American Society of Hematology/
Physician Consortium for Performance Improvement® (PCPI®)

Hematology
Physician Performance Measurement Set

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(*Introductory content is listed as originally drafted in 2007 and may not be up to date)

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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.

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Purpose of Measures:
These clinical performance measures, developed by the American Society of Hematology and the Physician Consortium for Performance Improvement® (PCPI®), are designed for individual quality improvement. Unless otherwise indicated, the measures are also appropriate for accountability if appropriate methodological, statistical, and implementation rules are achieved.

Accountability Measures:
Myelodysplastic Syndrome (MDS) and Acute Leukemias
Measure #1: Baseline Cytogenetic Testing Performed on Bone Marrow
  - National Quality Forum (NQF) Endorsed™

Myelodysplastic Syndrome (MDS)
Measure #2: Documentation of Iron Stores in Patients Receiving Erythropoietin Therapy
  - NQF Endorsed™

Multiple Myeloma (MM)
Measure #3: Treatment with Bisphosphonates
  - NQF Endorsed™

Chronic Lymphocytic Leukemia (CLL)
Measure #4: Baseline Flow Cytometry
  - NQF Endorsed™

Intended Audience and Patient Population:
These measures are designed for use by physicians and for calculating reporting or performance measurement at the individual physician level. When existing hospital-level or plan-level measures are available for the same measurement topics, the PCPI attempts to harmonize the measures to the extent feasible.

These measures are designed for any physician, particularly hematologists, managing the ongoing care of patients aged 18 years and older with Myelodysplastic Syndrome (MDS), Acute Leukemias, Multiple Myeloma (MM), or Chronic Lymphocytic Leukemia (CLL).

The PCPI also encourages the use of these measures by eligible health professionals, where appropriate.

Measure Specifications:
The PCPI seeks to specify measures for implementation using multiple data sources, including paper medical records, administrative (claims) data, and particular emphasis on Electronic Health Records (EHRs). Specifications to report on these measures for Hematology using administrative (claims) data are included in this document. We have identified codes for these measures, including ICD-9/ICD-10 and CPT (Evaluation & Management Codes, Category I and where Category II codes would apply).
**Measure Exceptions:**
For *process measures*, the PCPI provides three categories of reasons for which a patient may be excluded from the denominator of an individual measure:

- **Medical reasons**
  Includes:
  - not indicated (absence of organ/limb, already received/performed, other)
  - contraindicated (patient allergic history, potential adverse drug interaction, other)

- **Patient reasons**
  Includes:
  - patient declined
  - social, or religious reasons
  - other patient reasons

- **System reasons**
  Includes:
  - resources to perform the services not available
  - insurance coverage/payor-related limitations
  - other reasons attributable to health care delivery system

These measure exception categories are not available uniformly across all measures; for each measure, there must be a clear rationale to permit an exception for a medical, patient, or system reason. The exception of a patient may be reported by appending the appropriate modifier to the CPT Category II code designated for the measure:

- **Medical reasons**: modifier 1P
- **Patient reasons**: modifier 2P
- **System reasons**: modifier 3P

Although this methodology does not require the external reporting of more detailed exception data, the PCPI recommends that physicians document the *specific* reasons for exception in patients’ medical records for purposes of optimal patient management and audit-readiness. The PCPI also advocates the systematic review and analysis of each physician’s exception data to identify practice patterns and opportunities for quality improvement. For example, it is possible for implementers to calculate the percentage of patients that physicians have identified as meeting the criteria for exception.

Please refer to documentation for each individual measure for information on the acceptable exception categories and the codes and modifiers to be used for reporting.

Measures #1-4 in the Hematology measurement set are process measures.

For *outcome measures*, the PCPI specifically identifies all acceptable reasons for which a patient may be excluded from the denominator. Each specified reason is reportable with a CPT Category II code designated for that purpose.

There are no outcome measures in the Hematology measurement set.
The PCPI continues to evaluate and likely will evolve its methodology for handling exceptions as it gains experience in the use of the measures.

**Testing of the Measurement Set:**
The AMA-convened PCPI in collaboration with the American Society of Hematology (ASH) conducted a measure testing project from May to September of 2010 to ensure that all four hematology measures were feasible to implement and reliable. Two testing projects were conducted utilizing patient records in the electronic health record (EHR) environment and claims data. The two sites were located in different U.S. states and were selected based on their ability to meet the measure testing site criteria. Site 1 was a small-scale hematology group practice and Site 2 was a large-scale multi-specialty group clinic; both sites were in an urban setting.

Reliability Testing
The purpose of reliability testing was to evaluate whether the measure definitions and specifications, as prepared by the PCPI, yield stable, consistent measures. Measures were tested using information stored in the electronic health record (EHR) environment and claims data from both sites. Inter-rater reliability was performed in the EHR environment. Parallel forms reliability was performed reviewing PQRS claims information compared to a manual review of the patient chart.

Reliability Testing Results
Overall the measures were found to be reliable. Inter-rater reliability testing was conducted and Kappa statistics were calculated for the measures, which demonstrated almost perfect agreement.

One of the two measure testing sites participated in the PQRS program and submitted claims comparison on two measures. PQRS claims were reviewed and information was verified in the record review for a significant portion of these charts.