iron supplementation both to correct anemia and replenish body stores (B).
- Parenteral iron can be used when oral preparations are not tolerated (C).
- Blood transfusions should be reserved for patients with or at risk of cardiovascular instability due to the degree of their anemia (C).

U.S. Food and Drug Administration (FDA)

This section is to be used for informational purposes only. FDA approval alone is not a basis for coverage.

Feraheme (ferumoxytol) is an iron replacement product indicated for the treatment of iron deficiency anemia (IDA) in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron or who have chronic kidney disease (CKD).

Injectafer (ferric carboxymaltose) is an iron replacement product indicated for the treatment of IDA in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron or who have non-dialysis dependent CKD.

Monoferric (ferric derisomaltose) is an iron replacement product indicated for the treatment of iron deficiency anemia in adult patients who have intolerance to oral iron or have had unsatisfactory response to oral iron or who have non-hemodialysis dependent chronic kidney disease.

Centers for Medicare and Medicaid Services (CMS)

Medicare does not have a National Coverage Determination (NCD) for Feraheme® (Ferumoxytol), Injectafer® (ferric carboxymaltose), or Monoferric® (ferric derisomaltose). Local Coverage Articles (LCAs) exist; refer to the LCAs for Parenteral Iron Administration Coverage in Non-Dialysis Usage.

In general, Medicare covers outpatient (Part B) drugs that are furnished "incident to" a physician's service provided that the drugs are not usually self-administered by the patients who take them. Refer to the Medicare Benefit Policy Manual, Chapter 15, §50 - Drugs and Biologicals.
(Accessed October 30, 2020)

*Preferred therapy criteria is not applicable for Medicare Advantage members.

References

1. Feraheme [prescribing information]. AMAG Waltham, MA: Pharmaceuticals, Inc.; August 2020.
2. Injectafer [prescribing information]. Shirley, NY: American Regent, Inc.; August 2020.
3. KDIGO 2012 clinical practice guideline for evaluation and management of chronic kidney disease. Kidney International Supplements. January 2013; 3(1): 1-136.
4. KDIGO 2012 clinical practice guideline for anemia in chronic kidney disease. Kidney International Supplements. August 2012; 2(4): 279-331.
5. Camaschella C. Iron-Deficiency Anemia. N Engl J Med. 2015; 372: 1832-43.
6. Short MW, Domagalski JE. Iron Deficiency Anemia: Evaluation and Management. Am Fam Physician. 2013; 87(2): 98-104.
7. Macdougall IC, Bircher AJ, Eckardt KU, et al. Iron management in chronic kidney disease: conclusions from a "Kidney Disease: Improving Global Outcomes" (KDIGO) Controversies Conference. Kidney Int. 2016 Jan;89(1):28-39.
8. Braunstein EM. Iron Deficiency Anemia. Porter RS, Ed. Merk Manual Merck & Co., Inc., Kenilworth, NJ. Accessed on November 20, 2019.
9. Auerbach M. Causes and diagnosis of iron deficiency and iron deficiency anemia in adults. Timauer JS, Kunins L, Eds. UptoDate. Waltham, MA: UpToDate Inc. https://www.uptodate.com. Accessed on October 29, 2020.
10. Auerbach M. Treatment of iron deficiency anemia in adults. Timauer JS, Kunins L, Eds. UptoDate. Waltham, MA: UpToDate Inc. https://www.uptodate.com. Accessed on October 29, 2020.
11. Bems JS. Diagnosis of iron deficiency in chronic kidney disease. Motwani S, Ed. Waltham, MA: UpToDate Inc. https://www.uptodate.com. Accessed on October 29, 2020.
12. Breymann C, Honegger C, Hösli I, Surbek D. Diagnosis and Treatment of Iron-Deficiency Anaemia in Pregnancy and Postpartum. Arch Gynecol Obstet. December 2017; 296(6), 1229-1234; Dec 2017
13. Peyrin-Biroulet L, Williet N, Cacoub P. Guidelines on the diagnosis and treatment of iron deficiency across indications: a systematic review. Am J Clin Nutr. 2015;102(6):1585–1594.
14. De Franceschi L, Iolascon A, Taher A, Cappellini MD. Clinical management of iron deficiency anemia in adults: Systemic review on advances in diagnosis and treatment. Eur J Intern Med. 2017; 42:16–23.
15. Goddard AF, James MW, McIntyre AS, et al. Guidelines for the management of iron deficiency anaemia. Gut. October 2011. 60(10), 1309-16.
16. Dignass AU, Gasche C, Bettenworth D, et al. European Consensus on the Diagnosis and Management of Iron Deficiency and Anaemia in Inflammatory Bowel Diseases. J Crohns Colitis. March 2015; 9(3), 211-22.
17. Aapro M, Beguin Y, Bokemeyer C, et al. Management of anaemia and iron deficiency in patients with cancer: ESMO Clinical Practice Guidelines. Ann Oncol. 2018;29(Suppl 4): iv96–iv110.
18. Dignass A, Farraq K, Stein J. Limitations of Serum Ferritin in Diagnosing Iron Deficiency in Inflammatory Conditions. Int J Chronic Dis. 2018 Mar 18; 2018:9394060.

19. Monoferric [prescribing information]. Holbaek, Denmark: Pharmacosmos A/S; July 2020.

Policy History/Revision Information

Date	Summary of Changes
01/01/2021	Coverage Rationale • Added instruction to refer to the *CMS* section of the policy for Medicare reviews Supporting Information • Updated *CMS* and *References* sections to reflect the most current information • Archived previous policy version 2020D0088D

Instructions for Use

This Medical Benefit Drug Policy provides assistance in interpreting UnitedHealthcare standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare reserves the right to modify its Policies and Guidelines as necessary. This Medical Benefit Drug Policy is provided for informational purposes. It does not constitute medical advice.

This Medical Benefit Drug Policy may also be applied to Medicare Advantage plans in certain instances. In the absence of a Medicare National Coverage Determination (NCD), Local Coverage Determination (LCD), or other Medicare coverage guidance, CMS allows a Medicare Advantage Organization (MAO) to create its own coverage determinations, using objective evidence-based rationale relying on authoritative evidence (Medicare IOM Pub. No. 100-16, Ch. 4, §90.5).

UnitedHealthcare may also use tools developed by third parties, such as the MCG™ Care Guidelines, to assist us in administering health benefits. UnitedHealthcare Medical Benefit Drug Policies are intended to be used in connection with the independent professional medical judgment of a qualified health care provider and do not constitute the practice of medicine or medical advice.