## **All-KCQA Conference Call**

February 18, 2015 1-2 pm Eastern

1.888.289.4573; 569783#

**KIDNEY CARE QUALITY ALLIANCE** 

## **ROLL CALL**

#### **CALL GROUND RULES**

- Call is open to public and a public access file of all materials was made available on the web
- KCQA members participate in agenda items as they arise
- Specific time is provided on agenda for public comment
- All remarks are off the record

## **AGENDA**

- Overview of work undertaken since last All-KCQA call in November 2014
- 2. Review and discussion of retrospective testing results
  - Performance Gap
  - Scientific Acceptability: Reliability, Validity, Significant/Meaningful Difference
- 3. Recommended changes to specifications
- 4. Overview of CMS UFR measure
- KCQA Steering Committee recommendation re: submission to NQF
- 6. Next steps and public comment

# STEERING COMMITTEE AND WORKGROUP

- KCQA Steering Committee: Ed Jones (Co-Chair);
   Allen Nissenson (Co-Chair); Akhtar Ashfaq; Donna Bednarski; Barbara Fivush; Ray Hakim; Jay-r Lacson; Shari Ling; Chris Lovell; Tom Manley; Gail Wick
- Testing/Feasibility Workgroup: Scott Bieber;
   Steven Brunelli (non-voting); Maggie Carey (non-voting); Joseph Flynn; Lori Hartwell; Jeffrey Hymes;
   Mahesh Krishnan; Jay-r Lacson (non-voting);
   Klemens Meyer; Paul Miller; Don Molony; Tom
   Parker; Glenda Payne; Dan Weiner

#### MEASURES APPROVED FOR TESTING

 FM2: Post-Dialysis Weight Above or Below Target Weight

 FM7: Avoidance of Utilization of High UFR (>13 ml/kg/hour)

## **PURPOSE OF KCQA'S MEASURE TESTING**

- Four NQF endorsement criteria: Importance to Measure and Report (including a specific performance gap), Scientific Acceptability (reliability and validity of the measure's properties), Usability and Use, and Feasibility
- Importance, Usability and Use, and Feasibility are met via other avenues (literature review, use for internal quality improvement, etc.)
- Addressing the performance gap, reliability, and validity criteria requires testing the specifications

## KCQA'S MEASURE TESTING APPROACH

- Retrospective review by three KCQA member dialysis organizations with the capacity and willingness to provide testing from their data warehouses
- Prospective testing (not required for NQF) underway to inform issues related to implementation
- Consultant staff developed common protocols and refined deployment with testing organizations
- Organizations provided data to consultants for further analysis and compilation; data have been anonymized

# **TESTING DEMOGRAPHICS**

#### **OVERALL DEMOGRAPHICS**

- 4,884 facilities
- Mean facility census = 88.1 patients (range 1-644 per month)
- 412,522 patients
- Mean age = 61.7 years (range 18-104)
- 56.3% male, 43.7% female
- 52.4% Caucasian; 36.3% African American; 2.8% Asian; 1.2% American Indian/Native Alaskan; 0.7% Native Hawaiian/other Pacific Isl; 0.6% other/ missing/declined; 15.6% Hispanic (regardless of

## **EXCLUSIONS FROM MEASURES**

- Same for FM2 and FM7
- Age <18; Patients in a facility < 30 days; home dialysis patients; transient patients (<7 treatments during the month); patients without a 2728; transplant recipients with a functioning graft
- Recommendation is to retain all exclusions, as noted in memo

# **TESTING RESULTS**

#### PERFORMANCE GAP

- **FM2** (weight): Average score = 23% (lower is better); range of 0-100%\*
- **FM7 (UFR)**: Average score = 11.9% (lower is better); range of 0-100%

NOTE: To preserve anonymity, when data are presented as coming from Organization A, B, and C on accompanying material and these slides, this nomenclature is random and is scrambled throughout, such that A in one section might become B or C in another section.

<sup>\*</sup>Believed due to low census and currently being analyzed via testing organizations

#### RELIABILITY

#### FM2 (weight)

Dialysis Organization	Intra-Class Correlation	Between-Facility Co- Variance	Within-Facility Co- Variance	Ratio of Between- to Within-
A	.77	.011	.003	3.6
В	.71	123.6	49.2	2.5
C7	.63	231.8-	116.4	2.0

#### FM7 (UFR)

Dialysis Organization	Intra-Class Correlation	Between-Facility Within-Facility		Ratio of Between- to
		Variance	Variance	Within-
A <sup>8</sup>	.60	321.2	184.0	1.7
В	.70	41.1	17.4	2.3
С	.65	.004	.002	2.0

Reliability testing looked at "signal-to-noise." Across all groups, there is more variation between facilities than within facilities, which, when considered in light of the relatively high intra-class correlation coefficients, suggests that the measure is reliable and differentiates between facilities.

#### **VALIDITY**

Validity testing examined the degree to which performance on the measures was correlated to the 2013 SHR, the 2013 hospitalization rate (when available) and the 2013 SMR from Dialysis Facility Reports. Pearson's Correlation Coefficients are:

#### FM2 (weight)

Dialysis Organization	2013 SHR	2013 hospitalization	2013 SMF
		rate (from DFR)	
A	0.16	0.19	0.10
В	0.17	0.17	0.25
С	0.19		0.15

#### FM7 (UFR)

Dialysis Organization	2013 SHR	2013 hospitalization	2013 SMF
		rate (from DFR)	
A	0.11	0.11	0.07
В	0.12		0.17
С	0.09	0.08	0.03

## **VALIDITY** (cont.)

- Correlation between FM2 and FM7 and the SMR and SHR is statistically significant and in the expected direction—
   i.e., facilities that have fewer patients deviating from their prescribed weight post-dialysis or avoid high UFR have lower mortality and hospitalization
- While the size of the correlation in not large, it does reflect the hypothesized underlying relationship between process measures of dialysis quality and the ultimate patient outcome of mortality and hospitalization
- The correlations found are in-line with similar relationships for hospital and nursing home process measures and hospitalization, rehospitalization, and mortality

#### STATISTICAL/MEANINGFUL DIFFERENCE

Measure	N	Range of Scores	Mean Score	Median Score	Mode of Scores	Interquartile Range
FM2	2,205	0-100%	24.43%	24.00%	25.00%	16.00
	(2 of 3		SD =11.68			
	organizations)		SE = 0.25			
			95% CI = 23.95%-25.92%			
FM7	2,200	0-48%	10.85%	10%	8%	8.00
	(2 of 3		SD =6.61			
	organizations)		SE = 0.14			
			95% CI = 10.57-11.13%			

- Defined meaningful differences as did the Joint Commission in recent NQF submission: significant spread (>20%) between minimum and maximum scores or a significant spread between median and minimum or median and maximum score
- FM2 and FM7 show a significant spread between both the minimum and maximum scores, as well as the median and minimum and maximum scores

## **SUMMARY OF TESTING RESULTS**

- Testing for both FM2 (weight) and FM7 (UFR) identified a performance gap; the differences are meaningful.
- The specifications are reliable and differentiate between facilities.
- For validity, the correlations between performance on FM2 and FM7 and the SMR and SHR are statistically significant and in the expected direction. The size of the correlation in not large, but are in-line with similar relationships for hospital and nursing home process measures and hospitalization, rehospitalization, and mortality.

# RECOMMENDED SPECIFICATION CHANGES

# RECOMMENDED CHANGES TO SPECIFICATIONS

- FM7: Exclude patients receiving dialysis >three times per week. Evidence underlying the importance of the measure pertains to this population.
- **FM2**: Limit data collection to a calculation period that is defined as the same week that the monthly Kt/V is conducted. Change significantly reduces burden for manual data submitters and harmonizes it with FM7. Validity and reliability of this construct is comparable. Average score per facility increases 2.7% (lower score is better).

# FM2: Post-Dialysis Weight Above or Below Target Weight

ID	TITLE	DESCRIPTION	NUMERATOR	DENOMINATOR	EXCLUSIONS
FM2	Post-Dialysis Weight	Percentage of patients with an	Number of patients! from the denominator with an average post-dialysis	Number of adult in-center hemodialysis	1. Age <18 years.
l.	Above or Below Target	average post-dialysis weight >1 kg	weight >1 kg above or below the prescribed target weight during the	patients in an outpatient dialysis facility	2. Patients in a facility <30 days.
	Weight	above or below the prescribed target	reporting calculation period.	undergoing chronic maintenance	Home dialysis patients.
		weight.		hemodialysis during the reporting	4. <7 hemodialysis treatments in the facility during the
			Interpretation of Score: Lower score = better quality	calculation period.	month.
					5. Facilities beating <xx adult="" hemodialysis<="" in-center="" th=""></xx>
			Additional Information: The average post-dialysis and prescribed target		patients during the reporting period. <sup>3</sup>
			weight difference is calculated for the treatments received in the		6. Patients without a completed CMS Medical Evidence
			calculation period. The calculation period is defined as the same week		Form (Form CMS-2728).
			that the monthly KIV is drawn. <sup>2</sup>		€√7. Kidney transplant recipients with a functioning
					graft.*
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To address the fact that patients may contribute varying amounts of time to the annual denominator population, results will be reported using a "patient-month" construction.

<sup>\*</sup>Note: This exclusion was inadvertently left off the voting-version table, although the record is clear it should have been included.

# FM7: Avoidance of Utilization of High UFR (≥13 ml/kg/hour)

ID	TITLE	DESCRIPTION	NUMERATOR	DENOMINATOR	EXCLUSIONS
FM7	Avoidance of Utilization of	Percentage of adult in-center	Number of patients* from the denominator whose average UFR >13	Number of adult in-center hemodialysis	1. Age <18 years.
	High UFR (≥13 ml/kg/hour)	hemodialysis patients in the facility whose average UFR >13 ml/kg/hour.	ml/kg/hour who receive an average of <240 minutes per treatment during the calculation period.	patients in an outpatient dialysis facility undergoing chronic maintenance	Patients in a facility <30 days.     Peritoneal dialysis patients.
		and a religion in a long loan.		hemodialysis during the calculation	4. <7 hemodialysis treatments in the facility during the
			Interpretation of Score: Lower score = better quality	period.	month.
			Additional Information: The overage UFR is calculated for the		<ol> <li>Facilities treating <xx adult="" hemodialysis<br="" in-center="">patients during the reporting period (treat Bookmark not defined.</xx></li> </ol>
lı .			treatments received in the calculation period. The calculation period is		6. Patients without a completed CMS Medical Evidence
			defined as the same week that the monthly Kt/V is drawn.		Form (Form CMS-2728).
			-		7. Kidney transplant recipients with a functioning graft.**
			The average UFR for the calculation period is calculated in the following manner:		<ol> <li>Patients who receive 4 or more dialysis sessions during the calculation period.</li> </ol>
			The UFR (in ml/kg/hour) is first calculated for <u>each</u> treatment in the calculation period as:		
			([[{Pre-Dialysis Weight in kg - Post-Dialysis Weight in kg} x 1000 ml/kg] + Post-Dialysis Weight in kg) + (Delivered Treatment Time in minutes) x 60 minutes/hour		
			The <u>average</u> UFR for the calculation period is then calculated by summing the UFRs for each treatment and dividing by the number of treatments in the calculation period:		
			(UFR <sub>1</sub> + UFR <sub>2</sub> + UFR <sub>N</sub> ) + (X treatments)		
			The average treatment time is calculated as:		
			(Total Minutes Dialyzed During the Calculation Period) + (Number of Treatments in Calculation Period)		

<sup>\*</sup>To address the fact that patients may contribute varying amounts of time to the annual denominator population, results will be reported using a "patient-month" construction

<sup>\*\*</sup>Note: This exclusion was inadvertently left off the voting-version table, although the record is clear it should have been included.

# **CMS UFR MEASURE**

## **CMS UFR MEASURE**

- CMS has developed and will submit a UFR measure to NQF
  - Measures are similar, but some key differences exist
  - KCQA Co-Chairs reached out to CMS re:
     harmonizing measure specifications, as requested by
     NQF for all projects when competing measures can
     be identified in advance
  - Two conference calls held to date to review differences
  - Discussion will continue if KCQA votes to submit FM7

# **CMS UFR MEASURE (cont.)**

- CMS' testing results are directionally similar to FM7
- Primary differences in specifications are
  - UFR rate (CMS is >13; KCQA is ≥13 ml/kg/hour)
  - CMS does not include a length of session component
  - CMS does not exclude patients on dialysis four or more times/week
  - CMS relies on data submitted on a single session (data for Kt/V measure). KCQA specifies average of the sessions in the "Kt/V week" to avoid potential gaming from a single event, create a more accurate representation of performance, and obviate potential uneven-ness in performance that could arise depending on the particular day of the week a facility is using for the Kt/V data.

# RECOMMENDATION

The KCQA Steering Committee recommends KCQA members vote to approve submission of both FM2 and FM7 to NQF for endorsement consideration.

## **PUBLIC COMMENT**

#### **NEXT STEPS**

- Questions before KCQA members are whether to submit FM2 and/or FM7 to NQF for endorsement consideration
- Surveymonkey link will be sent to Lead Representatives after the call
- Due date for voting will be Monday, February 23, 6 pm ET