

**Hematology**  
**Measure #4: Chronic Lymphocytic Leukemia (CLL) – Baseline Flow Cytometry**

This measure may be used as an Accountability measure.

<b>Clinical Performance Measure</b>	
<p><b>Numerator:</b> Patients who had baseline flow cytometry* studies performed</p> <p>Definition: *Baseline flow cytometry studies: Refer to testing that is performed at time of diagnosis or prior to initiating treatment for that diagnosis. Treatment may include antineoplastic therapy.</p> <p><b>Denominator:</b> All patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL)</p> <p><b>Denominator Exceptions:</b>            Documentation of medical reason(s) for not performing baseline flow cytometry</p> <p>Documentation of patient reason(s) for not performing baseline flow cytometry (eg, receiving palliative care or not receiving treatment as defined above)</p> <p>Documentation of system reason(s) for not performing baseline flow cytometry (eg, patient previously treated by another physician at the time baseline flow cytometry studies were performed)</p> <p><b>Measure:</b> Percentage of patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL) who had baseline flow cytometry studies performed</p>	
<p><b>The following clinical recommendation statements are quoted <u>verbatim</u> from the referenced clinical guidelines and represent the evidence base for the measure:</b></p> <p>As with all lymphoid neoplasms, adequate hematopathologic review is essential to establish an accurate diagnosis of chronic lymphocytic leukemia and small lymphocytic lymphoma CLL/SLL...a combination of morphologic and flow cytometric studies may provide adequate information to provide a diagnosis. This is particularly true for the diagnosis of CLL. Flow cytometric studies performed on patients with leukemic cell burden include kappa/lambda to [assess] clonality...Distinguishing CLL/SLL from mantle cell lymphoma is essential (Category 2A Recommendation). (NCCN<sup>8</sup>)</p>	
<p><b>Rationale for the measure:</b></p> <p>Due to the distinct pattern of protein antigens expressed in CLL, flow cytometry should be performed in order to confirm the diagnosis, correctly characterize the pathological cells, and determine prognosis. In some instances, flow cytometry may also offer additional therapeutically relevant information.<sup>9</sup></p>	
<p><b>Data capture and calculations:</b>  <b>Calculation for Performance</b></p> <p>For performance purposes, this measure is calculated by creating a fraction with the following components: Numerator, Denominator, and Denominator Exclusions.</p> <p><b>Numerator (A) Includes:</b></p> <ul style="list-style-type: none"> <li>• Patients who had baseline flow cytometry studies performed</li> </ul> <p><b>Denominator (PD) Includes:</b></p> <ul style="list-style-type: none"> <li>• All patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL)</li> </ul> <p><b>Denominator Exceptions (C) Include:</b></p> <ul style="list-style-type: none"> <li>• Documentation of medical reason(s) for not performing baseline flow cytometry studies</li> <li>• Documentation of patient reason(s) for not performing baseline flow cytometry studies</li> <li>• Documentation of system reason(s) for not performing baseline flow cytometry studies</li> </ul>	
<p><b>Performance Calculation</b></p> <table border="1" style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; padding: 5px;"> <math display="block">\frac{A \text{ (# of patients meeting measure criteria)}}{PD \text{ (# of patients in denominator)} - C \text{ (# of patients with valid denominator exclusions)}}</math> </td> </tr> </table>	$\frac{A \text{ (# of patients meeting measure criteria)}}{PD \text{ (# of patients in denominator)} - C \text{ (# of patients with valid denominator exclusions)}}$
$\frac{A \text{ (# of patients meeting measure criteria)}}{PD \text{ (# of patients in denominator)} - C \text{ (# of patients with valid denominator exclusions)}}$	

Components for this measure are defined as:

<b>A</b>	# of patients who had baseline flow cytometry studies performed
<b>PD</b>	# of patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL)
<b>C</b>	# of patients with documented medical reason(s) for not performing baseline flow cytometry studies; # of patients with documented patient reason(s) for not performing baseline flow cytometry studies; # of patients with documented system reason(s) for not performing baseline flow cytometry studies

**Calculation for Reporting**

For reporting purposes, this measure is calculated by creating a fraction with the following components: Reporting Numerator and Reporting Denominator

Reporting Numerator includes each of the following instances:

- A. Patients who had baseline flow cytometry studies performed
  
- C. Patients who did not have baseline flow cytometry studies performed, but for whom there is a documented medical reason, patient reason, or system reason for not doing so
  
- D. Patients who did not have baseline flow cytometry studies performed and there is no documented reason for not doing so

Reporting Denominator (RD) Includes:

- Patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL)

**Reporting Calculation**

$\frac{A(\# \text{ of patients meeting numerator criteria}) + C(\# \text{ of patients with valid exclusions}) + D(\# \text{ of patients NOT meeting numerator criteria})}{RD (\# \text{ of patients in denominator})}$
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Components for this measure are defined as:

<b>A</b>	# of patients who had baseline flow cytometry studies performed
<b>C</b>	# of patients who did <u>not</u> have baseline flow cytometry studies performed, but for whom there is a documented medical reason, patient reason, or system reason for not doing so
<b>D</b>	# of patients who did <u>not</u> have baseline flow cytometry studies performed and there is <u>no</u> documented reason for not doing so
<b>RD</b>	# of patients aged 18 years and older with a diagnosis of chronic lymphocytic leukemia (CLL)

**Measure Specifications** – Measure #4: Chronic Lymphocytic Leukemia – Baseline Flow Cytometry  
Measure specifications will be provided for multiple data sources.

**D. Administrative claims data**

Administrative claims data collection requires users to identify the eligible population (denominator) and numerator using codes recorded on claims or billing forms (electronic or paper). Users report a rate based on all patients in a given practice for whom data are available and who meet the eligible population/denominator criteria.

(Note: The specifications listed below are those needed for performance calculation.)

Denominator (Eligible Population): All patients aged 18 years and older with a diagnosis chronic lymphocytic leukemia (CLL)

ICD-9-CM diagnosis codes: 204.10, 204.12

**AND**

CPT codes: 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215, 99241, 99242, 99243, 99244, 99245

Numerator: Patients who had baseline flow cytometry studies performed

- CPT Category II code: 3170F – Baseline flow cytometry studies performed

Denominator Exceptions:

Documentation of medical reason(s) for not performing baseline flow cytometry studies

- Append modifier to CPT Category II code: 3170F-1P

Documentation of patient reason(s) for not performing baseline flow cytometry studies (e.g., receiving palliative care or not receiving treatment as defined above)

- Append modifier to CPT Category II code: 3170F-2P

Documentation of system reason(s) for not performing baseline flow cytometry studies (e.g., patient previously treated by another physician at the time baseline flow cytometry studies were performed)

- Append modifier to CPT Category II code: 3170F-3P

B. Electronic Health Record System *(in development)*

C. Paper Medical Record *(in development)*