

# NATIONAL QUALITY FORUM

## Measure Evaluation 4.1 December 2009

This form contains the measure information submitted by stewards. Blank fields indicate no information was provided. Attachments also may have been submitted and are provided to reviewers. The subcriteria and most of the footnotes from the evaluation criteria are provided in Word comments within the form and will appear if your cursor is over the highlighted area. Hyperlinks to the evaluation criteria and ratings are provided in each section.

**TAP/Workgroup** (if utilized): Complete all **yellow highlighted** areas of the form. Evaluate the extent to which each subcriterion is met. Based on your evaluation, summarize the strengths and weaknesses in each section.

Note: *If there is no TAP or workgroup, the SC also evaluates the subcriteria (yellow highlighted areas).*

**Steering Committee:** Complete all **pink** highlighted areas of the form. Review the workgroup/TAP assessment of the subcriteria, noting any areas of disagreement; then evaluate the extent to which each major criterion is met; and finally, indicate your recommendation for the endorsement. Provide the rationale for your ratings.

Evaluation ratings of the extent to which the criteria are met

C = Completely (unquestionably demonstrated to meet the criterion)

P = Partially (demonstrated to partially meet the criterion)

M = Minimally (addressed BUT demonstrated to only minimally meet the criterion)

N = Not at all (NOT addressed; OR incorrectly addressed; OR demonstrated to NOT meet the criterion)

NA = Not applicable (only an option for a few subcriteria as indicated)

<b>(for NQF staff use)</b> NQF Review #: 1439      NQF Project: End Stage Renal Disease
<b>MEASURE DESCRIPTIVE INFORMATION</b>
<b>De.1 Measure Title:</b> <a href="#">Utilization of High Ultrafiltration Rate for Fluid Removal</a>
<b>De.2 Brief description of measure:</b> <a href="#">Proportion of patients who did not receive an ultrafiltration rate greater than or equal to 15 ml/kg/hr in the reporting month</a>
<b>1.1-2 Type of Measure:</b> <a href="#">Process</a> <b>De.3</b> If included in a composite or paired with another measure, please identify composite or paired measure <a href="#">N/A</a>
<b>De.4 National Priority Partners Priority Area:</b> <a href="#">Population health</a> <b>De.5 IOM Quality Domain:</b> <a href="#">Effectiveness</a> <b>De.6 Consumer Care Need:</b> <a href="#">Living with illness</a>

<b>CONDITIONS FOR CONSIDERATION BY NQF</b>	
Four conditions must be met before proposed measures may be considered and evaluated for suitability as voluntary consensus standards:	<b>NQF Staff</b>
<p><b>A.</b> The measure is in the public domain or an intellectual property (measure steward agreement) is signed. <i>Public domain only applies to governmental organizations. All non-government organizations must sign a measure steward agreement even if measures are made publicly and freely available.</i></p> <p><b>A.1</b> Do you attest that the measure steward holds intellectual property rights to the measure and the right to use aspects of the measure owned by another entity (e.g., risk model, code set)? <a href="#">Yes</a></p> <p><b>A.2</b> Indicate if Proprietary Measure (as defined in measure steward agreement):</p> <p><b>A.3</b> Measure Steward Agreement: <a href="#">Government entity and in the public domain - no agreement necessary</a></p> <p><b>A.4</b> Measure Steward Agreement attached:</p>	<p><b>A</b></p> <p>Y <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p><b>B.</b> The measure owner/steward verifies there is an identified responsible entity and process to maintain and update the measure on a schedule that is commensurate with the rate of clinical innovation, but at least</p>	<p><b>B</b></p> <p>Y <input type="checkbox"/></p>

every 3 years. <b>Yes, information provided in contact section</b>	N <input type="checkbox"/>
C. The intended use of the measure includes <u>both</u> public reporting <u>and</u> quality improvement. ► <b>Purpose:</b> Public reporting, Internal quality improvement	C Y <input type="checkbox"/> N <input type="checkbox"/>
D. The requested measure submission information is complete. Generally, measures should be fully developed and tested so that all the evaluation criteria have been addressed and information needed to evaluate the measure is provided. Measures that have not been tested are only potentially eligible for a time-limited endorsement and in that case, measure owners must verify that testing will be completed within 12 months of endorsement. D.1 Testing: <b>No, testing will be completed within 12 months</b> D.2 Have NQF-endorsed measures been reviewed to identify if there are similar or related measures? <b>Yes</b>	D Y <input type="checkbox"/> N <input type="checkbox"/>
(for NQF staff use) Have all conditions for consideration been met? Staff Notes to Steward (if submission returned):	Met Y <input type="checkbox"/> N <input type="checkbox"/>
Staff Notes to Reviewers (issues or questions regarding any criteria):	
Staff Reviewer Name(s):	

TAP/Workgroup Reviewer Name:	
Steering Committee Reviewer Name:	
<b>1. IMPORTANCE TO MEASURE AND REPORT</b>	
Extent to which the specific measure focus is important to making significant gains in health care quality (safety, timeliness, effectiveness, efficiency, equity, patient-centeredness) and improving health outcomes for a specific high impact aspect of healthcare where there is variation in or overall poor performance. <i>Measures must be judged to be important to measure and report in order to be evaluated against the remaining criteria.</i> (evaluation criteria) 1a. High Impact	Eval Ratin g
(for NQF staff use) Specific NPP goal:	
1a.1 Demonstrated High Impact Aspect of Healthcare: <b>Leading cause of morbidity/mortality</b> 1a.2 1a.3 Summary of Evidence of High Impact: <b>Avoidance of high ultrafiltration rates by dialysis facilities will likely improve patient outcomes, both by reducing morbidity (e.g. intradialytic hypotension) during dialysis as well as adverse longer term outcomes such as mortality due to cardiovascular disease.</b> 1a.4 Citations for Evidence of High Impact: <b>McIntyre CW. Hemodialysis-induced myocardial stunning in chronic kidney disease—a new aspect of cardiovascular disease. Blood Purif. 2010; 29(2): 105-10.</b> <b>Saran R, Bragg-Gresham JL, Levin NW, et al. "Longer treatment time and slower ultrafiltration in hemodialysis: associations with reduced mortality in the DOPPS." Kidney Int. 2006; 69:1222-8.</b>	1a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>
1b. Opportunity for Improvement 1b.1 Benefits (improvements in quality) envisioned by use of this measure: <b>High ultrafiltration rates can predispose to intradialytic ischemic episodes in the circulatory beds of vital organs such as the heart, brain or the viscera, especially if they are already compromised due to preexisting vascular disease such as atherosclerosis or arteriolosclerosis. Repetitive episodes of ischemia can cumulatively lead to myocardial dysfunction and heart failure, a leading cause of mortality among dialysis patients. Avoidance of high ultrafiltration rates by dialysis facilities will likely improve patient outcomes, both by reducing morbidity (e.g. intradialytic hypotension) during dialysis as well as adverse longer term outcomes such as mortality</b>	1b C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/>

due to cardiovascular disease.

**1b.2 Summary of data demonstrating performance gap (variation or overall poor performance) across providers:**

Variations in ultrafiltration rate across dialysis facilities in the US have not been investigated. The median ultrafiltration rate in an analysis based on the international Dialysis Outcomes and Practice Patterns Study (DOPPS), was 10ml/kg/hour (Saran 2006), indicating that half the dialysis patients were subject to higher ultrafiltration rates than this rate.

**1b.3 Citations for data on performance gap:**

Saran R, Bragg-Gresham JL, Levin NW, et al. "Longer treatment time and slower ultrafiltration in hemodialysis: associations with reduced mortality in the DOPPS." *Kidney Int.* 2006; 69:1222-8.

**1b.4 Summary of Data on disparities by population group:**

Disparities for ultrafiltration rate by population group have not been reported in the literature.

**1b.5 Citations for data on Disparities:**

N/A

**1c. Outcome or Evidence to Support Measure Focus**

**1c.1 Relationship to Outcomes** (*For non-outcome measures, briefly describe the relationship to desired outcome. For outcomes, describe why it is relevant to the target population*): High ultrafiltration rates have been associated with higher odds of intradialytic hypotension, unstable dialysis sessions and higher mortality.

**1c.2-3. Type of Evidence:** Observational study, Expert opinion

**1c.4 Summary of Evidence** (*as described in the criteria; for outcomes, summarize any evidence that healthcare services/care processes influence the outcome*):

High ultrafiltration rates (above 10 ml/kg/hr) have been associated with higher odds of intradialytic hypotension, unstable dialysis sessions and higher mortality (Saran 2006). High ultrafiltration rates can predispose to intradialytic ischemic episodes in the circulatory beds of vital organs such as the heart, brain or the viscera, especially if they are already compromised due to preexisting vascular disease such as atherosclerosis or arteriolosclerosis. The phenomenon of myocardial stunning during dialysis sessions has recently been highlighted (McIntyre 2010). Repetitive episodes of ischemia can cumulatively lead to myocardial dysfunction and heart failure, a leading cause of mortality among dialysis patients. Myocardial stunning has also been previously well described, in the non-dialysis patient population, as an underlying mechanism for heart failure (McIntyre 2010). In this study, 64% of HD patients (N = 70) had evidence of myocardial stunning and was associated with significantly higher risk of mortality at one year. Ultrafiltration rates of 15ml/kg/hour or higher would be considered unacceptably high (Saran 2006) and should be avoided either by prolonging the length of dialysis session or adding an extra session based on clinical judgment. The median ultrafiltration rate in this study, based on an analysis of the international DOPPS, was 10ml/kg/hour.

**1c.5 Rating of strength/quality of evidence** (*also provide narrative description of the rating and by whom*):

Data from observational studies. Level B evidence, as rated by the Fluid Weight Management C-TEP using an assessment scale similar to KDOQI.

**1c.6 Method for rating evidence:** The C-TEP followed similar methods of evidence assessment as that used by the KDOQI clinical practice guidelines.

**1c.7 Summary of Controversy/Contradictory Evidence:** There is a paucity of studies examining long-term outcomes associated with the use of high ultrafiltration rates. However, it is uncontroversial that an ultrafiltration rate above 15 ml/kg/hr is potentially harmful for patients.

**1c.8 Citations for Evidence** (*other than guidelines*): McIntyre CW. Hemodialysis-induced myocardial stunning in chronic kidney disease—a new aspect of cardiovascular disease. *Blood Purif.* 2010; 29(2): 105-

1c  
C   
P   
M   
N

<p>10.</p> <p>Saran R, Bragg-Gresham JL, Levin NW, et al. "Longer treatment time and slower ultrafiltration in hemodialysis: associations with reduced mortality in the DOPPS." <i>Kidney Int.</i> 2006; 69:1222-8.</p> <p><b>1c.9 Quote the Specific guideline recommendation (including guideline number and/or page number):</b>          This measure is related to the following 2006 KDOQI volume and blood pressure guideline:          5.1 - The ultrafiltration component of the HD prescription should be optimized with a goal to render the patient euvolemic and normotensive. This includes counseling the patient on sodium and fluid restriction, adequate ultrafiltration, and the use of diuretics in patients with RKF. (Evidence Level A)</p> <p>The KDOQI panel noted that, "For some patients, the conventional dialysis time is too short for their ultrafiltration requirements to be readily fulfilled. Attempts to accelerate ultrafiltration in these patients may precipitate hypovolemia and hypotension. Normal saline frequently is administered and ultrafiltration is slowed or discontinued, at least temporarily. As a consequence, at the end of the dialysis session, not only has the originally targeted fluid excess not been removed, but the infused saline also has expanded ECV further. More sodium and water will accumulate during the succeeding interdialysis period, contributing further to a chronic state of baseline volume expansion in association with persistent hypertension."</p> <p><b>1c.10 Clinical Practice Guideline Citation:</b> KDOQI. Clinical practice guidelines for hemodialysis adequacy. <i>Am J Kidney Dis.</i> 2006; Jul;48 (1 Suppl 1): S13-97.</p> <p><b>1c.11 National Guideline Clearinghouse or other URL:</b> N/A</p> <p><b>1c.12 Rating of strength of recommendation (also provide narrative description of the rating and by whom):</b>          The 2006 KDOQI guidelines were based on Work Group consensus.</p> <p><b>1c.13 Method for rating strength of recommendation (If different from USPSTF system, also describe rating and how it relates to USPSTF):</b>          N/A</p> <p><b>1c.14 Rationale for using this guideline over others:</b>          There are no known guidelines pertaining to ultrafiltration rates in dialysis patients.</p>	
<p><b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Importance to Measure and Report</i>?</b></p>	<p>1</p>
<p><b>Steering Committee: Was the threshold criterion, <i>Importance to Measure and Report</i>, met?</b>  <b>Rationale:</b></p>	<p>1          Y <input type="checkbox"/>          N <input type="checkbox"/></p>
<p style="text-align: center;"><b>2. SCIENTIFIC ACCEPTABILITY OF MEASURE PROPERTIES</b></p>	
<p>Extent to which the measure, <u>as specified</u>, produces consistent (reliable) and credible (valid) results about the quality of care when implemented. (evaluation criteria)</p>	<p>Eval          Rating</p>
<p style="text-align: center;"><b>2a. MEASURE SPECIFICATIONS</b></p>	
<p><b>S.1 Do you have a web page where current detailed measure specifications can be obtained?</b>  <b>S.2 If yes, provide web page URL:</b></p> <p><b>2a. Precisely Specified</b></p>	<p>2a-          specs          C <input type="checkbox"/>          P <input type="checkbox"/>          M <input type="checkbox"/>          N <input type="checkbox"/></p>
<p><b>2a.1 Numerator Statement (Brief, text description of the numerator - what is being measured about the target population, e.g. target condition, event, or outcome):</b>          Number of patients in the denominator who did not receive an ultrafiltration (UF) rate greater than or equal to 15 ml/kg/hr for the month's reported dialysis session.</p>	

**2a.2 Numerator Time Window** (*The time period in which cases are eligible for inclusion in the numerator*):

The entire reporting calendar month.

**2a.3 Numerator Details** (*All information required to collect/calculate the numerator, including all codes, logic, and definitions*):

Ultrafiltration rate is calculated for a single session per month (CROWNWeb generally records data from the last session) using data elements for pre-dialysis weight, post-dialysis weight, and delivered minutes of dialysis. The formula for UF rate is:  $((\text{pre-weight} - \text{post-weight}) * 1000 / \text{post-weight}) / (\text{delivered minutes} / 60)$ . The resulting units are ml/kg/hr.

**2a.4 Denominator Statement** (*Brief, text description of the denominator - target population being measured*):

Number of patients in an outpatient dialysis facility undergoing chronic maintenance hemodialysis (HD).

**2a.5 Target population gender:** Female, Male

**2a.6 Target population age range:** Adults 18 years or older.

**2a.7 Denominator Time Window** (*The time period in which cases are eligible for inclusion in the denominator*):

The entire reporting calendar month.

**2a.8 Denominator Details** (*All information required to collect/calculate the denominator - the target population being measured - including all codes, logic, and definitions*):

Denominator includes only in-center HD patients.

**2a.9 Denominator Exclusions** (*Brief text description of exclusions from the target population*): None.

**2a.10 Denominator Exclusion Details** (*All information required to collect exclusions to the denominator, including all codes, logic, and definitions*):

N/A

**2a.11 Stratification Details/Variables** (*All information required to stratify the measure including the stratification variables, all codes, logic, and definitions*):

No stratification is required for this measure.

**2a.12-13 Risk Adjustment Type:** No risk adjustment necessary

**2a.14 Risk Adjustment Methodology/Variables** (*List risk adjustment variables and describe conceptual models, statistical models, or other aspects of model or method*):

N/A

**2a.15-17 Detailed risk model available Web page URL or attachment:**

**2a.18-19 Type of Score:** Rate/proportion

**2a.20 Interpretation of Score:** Better quality = Higher score

**2a.21 Calculation Algorithm** (*Describe the calculation of the measure as a flowchart or series of steps*):

A patient's age is determined as of the start of the reporting month. Patients are counted as being in the facility for the entire reporting month if "Admit Date" to the specified facility is prior or equal to the first day of the reporting month, AND the patient has not been discharged ("Discharge Date" is null or blank), OR "Discharge Date" from the facility is greater than or equal to the last day of the reporting month. Patients are counted as in-center HD patients if their in-center HD start date is less than or equal to the first day of the reporting month and their in-center HD end date is greater than or equal to the last day of the reporting month (or blank/null in the case the patient has not ended in-center HD).

Ultrafiltration rate is calculated for a single session per month (CROWNWeb generally records data from the last session) using data elements for pre-dialysis weight, post-dialysis weight, and delivered minutes of dialysis. The formula for UF rate is:  $((\text{pre-weight} - \text{post-weight}) * 1000 / \text{post-weight}) / (\text{delivered minutes} / 60)$ . The resulting units are ml/kg/hr.

Patients are included in the denominator if they are at least 18 years old and were continuously enrolled in the dialysis facility as an in-center HD patient for the entire reporting month.

<p>Patients are included in the numerator if they are in the denominator and the ultrafiltration rate for the reported session was less than or equal to 15 ml/kg/hr. The measure is calculated by dividing the numerator by the denominator.</p>	
<p><b>2a.22 Describe the method for discriminating performance (e.g., significance testing):</b> The performance of the facility will be compared to state, Network and national performance.</p>	
<p><b>2a.23 Sampling (Survey) Methodology</b> <i>If measure is based on a sample (or survey), provide instructions for obtaining the sample, conducting the survey and guidance on minimum sample size (response rate):</i> N/A</p>	
<p><b>2a.24 Data Source</b> <i>(Check the source(s) for which the measure is specified and tested)</i> Electronic clinical data</p>	
<p><b>2a.25 Data source/data collection instrument</b> <i>(Identify the specific data source/data collection instrument, e.g. name of database, clinical registry, collection instrument, etc.):</i> CROWNWeb</p>	
<p><b>2a.26-28 Data source/data collection instrument reference web page URL or attachment:</b> URL <a href="http://www.projectcrownweb.org/crown/index.php">http://www.projectcrownweb.org/crown/index.php</a></p>	
<p><b>2a.29-31 Data dictionary/code table web page URL or attachment:</b> URL <a href="http://www.projectcrownweb.org/crown/index.php?page=Public_Documents&amp;subPage=Release_Documents">http://www.projectcrownweb.org/crown/index.php?page=Public_Documents&amp;subPage=Release_Documents</a></p>	
<p><b>2a.32-35 Level of Measurement/Analysis</b> <i>(Check the level(s) for which the measure is specified and tested)</i> Facility/Agency</p>	
<p><b>2a.36-37 Care Settings</b> <i>(Check the setting(s) for which the measure is specified and tested)</i> Dialysis Facility</p>	
<p><b>2a.38-41 Clinical Services</b> <i>(Healthcare services being measured, check all that apply)</i> Dialysis</p>	
<b>TESTING/ANALYSIS</b>	
<p><b>2b. Reliability testing</b></p> <p><b>2b.1 Data/sample</b> <i>(description of data/sample and size):</i> For the 2008 ESRD CPM project, inter-rater reliability was assessed using facility abstracted and Network re-abstracted data. A total of 301 randomly selected medical records were included in the analysis. (Centers for Medicare &amp; Medicaid Services. 2008 Annual Report, End Stage Renal Disease Clinical Performance Measures Project. Department of Health and Human Services, Centers for Medicare &amp; Medicaid Services, Office of Clinical Standards &amp; Quality, Baltimore, Maryland, December 2008).</p> <p><b>2b.2 Analytic Method</b> <i>(type of reliability &amp; rationale, method for testing):</i> To analyze the inter-rater reliability of the ESRD CPM data agreement rates, levels of concurrence, and kappa statistics were computed. Agreement rates were calculated for continuous data.</p> <p><b>2b.3 Testing Results</b> <i>(reliability statistics, assessment of adequacy in the context of norms for the test conducted):</i> The variables used in the calculation of ultrafiltration rate are pre-dialysis weight, post-dialysis weight, and treatment time. The reliability of the treatment time variable was not assessed as part of the ESRD CPM project. The agreement rate between the facility abstracted and network re-abstracted data for the pre-dialysis weight was between 84% and 85% for all three months assessed. Similarly, for post-dialysis weight, the agreement was between 82% and 84% for all three months assessed. These results suggest a high reliability in the weight data recorded by the dialysis facilities.</p>	<p style="text-align: right;"><b>2b</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p><b>2c. Validity testing</b></p>	<p style="text-align: right;"><b>2c</b> C <input type="checkbox"/></p>

<p><b>2c.1 Data/sample</b> (<i>description of data/sample and size</i>): This measure was established on the basis of face validity. Evidence suggests that ultrafiltration rates greater than 15 ml/kg/hr are unacceptably high. The clinical TEP members agreed that this measure will improve quality of care for in-center HD patients.</p> <p><b>2c.2 Analytic Method</b> (<i>type of validity &amp; rationale, method for testing</i>): Face validity is the only validity assessed. The validity was assessed by a vote by the C-TEP.</p> <p><b>2c.3 Testing Results</b> (<i>statistical results, assessment of adequacy in the context of norms for the test conducted</i>): The measure was ratified by the C-TEP as a valid measure.</p>	<p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>
<p><b>2d. Exclusions Justified</b></p> <p><b>2d.1 Summary of Evidence supporting exclusion(s):</b> There are no exclusions.</p> <p><b>2d.2 Citations for Evidence:</b> N/A</p> <p><b>2d.3 Data/sample</b> (<i>description of data/sample and size</i>): N/A</p> <p><b>2d.4 Analytic Method</b> (<i>type analysis &amp; rationale</i>): N/A</p> <p><b>2d.5 Testing Results</b> (<i>e.g., frequency, variability, sensitivity analyses</i>): N/A</p>	<p>2d</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p><b>2e. Risk Adjustment for Outcomes/ Resource Use Measures</b></p> <p><b>2e.1 Data/sample</b> (<i>description of data/sample and size</i>): Risk adjustment is not necessary for this measure.</p> <p><b>2e.2 Analytic Method</b> (<i>type of risk adjustment, analysis, &amp; rationale</i>): N/A</p> <p><b>2e.3 Testing Results</b> (<i>risk model performance metrics</i>): N/A</p> <p><b>2e.4 If outcome or resource use measure is not risk adjusted, provide rationale:</b> N/A</p>	<p>2e</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p> <p>NA <input type="checkbox"/></p>
<p><b>2f. Identification of Meaningful Differences in Performance</b></p> <p><b>2f.1 Data/sample from Testing or Current Use</b> (<i>description of data/sample and size</i>): Phase 1 and 2 CROWNWeb Beta Testing Data: Data are based on the 18 facilities participating in Phase 1 and the 180 facilities participating in Phase 2 plus about 3000 additional batch-submission facilities in CROWNWeb. These data include about 60% of dialysis facilities and 75% of dialysis patients and are heavily weighted towards large dialysis organization facilities.</p> <p><b>2f.2 Methods to identify statistically significant and practically/meaningfully differences in performance</b> (<i>type of analysis &amp; rationale</i>): We examined one month of CROWNWeb data for 3,254 facilities with 171,832 patients meeting the inclusion criteria (adult, in-center, thrice-weekly HD patients) in June 2010. Ultrafiltration rates were calculated as described above for each patient's reported dialysis session, and the proportion of patients at each facility meeting the measure guideline (with ultrafiltration rates less than 15 ml/kg/hr) was computed. Facilities with fewer than 10 patients meeting the inclusion criteria were excluded.</p> <p><b>2f.3 Provide Measure Scores from Testing or Current Use</b> (<i>description of scores, e.g., distribution by quartile, mean, median, SD, etc.; identification of statistically significant and meaningfully differences in performance</i>): Of the 3,185 facilities included in the analysis, about 5% of facilities (N = 171) had perfect attainment of</p>	<p>2f</p> <p>C <input type="checkbox"/></p> <p>P <input type="checkbox"/></p> <p>M <input type="checkbox"/></p> <p>N <input type="checkbox"/></p>

<p>the measure with all patients having an ultrafiltration rate less than 15 ml/kg/hr. About 37% of facilities had between 90% and 100% attainment (N = 1214); about 41% of facilities had between 80% and 90% attainment (N = 1335); 13% had between 70% and 80% attainment (N = 410); 4% had less than 70% attainment.</p> <p>Although the distribution of facility-level performance is narrow, available evidence suggests that an ultrafiltration rate above 15 ml/kg/hr is unacceptably high. Therefore, the fact that only 5% of facilities had perfect achievement of the measure suggests that there is considerable room for improvement in this area.</p>	
<p><b>2g. Comparability of Multiple Data Sources/Methods</b></p> <p><b>2g.1 Data/sample</b> (<i>description of data/sample and size</i>): Multiple data sources are not allowed for this measure and therefore testing is not applicable.</p> <p><b>2g.2 Analytic Method</b> (<i>type of analysis &amp; rationale</i>): N/A</p> <p><b>2g.3 Testing Results</b> (<i>e.g., correlation statistics, comparison of rankings</i>): N/A</p>	<p>2g C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p><b>2h. Disparities in Care</b></p> <p><b>2h.1</b> If measure is stratified, provide stratified results (<i>scores by stratified categories/cohorts</i>): N/A</p> <p><b>2h.2</b> If disparities have been reported/identified, but measure is not specified to detect disparities, provide follow-up plans: N/A</p>	<p>2h C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p><b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Scientific Acceptability of Measure Properties</i>?</b></p>	<p>2</p>
<p><b>Steering Committee: Overall, to what extent was the criterion, <i>Scientific Acceptability of Measure Properties</i>, met?</b> Rationale:</p>	<p>2 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<b>3. USABILITY</b>	
<p>Extent to which intended audiences (e.g., consumers, purchasers, providers, policy makers) can understand the results of the measure and are likely to find them useful for decision making. (evaluation criteria)</p>	<p>Eval Ratin g</p>
<p><b>3a. Meaningful, Understandable, and Useful Information</b></p> <p><b>3a.1 Current Use:</b> Testing not yet completed</p> <p><b>3a.2 Use in a public reporting initiative</b> (disclosure of performance results to the public at large) (<i>If used in a public reporting initiative, provide name of initiative(s), locations, Web page URL(s). If not publicly reported, state the plans to achieve public reporting within 3 years</i>): This measure is currently not publically reported. This measure could be considered for public reporting on Medicare’s Dialysis Facility Compare website in the future.</p> <p><b>3a.3 If used in other programs/initiatives</b> (<i>If used in quality improvement or other programs/initiatives, name of initiative(s), locations, Web page URL(s). If not used for QI, state the plans to achieve use for QI within 3 years</i>): None.</p> <p><b>Testing of Interpretability</b> (<i>Testing that demonstrates the results are understood by the potential users for public reporting and quality improvement</i>)</p> <p><b>3a.4 Data/sample</b> (<i>description of data/sample and size</i>): Testing of interpretability has not been</p>	<p>3a C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>



<p>performed.</p> <p><b>3a.5 Methods</b> (e.g., focus group, survey, QI project): N/A</p> <p><b>3a.6 Results</b> (qualitative and/or quantitative results and conclusions): N/A</p>	
<p><b>3b/3c. Relation to other NQF-endorsed measures</b></p> <p><b>3b.1 NQF # and Title of similar or related measures:</b></p>	
<p><b>(for NQF staff use) Notes on similar/related endorsed or submitted measures:</b></p>	
<p><b>3b. Harmonization</b> If this measure is related to measure(s) already endorsed by NQF (e.g., same topic, but different target population/setting/data source <u>or</u> different topic but same target population): <b>3b.2 Are the measure specifications harmonized? If not, why?</b></p>	<p><b>3b</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p><b>3c. Distinctive or Additive Value</b> <b>3c.1 Describe the distinctive, improved, or additive value this measure provides to existing NQF-endorsed measures:</b></p> <p><b>5.1 If this measure is similar to measure(s) already endorsed by NQF (i.e., on the same topic and the same target population), Describe why it is a more valid or efficient way to measure quality:</b> N/A</p>	<p><b>3c</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p><b>TAP/Workgroup: What are the strengths and weaknesses in relation to the subcriteria for <i>Usability</i>?</b></p>	<p><b>3</b></p>
<p><b>Steering Committee: Overall, to what extent was the criterion, <i>Usability</i>, met?</b> <b>Rationale:</b></p>	<p><b>3</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<b>4. FEASIBILITY</b>	
<p>Extent to which the required data are readily available, retrievable without undue burden, and can be implemented for performance measurement. (evaluation criteria)</p>	<p>Eval Ratin g</p>
<p><b>4a. Data Generated as a Byproduct of Care Processes</b></p> <p><b>4a.1-2 How are the data elements that are needed to compute measure scores generated?</b> Data generated as byproduct of care processes during care delivery (Data are generated and used by healthcare personnel during the provision of care, e.g., blood pressure, lab value, medical condition)</p>	<p><b>4a</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p><b>4b. Electronic Sources</b></p> <p><b>4b.1 Are all the data elements available electronically?</b> (elements that are needed to compute measure scores are in defined, computer-readable fields, e.g., electronic health record, electronic claims) Yes</p> <p><b>4b.2 If not, specify the near-term path to achieve electronic capture by most providers.</b></p>	<p><b>4b</b> C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p><b>4c. Exclusions</b></p>	<p><b>4c</b> C <input type="checkbox"/></p>

<p><b>4c.1</b> Do the specified exclusions require additional data sources beyond what is required for the numerator and denominator specifications? No</p> <p><b>4c.2</b> If yes, provide justification.</p>	<p>P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/> NA <input type="checkbox"/></p>
<p><b>4d.</b> Susceptibility to Inaccuracies, Errors, or Unintended Consequences</p> <p><b>4d.1</b> Identify susceptibility to inaccuracies, errors, or unintended consequences of the measure and describe how these potential problems could be audited. If audited, provide results. The requested information should be available in patient medical records as current standards require documentation of patients' delivered treatment time, pre-dialysis weight, and post-dialysis weight.</p>	<p>4d C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p><b>4e.</b> Data Collection Strategy/Implementation</p> <p><b>4e.1</b> Describe what you have learned/modified as a result of testing and/or operational use of the measure regarding data collection, availability of data/missing data, timing/frequency of data collection, patient confidentiality, time/cost of data collection, other feasibility/ implementation issues: There are likely to be few unintended consequences for implementation of this measure, as the required data elements are already routinely collected for reporting purposes.</p> <p><b>4e.2</b> Costs to implement the measure (<i>costs of data collection, fees associated with proprietary measures</i>): The data elements necessary for the calculation of this measure are already routinely collected and have been used previously with HD adequacy measures. Therefore, there would no additional costs associated with the implementation of this measure. The estimated data collection burden and associated cost estimates for these measures are presented in Tables 1-3 in the Federal Register. Vol. 73, No. 73 page 20469. URL: <a href="http://www.cms.gov/CFCsAndCoPs/downloads/ESRDFinalrule0415.pdf">http://www.cms.gov/CFCsAndCoPs/downloads/ESRDFinalrule0415.pdf</a></p> <p><b>4e.3</b> Evidence for costs: See above reference to Federal Register.</p> <p><b>4e.4</b> Business case documentation: The premise behind this measure is that high ultrafiltration rates are deleterious. The implementation of lower rates of ultrafiltration on dialysis should not impose an undue burden/cost on dialysis facilities.</p>	<p>4e C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<p><b>TAP/Workgroup:</b> What are the strengths and weaknesses in relation to the subcriteria for <i>Feasibility</i>?</p>	<p>4</p>
<p><b>Steering Committee:</b> Overall, to what extent was the criterion, <i>Feasibility</i>, met? Rationale:</p>	<p>4 C <input type="checkbox"/> P <input type="checkbox"/> M <input type="checkbox"/> N <input type="checkbox"/></p>
<b>RECOMMENDATION</b>	
<p><b>(for NQF staff use)</b> Check if measure is untested and only eligible for time-limited endorsement.</p>	<p>Time-limited <input type="checkbox"/></p>
<p><b>Steering Committee:</b> Do you recommend for endorsement? Comments:</p>	<p>Y <input type="checkbox"/> N <input type="checkbox"/> A <input type="checkbox"/></p>
<b>CONTACT INFORMATION</b>	
<p><b>Co.1 Measure Steward (Intellectual Property Owner)</b> <b>Co.1 Organization</b> Centers for Medicare &amp; Medicaid Services, 7500 Security Boulevard, Baltimore, Maryland, 21244</p>	

<b>Co.2 Point of Contact</b> Thomas, Dudley, <a href="mailto:Thomas.Dudley@cms.hhs.gov">Thomas.Dudley@cms.hhs.gov</a> , 410-786-1442-
Measure Developer If different from Measure Steward <b>Co.3 Organization</b> Arbor Research/UM-KECC, 315 W. Huron Street, Ann Arbor, Michigan, 48103
<b>Co.4 Point of Contact</b> Adrienne, Janney, <a href="mailto:adrienne.janney@arborresearch.org">adrienne.janney@arborresearch.org</a> , 734-665-4108-
<b>Co.5 Submitter If different from Measure Steward POC</b> Thomas, Dudley, <a href="mailto:Thomas.Dudley@cms.hhs.gov">Thomas.Dudley@cms.hhs.gov</a> , 410-786-1442-, Centers for Medicare & Medicaid Services
<b>Co.6 Additional organizations that sponsored/participated in measure development</b>
<b>ADDITIONAL INFORMATION</b>
<b>Workgroup/Expert Panel involved in measure development</b> <b>Ad.1</b> Provide a list of sponsoring organizations and workgroup/panel members' names and organizations. Describe the members' role in measure development. Dr. Rajiv Agarwal, panel chair (University of Indiana, School of Medicine, Indianapolis, IN) Dr. Nathan Levin (Renal Research Institute, New York, NY) Dr. John Daugirdas (University of Chicago, Chicago, IL) William Peckham ( <a href="http://www.billpeckham.com">http://www.billpeckham.com</a> ) Dr. Raymond Hakim (Fresenius Medical Care NA, Brentwood, TN) Dr. Thomas Parker III (Renal Ventures Management, Lakewood, CO) Dr. Allen Nissenon (DaVita, El Segundo, CA) Dr. Rajiv Saran, Moderator (University of Michigan - Kidney Epidemiology and Cost Center, Ann Arbor, MI) Brett Lantz, Analyst (Arbor Research Collaborative for Health, Ann Arbor, MI)
<b>Ad.2</b> If adapted, provide name of original measure: <b>Ad.3-5</b> If adapted, provide original specifications URL or attachment
<b>Measure Developer/Steward Updates and Ongoing Maintenance</b> <b>Ad.6</b> Year the measure was first released: <b>Ad.7</b> Month and Year of most recent revision: <b>Ad.8</b> What is your frequency for review/update of this measure? <a href="#">Three years</a> <b>Ad.9</b> When is the next scheduled review/update for this measure? <a href="#">2013</a>
<b>Ad.10</b> Copyright statement/disclaimers:
<b>Ad.11 -13</b> Additional Information web page URL or attachment:
Date of Submission ( <i>MM/DD/YY</i> ): <a href="#">09/30/2010</a>