# Hemoglobin Greater than 12 g/dL

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percentage of Medicare patients with a mean hemoglobin value greater than 12 g/dL.</td>
<td>Number of Medicare patients at the facility during the measurement period included in the denominator with a mean hemoglobin greater than 12 g/dL.</td>
<td>Number of Medicare patients at the facility during the measurement period.</td>
</tr>
</tbody>
</table>

## Exclusions:
1. Patients younger than 18.
2. Patients on dialysis for less than 90 days.
3. Patients who have not been treated with erythropoiesis stimulating agents (ESAs) during the claim month.
4. Hemoglobin values less than 5.
5. Hemoglobin values greater than 20.
6. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims.
7. Patients with missing data.

## Minimum Claims
4 months

## Data Source(s)
1. Medicare claims
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)  
   Note: this data is in CROWNWeb when application is operational

## Additional Information
1. Last valid claim of the month is used for calculation.
2. When hematocrit is reported on a claim, it is changed to hemoglobin by dividing by 3 and rounding to 1 decimal place.
3. All hemoglobin levels should be rounded to 1 decimal place.
4. No interpolation between claims for peritoneal dialysis patients.
5. The value reported by the facility is used, but the facility may obtain this value from an external source.
## Clinical Measures

### Hypercalcemia

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Proportion of patient-months with 3-month rolling average of total uncorrected serum calcium greater than 10.2 mg/dL. NQF #1454</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Number of patient-months in the denominator with 3-month rolling average of uncorrected serum calcium greater than 10.2 mg/dL.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of patients-months at the facility during the measurement period. Exclusions: 1. Patients younger than 18. 2. Patients present at facility for less than 30 days. 3. Patients on dialysis for less than 90 days. 4. Patients without a serum calcium value at that facility in the reporting month. 5. Patients not on chronic dialysis as defined by a completed 2728 form or a SIMS record.</td>
</tr>
<tr>
<td>Minimum Data</td>
<td>3 months</td>
</tr>
<tr>
<td>Data Source(s)</td>
<td>1. CROWNWeb 2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth) Note: this data is in CROWNWeb when application is operational</td>
</tr>
</tbody>
</table>

### Additional Information

1. First measure calculation begins in March of the measurement year for PY 2015. For PYs going forward, November and December of the previous year will be used in calculating the three-month rolling average for January and February of the performance period.
2. Includes all patients (i.e., not just those patients on Medicare).
3. The last value reported in the month is used for calculation.
4. A patient need only have a serum calcium value for the reporting month to be included in the measure. Any value reported during the two months prior to the reporting month will be used to calculate the 3-month rolling average.
5. No interpolation between serum calcium values for peritoneal dialysis patients.
6. The serum calcium value reported by the facility is used. The facility may obtain this value from an external source.
7. “Uncorrected” indicates albumin is not considered in the calculation.
### Clinical Measures

### Vascular Access Type: Fistula

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Description</th>
<th>Exclusions:</th>
</tr>
</thead>
</table>
| Percentage of patient-months on hemodialysis during the last hemodialysis treatment of the month using an autogenous AV fistula with two needles. | NQF#0257 | 1. Patients younger than 18.  
2. Peritoneal patients.  
3. Claims with both a fistula and graft reported.  
4. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims |

| Numerator | Patient-months in the denominator where an autogenous AV fistula with two needles was the means of access. |

<table>
<thead>
<tr>
<th>Denominator</th>
<th>Number of Medicare patient-months at the facility during the measurement period.</th>
</tr>
</thead>
</table>
| Exclusions: | 1. Patients younger than 18.  
2. Peritoneal patients.  
3. Claims with both a fistula and graft reported.  
4. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims |

| Minimum Claims | 4 months |

| Data Source(s) | 1. Medicare Claims  
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)  
Note: this data is in CROWNWeb when application is operational |

| Additional Information | 1. If claim indicates fistula and catheter, only the fistula is counted.  
2. Last claim of the month used for calculation. |
### Clinical Measures

#### Vascular Access Type: Catheter

| Measure Description | Hemodialysis Vascular Access – Minimizing Use of Catheters as Chronic Dialysis Access  
Lower rate desired |
|---------------------|-------------------------------------------------------------------------------------------------|
| **Numerator**       | Percentage of patient-months for patients on hemodialysis during the last hemodialysis treatment of month with a catheter continuously for 90 days or longer prior to the last hemodialysis session.  
NQF#0256 |
| **Denominator**     | Patient-months in the denominator for patients continuously using a catheter for hemodialysis access for 90 days or longer prior to the last hemodialysis treatment during the month.  
Number of Medicare patient-months at the facility during the measurement period.  
Exclusions:  
1. Patients younger than 18 years and 3 months.  
2. Peritoneal patients.  
3. Claims with both a fistula and graft reported.  
4. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims.  
Minimum Claims  
4 consecutive months |
| **Data Source(s)**  | 1. Medicare Claims  
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)  
Note: this data is in CROWNWeb when application is operational |
| **Additional Information** | 1. If claim indicates fistula and catheter, only the fistula is counted.  
2. Measure uses data prior to performance or comparison period (e.g. October – December 2012 for performance period) to determine catheter history.  
3. Last claim of the month used for calculation. |
### Clinical Measures

#### Kt/V Dialysis Adequacy Measure Topic: Hemodialysis

<table>
<thead>
<tr>
<th>Hemodialysis Adequacy Clinical Performance Measure III: Hemodialysis Adequacy--HD Adequacy-- Minimum Delivered Hemodialysis Dose</th>
<th>Higher rate desired</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Percent of hemodialysis patient-months with spKt/V greater than or equal to 1.2. NQF#0249</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Patient-months in the denominator for patients whose delivered dose of hemodialysis (spKt/V) was greater than or equal to 1.2 during the measurement period.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of Medicare patient-months at the facility during the measurement period.</td>
</tr>
</tbody>
</table>

**Exclusions:**
1. Patients younger than 18 years.
2. Peritoneal patients.
3. Patients on dialysis for less than 90 days.
4. Patients dialyzing 4 times or more per week.
5. Patients dialyzing 2 times or fewer per week.
6. Patients having a spKt/V value less than 0.5.
7. Patients having a spKt/V value greater than 2.5.
8. Patients treated at the facility less than twice during the claim month.
9. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims.

<table>
<thead>
<tr>
<th>Minimum Claims</th>
<th>1</th>
</tr>
</thead>
</table>

**Data Source(s):**
1. Medicare Claims
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
   
   Note: this data is in CROWNWeb when application is operational

**Additional Information:**
1. Calculated from the last measurement of the month.
2. Must be calculated using UKM or Daugirdas II method.
3. Dialyzing times per week is calculated by (i) number of dialysis sessions in the claim divided by the time period covered by the claim, with no rounding for number of sessions per week; and (ii) SIMS data indicating frequent hemodialysis.
4. The reported spKt/V should not include residual renal function.
5. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator.
### Clinical Measures

**Kt/V Dialysis Adequacy Measure Topic:** Peritoneal Dialysis

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Percent of peritoneal dialysis patient-months with Kt/V greater than or equal to 1.7 Kt/V (dialytic + residual) during the four month study period. NQF#0318</td>
<td>Patient-months in the denominator for patients whose delivered dose of peritoneal dialysis was equal to or greater than 1.7 Kt/V (dialytic + residual) during the measurement period.</td>
<td>Number of Medicare patient-months at the facility during the measurement period.</td>
</tr>
</tbody>
</table>

**Exclusions:**
1. Patients younger than 18 years.
2. Hemodialysis patients.
3. Patients on dialysis for less than 90 days.
4. Patients having a Kt/V value less than 0.5.
5. Patients having a Kt/V value greater than 5.0.
6. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims.

**Minimum Claims**

1

**Data Source(s)**

1. Medicare Claims
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)  
   Note: this data is in CROWNWeb when application is operational

**Additional Information**

1. If no Kt/V value is reported for a given patient in a claim month, the most recent Kt/V value in the prior 4 months is applied to the calculation for that month.
2. Patients with missing Kt/V values or Kt/V=9.99 (not reported) are included in the denominator.
Clinical Measures

**Kt/V Dialysis Adequacy Measure Topic: Pediatric Dialysis**

### Minimum spKt/V for Pediatric Hemodialysis Patients

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Percent of pediatric in-center hemodialysis patient-months with spKt/V greater than or equal to 1.2. NQF#1423</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numerator</td>
<td>Patient-months in the denominator for patients whose delivered dose of hemodialysis (spKt/V) was greater than or equal to 1.2 during the measurement period.</td>
</tr>
<tr>
<td>Denominator</td>
<td>Number of Medicare patient-months at the facility during the measurement period.</td>
</tr>
</tbody>
</table>

**Exclusions:**

1. Patients 18 years or older.
2. Peritoneal patients.
3. Home hemodialysis patients.
4. Patients on dialysis for less than 90 days.
5. Patients having a spKt/V value less than 0.5.
6. Patients having a spKt/V value greater than 2.5.
7. Patients dialyzing 5 times or more per week.
8. Patients dialyzing 2 times or fewer per week.
9. Patients treated at the facility less than twice during the claim month.
10. Patients not on chronic dialysis as defined by a completed 2728 form, a SIMS record, or a sufficient amount of dialysis reported on dialysis facility claims.

**Minimum Claims**

1

**Data Source(s)**

1. Medicare Claims
2. SIMS data (form 2728 to obtain the diagnosis date of ESRD and date of birth)
   
   Note: this data is in CROWNWeb when application is operational

**Additional Information**

1. Calculated from the last measurement of the month.
2. Must be calculated using UKM or Daugirdas II method.
3. Dialyzing times per week is calculated by (i) number of dialysis sessions in the claim divided by the time period covered by the claim, with no rounding for number of sessions per week; and (ii) SIMS data indicating frequent hemodialysis.
4. The reported spKt/V should not include residual renal function.
5. Patients with missing spKt/V values or spKt/V=9.99 (not reported) are included in the denominator.
# Reporting Measures

## Patient Experience of Care

<table>
<thead>
<tr>
<th>ICH CAHPS Administration</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th><strong>Measure Description</strong></th>
<th>Attestation that facility administered survey in accordance with specifications.</th>
</tr>
</thead>
</table>

| **Exclusions**          | 1. Facilities which only treat patients under 18 years of age.  
                           | 2. Facilities which do not treat in-center hemodialysis patients.  
                           | 3. Facilities with a CMS certification on or after July 1, 2013. |
|-------------------------|------------------------------------------------------------------|

| **Data Sources**        | 1. CROWNWeb  
                           | 2. SIMS (to obtain the certification date and dialysis services provided by the facility)  
                           | Note: this data is in CROWNWeb when application is operational |
|-------------------------|------------------------------------------------------------------|
# Reporting Measures

## NHSN Dialysis Event Reporting

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>NHSN Dialysis Event Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of months for which facility reports National Healthcare Safety Network (NHSN) Dialysis Event data to the Centers for Disease Control and Prevention (CDC).</td>
<td></td>
</tr>
</tbody>
</table>

### Exclusions

1. Facilities which do not treat in-center hemodialysis patients.
2. Facilities with a CMS certification on or after July 1, 2013.

### Data Sources

1. CDC’s NHSN
2. SIMS (to obtain the certification date and dialysis services provided by the facility)

Note: this data is in CROWNWeb when application is operational
# Reporting Measures

## Mineral Metabolism

<table>
<thead>
<tr>
<th>Mineral Metabolism Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measure Description</strong></td>
</tr>
<tr>
<td>Number of months for which facility reports serum calcium and phosphorus for each patient.</td>
</tr>
<tr>
<td><strong>Exclusions</strong></td>
</tr>
<tr>
<td>1. Facilities with a CMS certification on or after July 1, 2013.</td>
</tr>
<tr>
<td>2. Hemodialysis patients treated at facility less than twice during claim month.</td>
</tr>
<tr>
<td>3. Peritoneal patients not treated at a facility during the claim month.</td>
</tr>
<tr>
<td><strong>Data Sources</strong></td>
</tr>
<tr>
<td>1. CROWNWeb</td>
</tr>
<tr>
<td>2. SIMS (to obtain the certification date, as well as form 2728)</td>
</tr>
<tr>
<td>Note: this data is in CROWNWeb when application is operational</td>
</tr>
<tr>
<td><strong>Additional Information</strong></td>
</tr>
<tr>
<td>The serum calcium and serum phosphorus values reported by the facility are used. The facility may obtain these values from an external source.</td>
</tr>
</tbody>
</table>
## Anemia Management Reporting

<table>
<thead>
<tr>
<th>Measure Description</th>
<th>Number of months for which facility reports ESA dosage (as applicable) and hemoglobin/hematocrit for each Medicare patient.</th>
</tr>
</thead>
</table>
| **Exclusions**      | 1. Facilities with a CMS certification on or after July 1, 2013.  
2. Hemodialysis patients treated at facility less than twice during claim month.  
3. Peritoneal patients not treated at a facility during the claim month.  
4. Patients not on chronic dialysis as defined by a completed 2728 form or a SIMS record. |
| **Data Sources**    | 1. Medicare Claims  
2. SIMS (to obtain the certification date)  
   Note: this data is in CROWNWeb when application is operational |
| **Additional Information** | 1. Hemoglobin value of 99.99 is not considered valid for purposes of measure.  
2. The hemoglobin/hematocrit reported by the facility is used. The facility may obtain this value from an external source.  
3. No ESA dosage need be recorded if patient is not treated with ESAs. |