

HEMATOLOGY (HEM)
Algorithm for Measures Calculation – EHRS
(Analytic Narrative and Data Elements)

PATIENT SELECTION CRITERIA

Include if **ALL** the following criteria are met:

- At least two **face-to-face office visits** with the physician, physicians' assistant, or nurse practitioner during the measurement time period
- Is aged **18 years and older with a documented diagnosis of Myelodysplastic Syndrome (MDS) or Acute Leukemias, Multiple Myeloma (MM) or Chronic Lymphocytic Leukemia (CLL)** at the beginning of the measurement time period

➤ *List of Data Elements located in Appendix A*

Physician Performance Measures (Measures) and related data specifications, developed by the Physician Consortium for Performance Improvement™ (the Consortium), are intended to facilitate quality improvement activities by physicians.

These Measures are intended to assist physicians in enhancing quality of care. Measures are designed for use by any physician who manages the care of a patient for a specific condition or for prevention. These performance Measures are not clinical guidelines and do not establish a standard of medical care. The Consortium has not tested its Measures for all potential applications. The Consortium encourages the testing and evaluation of its Measures.

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At least two face-to-face office visits with physician, physicians' assistant, or nurse practitioner occurring during the measurement time period.

ENCOUNTER CODE (C4)
99201-99205, 99212-99215,
99241-99245,

AND

Patient is aged 18 years and older at the beginning of the measurement time period.

AND

Patient has a documented diagnosis of Myelodysplastic Syndrome (MDS) or Acute Leukemias, Multiple Myeloma (MM) or Chronic Lymphocytic Leukemia (CLL).

DX CODE (I9)
238.72, 238.73, 238.74,
238.75, 204.00, 205.00, 206.00,
207.00, 207.20, 208.00

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Myelodysplastic Syndrome (MDS) and Acute Leukemias – Baseline Cytogenic Testing Performed on Bone Marrow (HEM - 1): Percentage of patients aged 18 years and older with a diagnosis of MDS or acute leukemia who had baseline cytogenetic testing performed on bone marrow

Measurement Period: Twelve consecutive months

Denominator: All patients aged 18 years and older with a diagnosis of MDS or an acute leukemia

Denominator Inclusions

All patients with a documented diagnosis of MDS or an acute leukemia and aged 18 years and older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable CPT (C4) and ICD-9 (I9) codes for inclusion:

ENCOUNTER CODE (C4)
99201-99205, 99212-99215,
99241-99245,

AND

DX CODE (I9)
238.72, 238.73, 238.74,
238.75, 204.00, 205.00, 206.00,
207.00, 207.20, 208.00

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Numerator: Patients who had baseline cytogenetic testing performed on bone marrow

Numerator Inclusions

Patients who had a baseline cytogenetic testing performed on bone marrow.

Note: Baseline cytogenetic testing refers to testing that is performed at time of diagnosis or prior to initiating treatment for that diagnosis.

TOPIC_EVALUATION_CODES Table lists applicable CPT Category II (C4), CPT (C4) and SNOMED (SNM) codes for inclusion:

CYTOGEN TEST CODE (C4)
3155F

OR

CYTOGEN TEST CODE (C4)
88237, 88264, 88271, 88291

OR

CYTOGEN TEST CODE (SNM)
64643009, 73735000, 399681006

Denominator Exclusions

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason for exclusion:

Other medical reason documented for not having cytogenetic testing performed

MEDICAL REASON CODE (C4)
3155F 1P

OR

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TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason for exclusion:

Other patient reason (eg, economic, social, religious) documented for not having cytogenetic testing performed

PATIENT REASON CODE (C4)
3155F 2P

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason for exclusion:

Other system reason (eg, resources to perform service not available) documented for not having cytogenetic testing performed

SYSTEM REASON CODE (C4)
3155F 3P

HEMATOLOGY (HEM)
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Myelodysplastic Syndrome (MDS)- Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy (HEM-2): Percentage of patients aged 18 years and older with a diagnosis of MDS who are receiving erythropoietin therapy with documentation of iron stores prior to initiating erythropoietin therapy

Measurement Period: Twelve consecutive months

Denominator: All patients aged 18 years and older with a diagnosis of MDS who are receiving erythropoietin therapy

Denominator Inclusions:

All patients with a documented diagnosis of MDS who are receiving erythropoietin therapy and aged 18 years and older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable CPT (C4), ICD-9 (I9) CPT Category II (C4) and SNOMED (SNM) codes for inclusion:

ENCOUNTER CODE (C4)
99201-99205, 99212-99215, 99241-99245,

AND

DX CODE (I9)
238.72, 238.73, 238.74, 238.75

AND

EPO THERAPY CODE (C4)
4090F

OR

EPO THERAPY CODE (SNM)
67353006

OR

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed erythropoietin therapy during the measurement period and DRUG_EXCLUSION = N.

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Numerator: Patients with documentation of iron stores prior to initiating erythropoietin therapy.

Numerator Inclusion-Option #1

Patients with documentation of iron stores prior to initiating erythropoietin therapy.

Note: Documentation includes either bone marrow examination including iron stain or serum iron measurement by ferritin or serum iron and TIBC.

TOPIC_EVALUATION_CODES Table lists applicable CPT (C4) codes for inclusion:

IRON STAIN CODE (C4)
88313

OR

FERRITIN CODE (C4)
82728

OR

SERUM IRON CODE (C4)
83540

AND

TIBC CODE (C4)
83550

OR

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Numerator Inclusion-Option #2

Patients with documentation of iron stores prior to initiating erythropoietin therapy.

Note: Documentation includes either bone marrow examination including iron stain or serum iron measurement by ferritin or serum iron and TIBC.

TOPIC_EVALUATION_CODES Table lists applicable LOINC (LN) codes for inclusion:

IRON STAIN CODE (LN)
13513-7

OR

FERRITIN CODE (LN)
14723-1, 20567-4, 2276-4

OR

SERUM IRON CODE (LN)
13452-8, 14797-5, 14798-3,
14800-7, 14801-5, 22753-8,
2498-4, 2500-7, 2501-5,
2502-3, 2505-6, 39778-6, 44326-7

AND

TIBC CODE (LN)
14800-7, 22753-8, 2500-7,
2501-5, 2505-6, 39778-6

Numerator Inclusion-Option #3

Patients with documentation of iron stores prior to initiating erythropoietin therapy.

Note: Documentation includes either bone marrow examination including iron stain or serum iron measurement by ferritin or serum iron and TIBC.

TOPIC_EVALUATION_CODES Table lists an applicable CPT Category II (C4) code for inclusion:

IRON STORES CODE (C4)
3160F

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Denominator Exclusions

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason exclusion:

Other system reason (eg, resources to perform service not available) documented for not documenting iron stores prior to initiating erythropoietin therapy

SYSTEM REASON CODE (C4)
3160F 3P

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Multiple Myeloma - Treatment with Bisphosphonates (HEM-3): Percentage of patients aged 18 years and older with a diagnosis of multiple myeloma, not in remission, who were prescribed or received intravenous bisphosphonate therapy within the 12 month reporting period

Measurement Period: Twelve consecutive months

Denominator: All patients aged 18 years and older with a diagnosis of multiple myeloma, not in remission

Denominator Inclusions

All patients with a documented diagnosis of multiple myeloma, not in remission and aged 18 years and older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable CPT (C4) and ICD-9 (I9) codes for inclusion:

ENCOUNTER CODE (C4)
99201-99205, 99212-99215,
99241-99245,

AND

DX CODE (I9)
203.00

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Numerator: Patients who were prescribed or received intravenous bisphosphonate therapy within the 12 month reporting period

Numerator Inclusion-Option #1

Patients who were prescribed or received intravenous bisphosphonate therapy within the 12 month reporting period

TOPIC_EVALUATION_CODES Table lists applicable CPT Category II (C4) and SNOMED (SNM) codes for inclusion:

BISPHOS THERAPY CODE (C4)
4100F

OR

BISPHOS THERAPY CODE (SNM)
96281001, 372907000

OR

Numerator Inclusion-Option # 2

TOPIC_DRUG_CODES Table lists applicable drug codes for patients who were prescribed bisphosphonate therapy the measurement period and DRUG_EXCLUSION = N.

Denominator Exclusions

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason for exclusion:

Other medical reason documented for not prescribing bisphosphonate therapy

MEDICAL REASON CODE (C4)
4100F 1P

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason for exclusion:

Other patient reason (eg, economic, social, religious) documented for not prescribing bisphosphonate therapy

PATIENT REASON CODE (C4)
4100F 2P

HEMATOLOGY (HEM)
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Chronic Lymphocytic Leukemia (CLL) - Baseline Flow Cytometry (HEM-4): Percentage of patients aged 18 years and older with a diagnosis of CLL who had baseline flow cytometry studies performed

Denominator: All patients aged 18 years and older with a diagnosis of CLL

Denominator Inclusions

All patients with a documented diagnosis of CLL and aged 18 years and older at the beginning of the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable CPT (C4) and ICD-9 (I9) codes for inclusion:

ENCOUNTER CODE (C4)
99201-99205, 99212-99215,
99241-99245,

AND

DX CODE (I9)
204.10

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Numerator: Patients who had baseline flow cytometry studies performed

Numerator Inclusions

Patients who had baseline flow cytometry studies during the measurement period.

TOPIC_EVALUATION_CODES Table lists applicable CPT Category II (C4), CPT (C4) and SNOMED (SNM) codes for inclusion:

CYTOMETRY CODE (C4)
3170F

OR

CYTOMETRY CODE (C4)
88182, 88184,
88187, 88188, 88189

OR

CYTOMETRY CODE (SNM)
29274000, 50183007, 64444005

Denominator Exclusions

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for medical reason for exclusion:

Other medical reason documented by the practitioner for not having baseline flow cytometry studies performed

MEDICAL REASON CODE (C4)
3170F 1P

OR

TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for patient reason for exclusion:

Other patient reason (eg, economic, social, religious) documented for not having baseline flow cytometry studies performed

PATIENT REASON CODE (C4)
3170F 2P

OR

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TOPIC_MEDICAL_EXCLUSION Table lists an applicable CPT Category II (C4) code for system reason for exclusion:

Other system reason (eg, resources to perform service not available) documented for not having baseline flow cytometry studies performed

SYSTEM REASON CODE (C4)
3170F 3P

Appendix A
HEMA MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
HEM-1 MDS and Acute Leukemias-Baseline Cytogenetic Testing Performed on Bone Marrow		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Type of coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Type of coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	DRUG CODING SYSTEM	Type of coding system applicable to drug codes (NDC)
	DRUG CODE	Code used for drugs
	ORDER DATE	Date the drug was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	CYTOGEN TEST CODING SYSTEM	Type of coding system applicable for a cytogenetic test code (CPT4, SNOMED, CPT Category II)
	CYTOGEN TEST CODE	Code used for cytogenetic test
	CYTOGEN TEST DATE	Date cytogenetic test was performed
	MEDICAL REASON CODING SYSTEM	Type of coding system applicable for a medical reason code (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was documented
	PATIENT REASON CODING SYSTEM	Type of coding system applicable for a patient reason code (CPT Category II)
	PATIENT REASON CODE	Codes used for a patient reason
	PATIENT REASON DATE	Date a patient reason was documented
	SYSTEM REASON CODING SYSTEM	Type of coding system applicable for a system reason code (CPT Category II)
	SYSTEM REASON CODE	Codes used for a system reason
	SYSTEM REASON DATE	Date a system reason was documented

Shaded data elements apply to each measure

Appendix A
HEMA MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
HEM-2 MDS-Documentation of Iron Stores in Patients Receiving Erythropoietin therapy		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Type of coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Type of coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	DRUG CODING SYSTEM	Type of coding system applicable to erythropoietin drug codes (NDC)
	DRUG CODE	Codes used for erythropoietin drugs
	DRUG ORDER DATE	Date erythropoietin was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	EPO THERAPY CODING SYSTEM	Type of coding system applicable for EPO therapy code (CPT Category II, SNOMED)
	EPO THERAPY CODE	Code used for EPO therapy
	EPO THERAPY DATE	Date EPO therapy was prescribed
	IRON STAIN CODING SYSTEM	Type of coding system applicable for a iron stain code (LOINC, CPT4)
	IRON STAIN CODE	Code used for iron stain test
	IRON STAIN DATE	Date an iron stain test was performed

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HEMA MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
	FERRITIN CODING SYSTEM	Type of coding system applicable for a ferritin test code (CPT4, LOINC)
	FERRITIN CODE	Code used for a ferritin test
	FERRITIN DATE	Date ferritin test was performed
	SERUM IRON CODING SYSTEM	Type of coding system applicable for a serum iron test code (CPT4, LOINC)
	SERUM IRON CODE	Code used for a serum iron test
	SERUM IRON DATE	Date a serum iron test was performed
	TIBC CODING SYSTEM	Type of coding system applicable for a TIBC test code (CPT4, LOINC)
	TIBC CODE	Codes used for a TIBC test
	TIBC DATE	Date TIBC test was performed
	IRON STORES CODING SYSTEM	Type of coding system applicable for an iron stores test code (CPT Category II)
	IRON STORES CODE	Codes used for iron stores testing
	IRON STORES DATE	Date iron stores testing was documented
	SYSTEM REASON CODING SYSTEM	Type of coding system applicable for a system reason code (CPT Category II)
	SYSTEM REASON CODE	Codes used for a system reason
	SYSTEM REASON DATE	Date a system reason was documented

Shaded data elements apply to each measure

Appendix A
HEMA MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
HEM-3 Multiple Myeloma- Treatment with Bisphosphonates		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Type of coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Type of coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	DRUG CODING SYSTEM	Type of coding system applicable to IV bisphosphonate drug codes (NDC)
	DRUG CODE	Codes used for IV bisphosphonate drugs
	DRUG ORDER DATE	Date IV bisphosphonate was prescribed
	DRUG EXCLUSION	Is drug used as an exclusion to the measure (Yes or No)
	BISPHOS THERAPY CODING SYSTEM	Type of coding system applicable for bisphosphonate therapy code (SNOMED, CPT Category II)
	BISPHOS THERAPY CODE	Code used for bisphosphonate therapy
	BISPHOS THERAPY DATE	Date bisphosphonate therapy was prescribed
	MEDICAL REASON CODING SYSTEM	Type of coding system applicable for a medical reason code (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was documented
	PATIENT REASON CODING SYSTEM	Type of coding system applicable for a patient reason code (CPT Category II)
	PATIENT REASON CODE	Codes used for a patient reason
	PATIENT REASON DATE	Date a patient reason was documented

Shaded data elements apply to each measure

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HEMA MEASURES WITH CORRESPONDING DATA ELEMENTS

Ambulatory Care Measure	Short Name	Description
HEM-4 Chronic Lymphocytic Leukemia- Baseline Flow Cytometry		
	TOPIC TYPE	Topic that is being reported on
	TOPIC INDICATOR	The specific indicator or measure
	BIRTHDATE	Birth date
	MEASURE START DATE	Date the measurement period begins
	MEASURE END DATE	Date the measurement period ends
	ENCOUNTER CODING SYSTEM	Type of coding system applicable to face-to-face office visit (CPT4)
	ENCOUNTER CODE	Code used for encounter
	ENCOUNTER DATE	Date of encounter
	DX CODING SYSTEM	Type of coding system applicable to the diagnosis code (ICD9)
	DX CODE	Diagnosis code
	DX DATE	Date of diagnosis
	CYTOMETRY CODING SYSTEM	Type of coding system applicable for a cytometry study code (CPT4, SNOMED, CPT Category II)
	CYTOMETRY CODE	Code used for a cytometry study
	CYTOMETRY DATE	Date a cytometry study was performed
	MEDICAL REASON CODING SYSTEM	Type of coding system applicable for a medical reason code (CPT Category II)
	MEDICAL REASON CODE	Code used for medical reason
	MEDICAL REASON DATE	Date medical reason was documented
	PATIENT REASON CODING SYSTEM	Type of coding system applicable for a patient reason code (CPT Category II)
	PATIENT REASON CODE	Codes used for a patient reason
	PATIENT REASON DATE	Date a patient reason was documented
	SYSTEM REASON CODING SYSTEM	Type of coding system applicable for a system reason code (CPT Category II)
	SYSTEM REASON CODE	Codes used for a system reason
	SYSTEM REASON DATE	Date a system reason was documented

Shaded data elements apply to each measure