

# Understanding Measures, Star Ratings, and Quality Outcomes

October 25, 2017  
2:30 P.M. ET



## Agenda

Topic	Speaker
<p><b>Dialysis Facility Compare Star Ratings Overview</b></p> <p><b>Dialysis Facility Compare October 2017 Status Update</b></p>	<p><b>Elena K. Balovlenkov, MS, RN, CHN</b> Technical Lead, Dialysis Facility Compare, Division of Quality Measurement, Centers for Medicare &amp; Medicaid</p>
<p><b>Dialysis Facility Compare 2018 Release – Measures and Methodology Updates</b></p>	<p><b>Joel Andress, PhD</b> ESRD Measures Development Lead, Division of Quality Measurement, Centers for Medicare &amp; Medicaid Services</p> <p><b>Judith Lynch, BA</b> ICH CAHPS Project Director, RTI International</p>
<p><b>Dialysis Facility Compare – New Measures</b></p> <p><b>Dialysis Facility Compare Measure Implementation Process</b></p>	<p><b>Joel Andress, PhD</b></p>
<p><b>Questions</b></p>	

# **Dialysis Facility Compare Overview**

Elena K. Balovlenkov, MS, RN, CHN  
*Division of Quality Measurement, CMS*

## Background

- » The Centers for Medicare & Medicaid Services (CMS) developed the Dialysis Facility Compare (DFC) Star Ratings in response to a national call for greater transparency in how the agency measures the quality of kidney care and health care consumers' desire to use health care quality data to make informed decisions

## DFC Star Ratings Highlights

<b>Date</b>	<b>Activity</b>
June 2014	Star Ratings announcement
January 2015	DFC 2014 Star Ratings release
April 2015	Technical Expert Panel (TEP) review
October 2015	DFC 2015 Star Ratings release
December 2015	TEP discussion of April 2015 report
February – March 2016	Public comment period
June 2016	Public call on Star Ratings methodology
August 2016	Public call on measure updates
October 2016	DFC 2016 Star Ratings refresh
October – December 2016	Announcement of Candidate Measures and Public Comment Period
February 2017	Technical Expert Panel (TEP) review
October 2017	October 2018 Technical Report Available

## Including the Patient Voice

- » CMS continues to believe that DFC is intended to support patients seeking information on kidney care
- » We continue to reach out to the community for ideas and suggestions on how to improve
  - To this end, DFC is conducting usability testing of the website to ensure that it is easy to use and displays correctly on tablets and smartphones
- » We also continue to develop tools to help the community educate health care professionals, patients, and caregivers about DFC

## Patient Summit Overview

- » On April 3, 2017, NORC at the University of Chicago, with support from the American Association of Kidney Patients, conducted a five-hour discussion with ESRD patients and one caregiver
- » Patients were members of five national organizations representing the interests of ESRD patients
- » 12 patients participated in the meeting
- » This feedback session was the first time DFC leveraged relationships with patient advocacy organizations in the kidney community to dually:
  - Receive broad patient input on the website
  - Engage patients

## Key Patient Summit Takeaways

- » Patients want and seek resources specific to their current stage of disease and health status
- » Current depictions of ESRD and ESRD patients do not always represent the range of patient experiences, and many feel they are too negative
- » Information about treatment options and quality should be proactively provided directly into the hands of patients who might not otherwise seek it out
- » Medicare is a trusted source of information

## Patient Summit Next Steps

- » Look for opportunities to incorporate feedback into DFC, where possible. For example:
  - Reorganize existing content to address different stages of kidney disease
  - Address patients' sensitivities around terminology and depictions of patients
- » Consider feedback in the bigger picture of DFC's future development
- » Consider a future meeting with less engaged patients to understand their perspectives and how DFC can help them engage in their kidney care

# **Dialysis Facility Compare October 2017 Status Update**

Elena K. Balovlenkov, MS, RN, CHN  
*Technical Lead, Division of Quality Measurement,  
CMS*

## October 2017 DFC Status Update

- » CMS will not publish the data from the Quarterly Dialysis Facility Compare—Preview for October 2017 Report on Dialysis Facility Compare
- » Star Ratings and measure values available since July 2017 will remain on Dialysis Facility Compare until the next update
- » The date of the next site update is not yet available but CMS will keep the community informed
- » CMS has completed its investigation into the completeness of the data, but due to operational constraints, will not be able to update measure results immediately

## Dialysis Facilities Should Know

- » The following measures will be updated on the DFC site in January 2018 (previewed to facilities in November 2017):
  - The Standardized Transfusion Ratio
  - The Standardized Mortality Ratio
  - The Standardized Hospitalization Ratio
  - The Standardized Readmission Ratio
  - Vascular Access Type (Fistula and Catheter measures)
  - NHSN Bloodstream Infection
  - In-Center Hemodialysis CAHPS
- » The following measures will not be updated in January 2018:
  - Kt/V\*
  - Proportion of patients with Hypercalcemia

\*includes all four measures: Pediatric HD Kt/V,  
Adult HD Kt/V, Pediatric PD Kt/V, Adult PD Kt/V

## Dialysis Facilities Should Know

- » During the Preview Period it was determined that there was incomplete nursing home data for calendar year 2016 for most dialysis facilities in 11 states
- » The following measures will be recalculated for all facilities using the more complete nursing home data:
  - Standardized Mortality Ratio
  - Standardized Hospitalization Ratio
  - Standardized Transfusion Ratio
- » Most facilities will notice a small change to these measures. The revised measure calculations will be available for facilities during the November 2017 preview period for posting on Dialysis Compare in January 2018

## Dialysis Facilities Should Know

- » Recalculating the Kt/V, Hypercalcemia, and Phosphorus Measures
  - A subset of patients who had clinical data included in CROWNWeb but did not have a 2728 form available in the CROWNWeb system on the date the extract was created had clinical data removed from the extract. These measures will be recalculated with complete data once it becomes available
- » To be included in the data extract used to calculate DFC Measures the following criteria must be met for CROWNWeb Data:
  - The record for the patient/provider/month must be in the “Submitted” state. Records that are in the “Saved” state will not be included
  - The record for the patient/provider/month must not have the “No Clinical Data Available” flag set in order to retrieve any values

# **Dialysis Facility Compare 2018 Release Measures and Methodology Updates**

Joel Andress, PhD

*ESRD Measures Development Lead, Division of  
Quality Measurement, CMS*

## Updated and New Quality Measures to be Reported in October 2018

- » Standardized Transfusion Ratio for Dialysis Facilities (STrR, [NQF #2979](#))
- » Standardized Mortality Ratio for Dialysis Facilities (SMR, [NQF #0369](#))
- » Standardized Hospitalization Ratio for Dialysis Facilities (SHR, [NQF #1463](#))
- » Hemodialysis Vascular Access: Standardized Fistula Rate (SFR, [NQF #2977](#))
- » Hemodialysis Vascular Access: Long-Term Catheter Rate (Catheter, [NQF #2978](#))
- » Proportion of Patients with Hypercalcemia (Hypercalcemia, [NQF #1454](#))
- » Measurement of nPCR for Pediatric Hemodialysis Patients (nPCR, [NQF #1425](#))

## Star Ratings Technical Expert Panel

- » In early 2017, CMS convened a Technical Expert Panel (TEP) to review and make recommendations on:
  - Measures to include/retire
  - Star Ratings scoring methodology
  - Presentation of the Star Ratings on the DFC website
- » The TEP included patient and provider subject matter experts

## Key Star Ratings TEP Recommendations

- » Update Hypercalcemia, SMR, SHR, and STrR quality measures to reflect NQF-endorsed specifications
- » Replace current VA measures with Standardized Fistula Rate and Long-Term Catheter Rate measures
- » Include Pediatric PD Kt/V in the Star Ratings
- » Add ICH-CAHPS as a separate rating from the overall Star Ratings
- » Provide input on potential next steps for re-baselining

*For a complete summary, see the Technical Expert Panel final report [here](#).*

## Key Star Ratings TEP Recommendations

- » 54 percent of TEP members supported the addition of Standardized Readmission Ratio (SRR) to the Star Ratings; 46 percent did not support adding SRR to the Star Ratings
- » The TEP did not achieve a consensus to support including the National Healthcare Safety Network Bloodstream Infection (NHSN SIR) measure to the Star Ratings

*For a complete summary, see the Technical Expert Panel final report [here](#).*

## Updates for the October 2018 Star Ratings

- » The October 2018 Star Rating release will include updated versions of the following measures: Standardized Fistula Rate (SFR), Long-term Catheter Rate, SMR, SHR, STrR, and Hypercalcemia
- » The following new measures are: Standardized Readmission Ratio (SRR), Pediatric PD Kt/V
- » The ICH CAHPS will also be added as a separate ICH CAHPS Star Rating
- » The Pediatric PD Kt/V measure will be added into the combined Total Kt/V measure

*NOTE: The (NHSN SIR) measure will remain on the DFC site but will not be included in the Star Ratings*

*The technical notes for the October 2018 Star Rating methodology are available [here](#).*

## Updates for the October 2018 Star Ratings

- » In order to maintain longitudinal continuity of the current Star Rating distribution, the October 2018 Release will use the prior year's DFC Star Rating distribution (using CY 2016 data) to establish a new set of cutoffs for the Star Rating to be applied to the final scores calculated for the October 2018 DFC release

*The technical notes for the October 2018 Star Rating methodology are available [here](#).*

# Quality Measures Used in the Clinical Star Rating Calculation for October 2018

- » Standardized Transfusion Ratio for Dialysis Facilities (STrR, [NQF #2979](#))
- » Standardized Mortality Ratio for Dialysis Facilities (SMR, [NQF #0369](#))
- » Standardized Hospitalization Ratio for Dialysis Facilities (SHR, [NQF #1463](#))
- » Standardized Readmission Ratio for Dialysis Facilities (SRR, [NQF# 2496](#))
- » Total Kt/V Measure
  - Delivered Dose of Hemodialysis Above Minimum (Adult HD Kt/V, [NQF #0249](#))\*
  - Minimum spKt/V for Pediatric Hemodialysis Patients (Pediatric HD Kt/V, [NQF #1423](#))\*
  - Delivered Dose of Peritoneal Dialysis Above Minimum (Adult PD Kt/V, [NQF #0318](#))\*
  - Pediatric Peritoneal Dialysis Adequacy: Achievement of Target Kt/V (Pediatric PD Kt/V, [NQF# 2706](#))\*
- » Hemodialysis Vascular Access: Standardized Fistula Rate (SFR, [NQF #2977](#))
- » Hemodialysis Vascular Access: Long-Term Catheter Rate (Catheter, [NQF #2978](#))
- » Proportion of Patients with Hypercalcemia (Hypercalcemia, [NQF #1454](#))

\*Kt/V measurements are combined into a single Total Kt/V measure.

\*\*The technical notes for the October 2018 Star Rating methodology are available [here](#).

## When Will the Clinical Star Rating Distribution Be Reset?

- » The clinical star ratings distribution will be evaluated once 3 years have passed since the last reset
- » After 3 years have passed, the clinical star rating distribution will be evaluated for a reset when 15% or less of facilities are receiving 1 or 2 stars
- » This is in alignment with the TEP recommendations for CMS to evaluate a potential re-setting of the star rating distribution approximately every 3 years
- » A re-setting of the star rating distribution will also include the establishment of a new baseline

# Star Ratings of CAHPS Survey Results

Judith Lynch

*ICH CAHPS Project Director, RTI  
International*

## The In-Center Hemodialysis CAHPS Survey

- » The ICH CAHPS Survey is conducted on a semi-annual basis with samples of hemodialysis patients
- » Survey questionnaire contains 62 items; with 43 considered to be “Core CAHPS” survey items
- » How does CMS ensure the quality of data collected in the survey?
  - Use of independent survey vendors
  - Ongoing training of all survey vendors
  - In-person meetings and oversight with vendors
  - Survey website for announcements and updates
  - Ongoing review of submitted data

## Publicly Reported ICH CAHPS Measures

- » CMS began reporting ICH CAHPS Survey results on Dialysis Facility Compare on [www.medicare.gov](http://www.medicare.gov) in October 2016
- » Beginning in 2017, results will be updated or “refreshed” twice each year
- » Results are based on data from the two most recent survey periods
- » For survey results to be publicly reported, each in-center hemodialysis (ICH) facility must have 30 or more completed surveys across two survey periods
- » “Top-box” (the most positive) scores are reported on Dialysis Facility Compare

## Publicly Reported ICH CAHPS Measures (cont'd)

- » Three composite and three individual measures are reported on Dialysis Facility Compare
- » Composite Measures
  - Kidney doctors' communication and caring (6 survey items)
  - Dialysis center staff, care and operations (17 survey items)
  - Providing information to patients (9 survey items)
- » Three global ratings (individual survey items)
  - Rating of kidney doctors
  - Rating of dialysis center staff
  - Rating of dialysis center

## What are Star Ratings?

- » Star Ratings summarize performance using symbols (stars) to help consumers quickly and easily understand quality of care information
- » Star Ratings spotlight differences in health care quality and identify areas for improvement
- » Star Ratings are useful to consumers, consumer advocates, health care providers, and other stakeholders

## General Information about Star Ratings on CAHPS Surveys

- » Star ratings on the ICH CAHPS Survey will be based on the same data as the ICH CAHPS measures publicly reported on Dialysis Facility Compare
- » CMS is currently using star ratings on other CAHPS Surveys, including the Hospital CAHPS and the Home Health CAHPS Surveys, and on the CMS Part C and Part D Star Ratings Program

*The technical notes for the October 2018 ICH CAHPS Star Rating methodology are available [here](#).*

## Creating Star Ratings on ICH-CAHPS: Step 1

- » Star ratings for the ICH CAHPS Survey measures will be calculated using the following steps

### **Step 1**

- » Construction and Adjustment of Linearized Score
  - For star ratings, all survey response levels are used
  - Individual survey responses are converted into linear scores on a 0-100 point scale
  - Composite scores are based on the mean of the linearized responses to the questions that are included in each composite measure

*The technical notes for the October 2018 ICH CAHPS Star Rating methodology are available [here](#).*

## Creating Star Ratings on ICH-CAHPS: Step 1 (cont'd)

- » After linearized scores are created, they are adjusted for mode effects and patient mix
  - Patient mix = a level playing field among providers by adjusting for patient characteristics that affect response tendencies
- » Patient Mix Adjusters
  - Patient adjustment factors include age, gender, self-reported overall health status, education, years on dialysis, and selected diseases and conditions
  - Most of the adjustment factors come from the patient survey

The technical notes for the October 2018 ICH CAHPS Star Rating methodology are available [here](#).

# Creating Star Ratings on ICH-CAHPS: Step 2

## Step 2

### Converting Linearized Scores to Star Ratings

- » A statistical clustering technique is applied to the adjusted linearized scores for any CCN with 30 or more completed surveys
- » Adjusted scores are rounded to the nearest whole number prior to clustering
- » Clustering identifies star groups that **maximize** differences between groups and **minimize** differences within groups
  - There are no predetermined quotas on the number of in-center hemodialysis facilities that would be included in any star category
- » A 1, 2, 3, 4, or 5 star is assigned to each ICH CAHPS measure based on cluster assignments

The technical notes for the October 2018 ICH CAHPS Star Rating methodology are available [here](#).

## Star Ratings Cut Points on ICH-CAHPS

- » The cut points (boundaries) for star assignments are derived from the range of individual measure Star Ratings in each cluster
- » The star levels associated with each cluster are determined by ordering the means of each cluster
- » In each public reporting period, the cut points will be re-estimated and made available to ICH facilities in a Preview Report
- » Linearized scores for each measure will also be provided to ICH facilities via the Preview Report

*The technical notes for the October 2018 ICH CAHPS Star Rating methodology are available [here](#).*

# **DFC October 2019 Release Measure Candidates**

Joel Andress, PhD

*ESRD Measures Development Lead, Division of  
Quality Measurement, CMS*

## **DFC October 2019 Release: Measure Candidates**

- » Percentage of Prevalent Patients Waitlisted (PPPW)
- » Standardized First Kidney Transplant Waitlist Ratio for Incident Dialysis Patients (SWR)

## DFC October 2019 Star Ratings: Measure Updates

- » Measure specifications for all measures may be found at <https://dialysisdata.org/content/esrd-measures>

# Commenting on DFC October 2019 Measure Candidates

Joel Andress, PhD

*ESRD Measures Development Lead, Division of  
Quality Measurement, CMS*

## Submitting Comments and Candidate Measures for Consideration

- » CMS is accepting comments beginning October 25 through December 31, 2017, on:
  - DFC measure candidates
  - Additional measures candidates for DFC or Star Ratings

## Measure Submission Requirements

- » If you would like to submit a measure for consideration as a candidate measure, you must provide:
  - Complete measure specifications
  - Clinical evidence supporting the use of the measure
  - Measure testing data consistent with the requirements of the NQF
- » We recommend using the NQF Measure Submission Form as a basis for any submitted measure
- » Submitted measures will be considered based on the information provided

# Questions

## Resources

- » Information about measure specifications and the Star Ratings methodology can be found in the CMS End-Stage Renal Disease (ESRD) Measures Manual:  
<https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/ESRDQIP/Downloads/CMS-ESED-Measures-Manual-2017-v2-5-2-17.pdf>

## Questions?

- » For additional questions about the Star Ratings methodology or measure specifications, please email the UM-KECC helpdesk at [dialysisdata@umich.edu](mailto:dialysisdata@umich.edu)
- » For questions about CROWNWeb data submission, contact the QualityNet helpdesk at (866) 288-8912 or <http://help.mycrownweb.org/>
- » For questions about the ICH CAHPS® Survey contact the project team at: [ichcahps@rti.org](mailto:ichcahps@rti.org) or call 1-866-245-8083. More information is available at the survey web site: <https://ichcahps.org>

**Thank you!**