

Evaluation of the Consumer Assessment of Healthcare Providers and Systems In-Center Hemodialysis (CAHPS®-ICH) Survey

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ABSTRACT

- The CMS ESRD Prospective Payment System (PPS) Quality Incentive Program (QIP) reporting measure for patient experiences with care is the CAHPS®-ICH survey; however, no data on the survey have been published. The purpose of this study was to evaluate the CAHPS®-ICH in a sample of ESRD patients.
- Patient characteristics and CAHPS®-ICH responses among HD patients in the Adelphi Real World Chronic Kidney Disease Program were collected and analyzed in 2012/2013. The CAHPS®-ICH yields 3 multi-item composites: Nephrologists' Communication & Quality of Care scales are scored on a 1-4 range while Patient Information is scored 0-1. Three 0-10 global rating items (Kidney Doctors, Dialysis Center Staff, Dialysis Center) are collapsed into 3 scoring categories (1-3). Higher CAHPS®-ICH scores indicate more positive experiences with care.
- 76 facilities were treating 404 eligible HD patients. Mean patient age was 57 years, mean dialysis vintage was 3 years, and 44% were female. Facility means for each CAHPS®-ICH score below.

	Mean	SD	Range	25 th %	75 th %
Nephrologists' Communication	3.72	0.26	3.02 - 4.05	3.58	3.92
Quality of Care	3.51	0.29	2.63 - 4.01	3.35	3.73
Patient Information	0.84	0.11	0.57 - 1.01	0.76	0.91
Global Rating- Kidney Doctors	2.72	0.36	1.52 - 3.07	2.52	2.99
Global Rating – Dialysis Centre Staff	2.54	0.41	1.40 - 3.10	2.23	2.90
Global Rating – Dialysis Centre	2.58	0.45	1.38 - 3.10	2.20	2.98

- While this study demonstrates that facilities have CAHPS-ICH scores with large differences between the 25th and 75th percentiles (in effect sizes), the complexity of the scoring algorithms may pose a challenge in interpretation for clinicians.

BACKGROUND

- The U.S. Centers for Medicare and Medicaid Services (CMS) End Stage Renal Disease (ESRD) Prospective Payment System (PPS) and Quality Incentive Program (QIP) reporting measure for patient experiences with care is the Consumer Assessment of Healthcare Providers and Systems In-Center Hemodialysis (CAHPS®-ICH) survey; however no data on the survey has been published to date.
- Patient experience of care was included as a QIP reporting metric for 2014.¹
- While CMS makes this recommendation, they also note that the cost burden may be quite high based on volume of patients treated. They estimate a \$10M annual burden to the system.²

OBJECTIVE

- To evaluate in a sample of ESRD patients how well the CAHPS®-ICH questionnaire performs as a QIP measure of patient experience with care.

STUDY DESIGN

- Data were drawn from the 2012 Adelphi Chronic Kidney Disease (CKD) Disease Specific Programme® (DSP), a cross-sectional survey of US nephrologists and their patients. Details of the survey methodology have been published previously.³
- Nephrologists treating at least 20 CKD patients on dialysis were asked to provide information on their dialysis center characteristics (size, ratio of patients to physicians, nurses, and technicians, etc.) as well as information on 10 randomly selected CKD patients using a patient record form (PRF). Selected patients had to be on hemodialysis for 3 months or more.

- The PRF included patient demographics, patient history and monitoring, symptoms, concomitant conditions, treatments, drivers of therapy choice, management, lifestyle modifications, and hospitalization details.
- The 10 patients from each facility were then mailed a questionnaire which was optional to complete. It contained questions related to the patients' treatment and lifestyle and also included the CAHPS®-ICH.

CAHPS®-ICH Scoring System

- The CAHPS®-ICH survey² has 58 items that include 3 global rating items (Kidney Doctor; Dialysis Center Staff; and Dialysis Center) and 3 multi-item composites (Nephrologists' Communication and Caring, Quality of Dialysis Center Care and Operations, and Providing Information to Patients).
- The Nephrologists' Communication composite comprises 6 items, 5 of which are scored in the range 1 to 4. The sixth item is scored either 0 or 1.
- The 17-item Quality of Care composite consists of 14 items scored in the range 1 to 4 and 3 items scored as either 0 or 1.
- The Patient Information composite consists of 9 items each scored as either 0 or 1.
- Each of the global rating items is administered using a 0-10 response scale and scored as 1 (0-6), 2 (7-8), or 3 (9-10).
- A higher score on each of the CAHPS®-ICH measures indicates a more positive experience of care. Note: All scores can exceed the maximum range due to adjustment for general health status, age and education.

Statistical Analysis

- CAHPS®-ICH scores were stratified by dialysis center characteristics and significant differences were tested for using F-tests.
- To ensure comparability, effect sizes were standardized across CAHPS®-ICH global rating items and composite scores using the formula: 75th - 25th percentile / SD.

SAMPLE

- 404 patients from 76 centers were eligible and included in this analysis. The sample is similar to the United States Renal Data System (USRDS) 2011 dialysis population⁴ in terms of age and gender (Table 1).

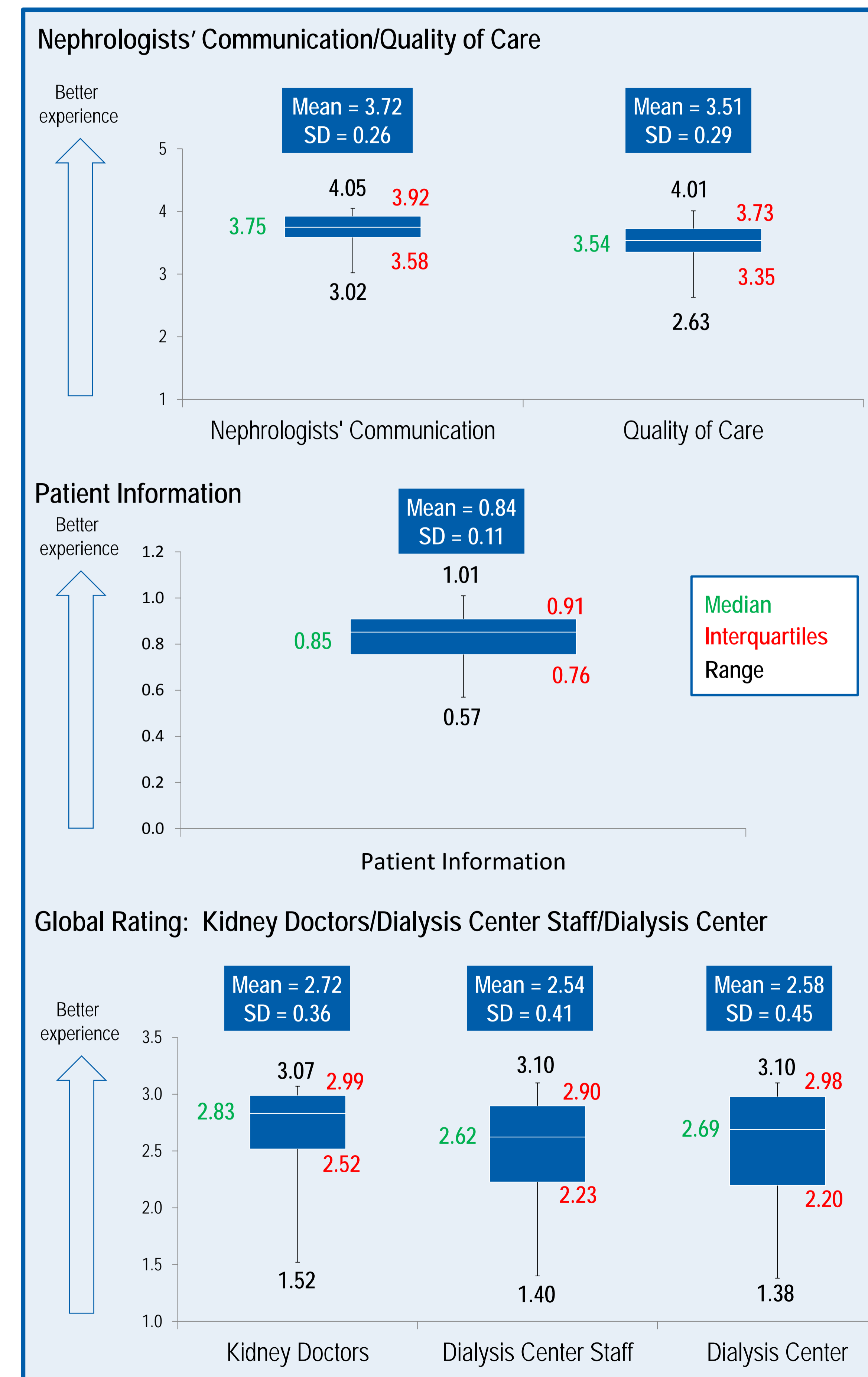
Table 1: Characteristics of the study population

Demographics	Eligible Patients (n=404)	USRDS (n=633,677)
Age		
0-19 years	0%	1%
20-44 years	21%	17%
45-64 years	46%	45%
65-74 years	20%	22%
75+ years	13%	16%
Gender		
Male	56%	57%
Female	44%	43%

PRINCIPAL FINDINGS

- Facility ratings for each CAHPS®-ICH score are shown in Figure 1:

Figure 1: CAHPS®-ICH SCORES



- The differences between the 25th and 75th percentiles, in terms of effect sizes, were large, ranging from 1.31 (Nephrologists' Communication, Quality of Care and Kidney Doctors' Global Rating) to 1.73 (Dialysis Center Global Rating).
- Center characteristics observed to have significant impact on CAHPS®-ICH composite scores and global ratings were:
 - Lower patient to nurse ratio associated with a better patient information score
 - Lower patient to physician ratio associated with better dialysis center and staff scores
 - Shorter waiting room time associated with better nephrologist communication and quality of care score.

LIMITATIONS

- It was not possible to compare patients who did/did not complete the survey in terms of relevant variables that may have impacted on their experience of care and the likelihood of their completing the survey.

CONCLUSIONS

While this study demonstrates that facilities have CAHPS®-ICH scores with large differences between the 25th and 75th percentiles (in effect sizes), the complexity of the scoring algorithms may pose a challenge in interpretation for clinicians.

IMPLICATIONS FOR HEALTH POLICY

The Center for Medicare and Medicaid Services (CMS) is using the CAHPS®-ICH Survey as a process reporting measure for their End-Stage Renal Disease (ESRD) Quality Incentive Program (QIP).

The results of this study demonstrate that CAHPS®-ICH can detect differences across some patient and dialysis facility variables.

Further research is required to assess clinically meaningful differences between dialysis centers.

- The study results are published at: Wood R, Paoli C J, Hays R D, Taylor-Stokes G, Piercy J, & Gitlin M (in press). Evaluation of the Consumer Assessment of Healthcare Providers and Systems In-Center Hemodialysis Survey (CAHPS®-ICH). Clinical Journal of the American Society of Nephrology.

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