Measure #68 (NQF 0378): Hematology: Myelodysplastic Syndrome (MDS): Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy – National Quality Strategy Domain: Effective Clinical Care

2017 OPTIONS FOR INDIVIDUAL MEASURES:
REGISTRY ONLY

MEASURE TYPE:
Process

DESCRIPTION:
Percentage of patients aged 18 years and older with a diagnosis of myelodysplastic syndrome (MDS) who are receiving erythropoietin therapy with documentation of iron stores within 60 days prior to initiating erythropoietin therapy

INSTRUCTIONS:
This measure is to be reported a minimum of once per **performance period** for all myelodysplastic syndrome (MDS) patients seen during the performance period, regardless of when erythropoietin therapy is initiated; the quality action being measured is that iron stores were documented for each MDS patient receiving erythropoietin therapy within 60 days of starting erythropoietin therapy, regardless of how far back the erythropoietin therapy initiated. It is anticipated that eligible clinicians who provide services for patients with the diagnosis of myelodysplastic syndromes will submit this measure.

Measure Reporting:
The listed denominator criteria is used to identify the intended patient population. The numerator options included in this specification are used to submit the quality actions allowed by the measure. The quality-data codes listed do not need to be submitted for registry-based submissions; however, these codes may be submitted for those registries that utilize claims data.

DENOMINATOR:
All patients aged 18 years and older with a diagnosis of myelodysplastic syndrome (MDS) who are receiving erythropoietin therapy

> Definition:
> Erythropoietin Therapy – Includes the following medications: epoetin and darbepoetin for the purpose of this measure.
>
> Denominator Criteria (Eligible Cases):
> Patients aged ≥ 18 years on date of encounter
> AND
> Diagnosis for MDS (ICD-10-CM): D46.0, D46.1, D46.20, D46.21, D46.22, D46.4, D46.9, D46.A, D46.B, D46.C, D46.Z
> AND
> Patient encounter during the **performance period** (CPT): 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215
> WITHOUT
> Telehealth Modifier: GQ, GT
> AND
> Patient receiving erythropoietin therapy: 4090F

NUMERATOR:
Patients with documentation of iron stores within 60 days prior to initiating erythropoietin therapy

Definition:
Documentation of Iron Stores – Includes either: 1) bone marrow examination including iron stain OR 2)serum iron measurement including ferritin, serum iron and total iron-binding capacity (TIBC).

Numerator Options:

Performance Met:	Documentation of iron stores prior to initiating erythropoietin therapy (3160F)
OR	
Denominator Exception:	Documentation of system reason(s) for not documenting iron stores prior to initiating erythropoietin therapy (3160F *with* 3P)
OR	
Performance Not Met:	Iron stores prior to initiating erythropoietin therapy not documented, reason not otherwise specified (3160F *with* 8P)

RATIONALE:
In comparison with supportive care alone, patients receiving EPO with or without granulocyte colony-stimulating factor plus supportive care had improved erythroid responses, similar survival, and incidence of acute myeloid leukemia transformation Treatment of anemia in MDS with EPO plus G-CSF was associated with significantly improved survival outcome in patients with no or low transfusion need, while not affecting the risk of leukemic transformation. Erythropoiesis-stimulating agents (ESAs: erythropoietin-alfa, darbepoietin) are a key component of the strategy for improving anemia and reducing dependence on red blood cell (RBC) transfusions. Clinical trial results indicate that approximately 40% of selected patients have a clinically meaningful hemoglobin response to ESAs, with a median two-year response. To be effective, erythropoietin therapy requires that adequate iron stores be present due to iron's importance in red-blood-cell synthesis. By promoting the documentation of adequate iron stores in MDS patients requiring EPO therapy, the efficacy of the treatment will be enhanced .

CLINICAL RECOMMENDATION STATEMENTS:
The following clinical recommendation statements are quoted verbatim from the referenced clinical guidelines:

Anemia related to MDS generally presents as a hypoproductive macrocytic anemia, often associated with suboptimal elevation of serum Epo levels. Bone marrow aspiration with iron stain, biopsy, and cytogenetics should be used to determine WHO subtype, iron status, and the level of ring sideroblasts. Patients should also be considered for HLA-DR15 typing as indicated above. Iron repletion needs to be verified before instituting Epo or darbepoetintherapy. (Category 2A Recommendation) (NCCN, 2016)

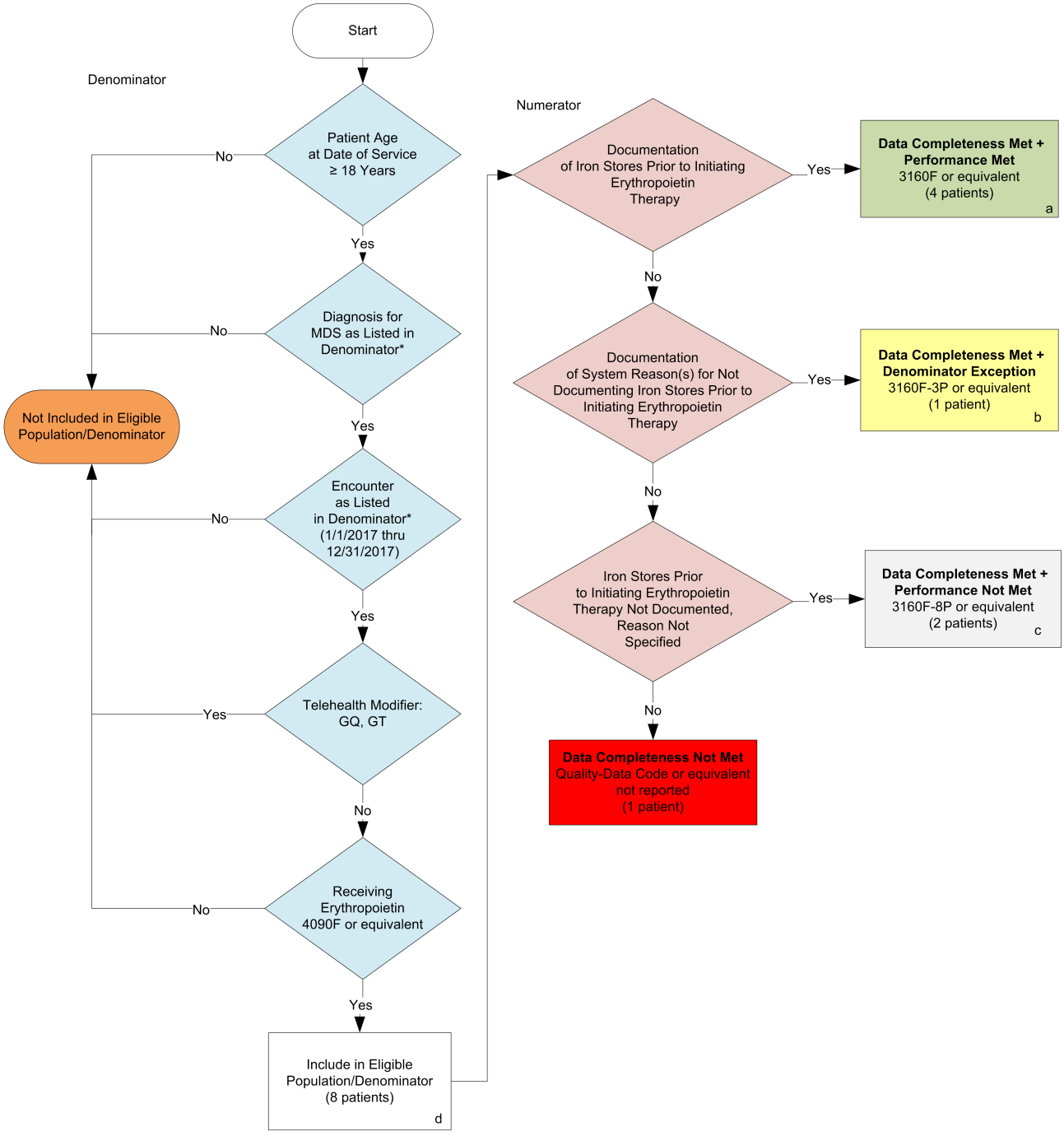
Baseline and periodic monitoring of iron, total iron-binding capacity, transferrin saturation, or ferritin levels and instituting iron repletion when indicated may help to reduce the need for ESAs, maximize symptomatic improvement for patients, and determine the reason for failure to respond adequately to ESA therapy. (ASH, 2010)

The AMA's and AMA-PCPI's significant past efforts and contributions to the development and updating of the Measures is acknowledged. ASH is solely responsible for the review and enhancement ("Maintenance") of the Measures as of August 15, 2014.

ASH encourages use of the Measures by other health care professionals, where appropriate.

THE MEASURES AND SPECIFICATIONS ARE PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND.

2017 Registry Individual Measure Flow
#68 NQF # 0378: Hematology: Myelodysplastic Syndrome (MDS): Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy



SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=4 patients) + Denominator Exception (b=1 patient) + Performance Not Met (c=2 patients) / Eligible Population / Denominator (d=8 patients) = 7 patients / 8 patients = **87.50%**

Performance Rate=

Performance Met (a=4 patients) / Data Completeness Numerator (7 patients) – Denominator Exception (b=1 patient) = 4 patients / 6 patients = **66.67%**

*See the posted Measure Specification for specific coding and instructions to report this measure.
NOTE: Reporting Frequency: Patient- process

v1

2017 Registry Individual Measure Flow
#68 NQF #0378: Hematology: Myelodysplastic Syndrome (MDS): Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy

Please refer to the specific section of the Measure Specification to identify the denominator and numerator information for use in reporting this Individual Measure.

1. Start with Denominator
2. Check Patient Age:
    a. If the Patient Age is greater than or equal to 18 Years of age at Date of Service and equals No during the measurement period, do not include in Eligible Patient Population. Stop Processing.
    b. If the Patient Age is greater than or equal to 18 Years of age at Date of Service and equals Yes during the measurement period, proceed to check Patient Diagnosis.
3. Check Patient Diagnosis:
    a. If Diagnosis for MDS as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Diagnosis for MDS as Listed in the Denominator equals Yes, proceed to check Encounter.
4. Check Encounter Performed:
    a. If Encounter as Listed in the Denominator equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Encounter as Listed in the Denominator equals Yes, proceed to check Telehealth Modifier
5. Check Telehealth Modifier:
    a. If Telehealth Modifier equals Yes, do not include in Eligible Patient Population. Stop Processing.
    b. If Telehealth Modifier equals No, proceed to check Receiving Erythropoietin.
6. Check Receiving Erythropoietin:
    a. If Receiving Erythropoietin equals No, do not include in Eligible Patient Population. Stop Processing.
    b. If Receiving Erythropoietin 4090F or equivalent Yes, include in the Eligible Patient Population.
7. Denominator Population:
    a. Denominator population is all Eligible Patients in the denominator. Denominator is represented as Denominator in the Sample Calculation listed at the end of this document. Letter d equals 8 patients in the sample calculation.
8. Start Numerator
9. Check Documentation of Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy:
    a. If Documentation of Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy equals Yes, include in Data Completeness Met and Performance Met.

b. Data Completeness Met and Performance Met letter is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter a equals 4 patients in Sample Calculation.

c. If Documentation of Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy equals No, proceed to Documentation of System Reason(s) for Not Documenting Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy.

10. Check Documentation of System Reason(s) for Not Documenting Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy:

    a. If Documentation of System Reason(s) for Not Documenting Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy equals Yes, include in Data Completeness Met and Denominator Exception.

    b. Data Completeness Met and Denominator Exception is represented in the Data Completeness and Performance Rate in the Sample Calculation listed at the end of this document. Letter b equals 1 patient in the Sample Calculation.

    c. If Documentation of System Reason(s) for Not Documenting Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy equals No, proceed to Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy Not Documented, Reason Not Specified.

11. Check Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy Not Documented, Reason Not Specified:

    a. If Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy Not Documented, Reason Not Specified equals Yes, include in the Data Completeness Met and Performance Not Met.

    b. Data Completeness Met and Performance Not Met letter is represented in the Data Completeness in the Sample Calculation listed at the end of this document. Letter c equals 2 patients in the Sample Calculation.

    c. If Iron Stores within 60 days Prior to Initiating Erythropoietin Therapy Not Documented, Reason Not Specified equals No, proceed to Data Completeness Not Met .

12. Check Data Completeness Not Met :

    a. If Data Completeness Not Met, the Quality Data Code or equivalent was not reported. 1 patient has been subtracted from the data completeness numerator in sample calculation.

SAMPLE CALCULATIONS:

Data Completeness=

Performance Met (a=4 patients) + Denominator Exception (b=1 patient) + Performance Not Met (c=2 patients) = 7 patients = **87.50%**

Eligible Population / Denominator (d=8 patients) = 8 patients

Performance Rate=

Performance Met (a=4 patients) = 4 patients = **66.67%**

Data Completeness Numerator (7 patients) – Denominator Exception (b=1 patient) = 6 patients