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VII. List of Tables and Figures

Table	Title	Page
1.	Number of adult in-center hemodialysis patients in each Network in December 2001, sample size and response rate for the 2002 ESRD CPM Project.	17
2.	Characteristics of adult in-center hemodialysis patients in the 2002 ESRD CPM Project compared to those of all in-center hemodialysis patients in the US in 2000.	17
3.	Number of adult peritoneal dialysis patients in each Network in December 2001, sample size and response rate for the 2002 ESRD CPM Project.	18
4.	Characteristics of adult peritoneal dialysis patients in the 2002 ESRD CPM Project compared to those of all peritoneal dialysis patients in the US in 2000.	18
5.	Characteristics of pediatric (aged < 18 years) in-center hemodialysis patients in the 2002 ESRD CPM Project.	19
6.	Mean delivered calculated, single session Kt/V and percent of adult in-center hemodialysis patients with mean delivered calculated, single session Kt/V ≥ 1.2 and ≥ 1.3 by patient characteristics, October-December 2001. 2002 ESRD CPM Project.	22
7.	Percent of adult in-center hemodialysis patients receiving dialysis with a mean delivered, single session Kt/V ≥ 1.2 , by gender, race, ethnicity and Network, October-December 2001. 2002 ESRD CPM Project.	24
8.	Vascular access type for incident and all adult in-center hemodialysis patients during the last hemodialysis session of the study period, by selected patient characteristics, October-December 2001. 2002 ESRD CPM Project.	26
9.	Percent of all adult in-center hemodialysis patients with an AV fistula access on their last hemodialysis session during October–December 2001, by gender, race, ethnicity, age and Network. 2002 ESRD CPM Project.	28
10.	Percent of all adult in-center hemodialysis patients with a catheter access on their last hemodialysis session during October–December 2001, by gender, race, ethnicity, age and Network. 2002 ESRD CPM Project.	29
11.	Independent logistic regression analyses by selected patient and clinical characteristics to predict odds ratio (95% CI) for having an AV fistula access, October–December 2001. 2002 ESRD CPM Project.	30
12.	Reasons for catheter placement in adult in-center hemodialysis patients on their last hemodialysis session during October-December 2001. 2002 ESRD CPM Project.	30
13.	Mean hemoglobin values (gm/dL) for adult in-center hemodialysis patients in the US, by patient characteristics, October–December 2001. 2002 ESRD CPM Project.	33
14.	Percent of adult in-center hemodialysis patients with mean hemoglobin ≥ 11 gm/dL, by gender, race, ethnicity, age and Network, October-December 2001. 2002 ESRD CPM Project.	34
15.	Regional variation for various anemia management measures for adult in-center hemodialysis patients including the percent of patients with mean hemoglobin ≥ 11 gm/dL, mean hemoglobin (gm/dL), and mean serum albumin ≥ 4.0 gm/dL, for these patients nationally and by Network, October-December 2001. 2002 ESRD CPM Project.	37
16.	Independent logistic regression analyses by selected patient and clinical characteristics to predict odds ratio (95% CI) for mean hemoglobin < 11 gm/dL. 2002 ESRD CPM Project.	38
17.	Percent of adult in-center hemodialysis patients with mean serum albumin values $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP) in the US, by patient characteristics, October-December 2001. 2002 ESRD CPM Project.	41

Table	Title	Page
18.	Percent of adult in-center hemodialysis patients with mean serum albumin ≥ 4.0 gm/dL (BCG method) or ≥ 3.7 gm/dL (BCP method), by gender, race, ethnicity, age and Network, October-December 2001. 2002 ESRD CPM Project.	43
19.	Percent of adult CAPD patients with mean (\pm SD) weekly adequacy values meeting 2000 NKF-K/DOQI guidelines and median adequacy values, by transporter type, October 2001–March 2002. 2002 ESRD CPM Project.	48
20.	Percent of adult cycler patients with mean (\pm SD) weekly adequacy values meeting 2000 NKF-K/DOQI guidelines and median adequacy values, October 2001–March 2002. 2002 ESRD CPM Project.	48
21.	Mean hemoglobin values (gm/dL) for adult peritoneal dialysis patients, by patient characteristics, October 2001-March 2002. 2002 ESRD CPM Project.	50
22.	Percent of adult peritoneal dialysis patients with mean serum albumin values $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP) in the US, by patient characteristics, October 2001-March 2002. 2002 ESRD CPM Project.	52
23.	Mean delivered calculated, single session Kt/V and percent of all pediatric (aged < 18 years) in-center hemodialysis patients with mean Kt/V ≥ 1.2 , by patient characteristics, October-December 2001. 2002 ESRD CPM Project.	53
24.	Vascular access type for all pediatric (aged < 18 years) in-center hemodialysis patients on their last hemodialysis session during October-December 2001, by selected patient characteristics. 2002 ESRD CPM Project.	55
25.	Reasons for catheter placement in all pediatric (aged < 18 years) in-center hemodialysis patients on their last hemodialysis session during October-December 2001. 2002 ESRD CPM Project.	55
26.	Mean hemoglobin values (gm/dL) and distribution of hemoglobin values for all pediatric (aged < 18 years) in-center hemodialysis patients, by patient characteristics, October-December 2001. 2002 ESRD CPM Project.	57
27.	Percent of all pediatric (aged < 18 years) in-center hemodialysis patients with mean serum albumin values $\geq 4.0/3.7$ gm/dL (BCG/BCP), and $\geq 3.5/3.2$ gm/dL (BCG/BCP), by patient characteristics, October-December 2001. 2002 ESRD CPM Project.	59

Figure	Title	Page
1.	Geographical boundaries of the 18 ESRD Network Organizations (map).	i
2.	Percent of adult in-center hemodialysis patients with mean delivered calculated, single session Kt/V ≥ 1.2 in October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	6
3.	Distribution of mean delivered calculated, single session Kt/V values for adult in-center hemodialysis patients, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	6
4.	Vascular access type for all adult in-center hemodialysis patients on their last hemodialysis session during the study period. 2002 ESRD CPM Project.	6
5.	Distribution of mean weekly Kt/V _{urea} values for adult CAPD patients, October 2001-March 2002 compared to previous study periods. 2002 ESRD CPM Project.	7
6.	Distribution of mean weekly creatinine clearance values (L/week/1.73m ²) for adult CAPD patients, October 2001-March 2002 compared to previous study periods. 2002 ESRD CPM Project.	7
7.	Percent of adult peritoneal dialysis patients with total solute clearance for urea and creatinine measured at least once during the study period (PD Adequacy CPM I) and with total solute clearance calculated in a standard way (PD Adequacy CPM II), October 2001-March 2002 compared to previous study periods. 2002 ESRD CPM Project.	7

Figure	Title	Page
8.	Percent of adult in-center hemodialysis patients with mean hemoglobin ≥ 11 gm/dL, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	8
9.	Distribution of mean hemoglobin values for adult in-center hemodialysis patients, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	8
10.	Percent of adult peritoneal dialysis patients with mean hemoglobin ≥ 11 gm/dL, October 2001-March 2002 compared to previous study periods. 2002 ESRD CPM Project.	8
11.	Distribution of mean hemoglobin values for adult peritoneal dialysis patients, October 2001-March 2002 compared to previous study periods. 2002 ESRD CPM Project.	8
12.	Distribution of mean delivered calculated, single session Kt/V values for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients. 2002 ESRD CPM Project.	9
13.	Vascular access type for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients on their last hemodialysis session during the study period. 2002 ESRD CPM Project.	9
14.	Distribution of mean hemoglobin values for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients. 2002 ESRD CPM Project.	9
15.	Distribution of mean delivered calculated, single session Kt/V values for adult in-center hemodialysis patients, October–December 2001. 2002 ESRD CPM Project.	22
16.	Distribution of mean delivered blood pump flow rates 60 minutes into the dialysis session for adult in-center hemodialysis patients, by access type, October–December 2001. 2002 ESRD CPM Project.	22
17.	Percent of adult in-center hemodialysis patients receiving dialysis with a mean delivered, single session Kt/V ≥ 1.2 , by Network, October–December 2001. 2002 ESRD CPM Project.	23
18.	Percent of adult in-center hemodialysis patients receiving dialysis with a mean delivered, single session Kt/V ≥ 1.2 , by Network, October–December 2001 (map). 2002 ESRD CPM Project.	23
19.	Percent of adult male in-center hemodialysis patients with mean delivered, single session Kt/V ≥ 1.2 , by race, October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	23
20.	Percent of adult female in-center hemodialysis patients with mean delivered, single session Kt/V ≥ 1.2 , by race, October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	25
21.	Percent of adult in-center hemodialysis patients dialyzed by dialyzer KUF category, October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	25
22.	Distribution of mean dialysis session length (minutes), October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	25
23.	Percent of all adult in-center hemodialysis patients dialyzed with an AV fistula as their vascular access on their last hemodialysis session during October-December 2001, by patient characteristics. 2002 ESRD CPM Project.	26
24.	Percent of all adult in-center hemodialysis patients dialyzed with a catheter as their vascular access on their last hemodialysis session during October–December 2001, by patient characteristics. 2002 ESRD CPM Project.	27
25.	Percent of all adult in-center hemodialysis patients dialyzed with a catheter continuously for 90 days or longer as their vascular access on their last hemodialysis session during October- December 2001, by patient characteristics. 2002 ESRD CPM Project.	27
26.	Percent of all adult in-center hemodialysis patients dialyzed with an AV fistula as their vascular access on their last hemodialysis session during October–December 2001, by Network (map). 2002 ESRD CPM Project.	27

Figure	Title	Page
27.	Percent of incident adult in-center hemodialysis patients dialyzed with an AV fistula as their vascular access on their last hemodialysis session during October–December 2001, by Network (map). 2002 ESRD CPM Project.	27
28.	Percent of all adult in-center hemodialysis patients dialyzed with a catheter as their vascular access on their last hemodialysis session during October–December 2001, by Network (map). 2002 ESRD CPM Project.	27
29.	Percent of all adult in-center hemodialysis patients dialyzed with a catheter continuously for 90 days or longer as their vascular access on their last hemodialysis session during October–December 2001, by Network (map). 2002 ESRD CPM Project.	27
30.	Percent of incident adult in-center hemodialysis patients with different types of vascular access upon initiation of a maintenance course of hemodialysis, and 90 days later, October-December 2001. 2002 ESRD CPM Project.	30
31.	Percent of adult in-center hemodialysis patients (all and incident) dialyzed with a catheter as their access on their last hemodialysis session during October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	31
32.	Percent of adult in-center hemodialysis patients (all and incident) dialyzed with an AV fistula as their vascular access on their last hemodialysis session during October-December 2001 compared to previous study periods. 2002 ESRD CPM Project.	31
33.	Types of stenosis monitoring reported for adult in-center hemodialysis patients with either an AV fistula or an AV graft as their vascular access on their last hemodialysis session during October-December 2001 compared to October-December 2000. 2002 ESRD CPM Project.	31
34.	Distribution of mean hemoglobin values for adult in-center hemodialysis patients in the US, by race, October–December 2001. 2002 ESRD CPM Project.	32
35.	Percent of adult in-center hemodialysis patients with mean hemoglobin < 10gm/dL, by Network, October–December 2001 (map). 2002 ESRD CPM Project.	33
36.	Percent of adult in-center hemodialysis patients with mean hemoglobin \geq 11 gm/dL, by Network, October–December 2001. 2002 ESRD CPM Project.	35
37.	Percent of adult in-center hemodialysis patients with mean hemoglobin \geq 11 gm/dL, by Network, October–December 2001 (map). 2002 ESRD CPM Project.	35
38.	Percent of adult in-center hemodialysis patients with mean hemoglobin values \geq 11 gm/dL, by age and race, October–December 2001. 2002 ESRD CPM Project.	36
39.	Percent of adult in-center hemodialysis patients with mean hemoglobin \geq 11 gm/dL, by selected patient characteristics and clinical parameters, October-December 2001. 2002 ESRD CPM Project.	36
40.	Distribution of mean intravenous iron doses (mg/month) for adult in-center hemodialysis patients, October-December 2001. 2002 ESRD CPM Project.	36
41.	Percent of adult in-center hemodialysis patients with mean hemoglobin values \geq 11 gm/dL, by race, October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	39
42.	Percent of adult in-center hemodialysis patients who were prescribed Epoetin by hemoglobin category, October–December 2001 compared to previous study periods. 2002 ESRD CPM Project.	39
43.	Mean prescribed weekly Epoetin dose (units/kg/week) for adult in-center hemodialysis patients, by hemoglobin category and route of administration, October–December 2001 compared to selected previous study periods. 2002 ESRD CPM Project.	40
44.	Percent of adult in-center hemodialysis patients with specific anemia management indicators, October–December 2001 compared to selected previous study periods. 2002 ESRD CPM Project.	40

Figure	Title	Page
45.	Distribution of mean serum albumin for adult in-center hemodialysis patients, by laboratory method, October–December 2001. 2002 ESRD CPM Project.	41
46.	Percent of adult in-center hemodialysis patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP), by race and gender, October–December 2001. 2002 ESRD CPM Project.	42
47.	Percent of adult in-center hemodialysis patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP), October–December 2001 compared to selected previous study periods. 2002 ESRD CPM Project.	42
48.	Distribution of mean weekly Kt/V_{urea} for adult cycler patients with a daytime dwell, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	46
49.	Distribution of mean weekly creatinine clearance (L/week/1.73m ²) for adult cycler patients with a daytime dwell, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	46
50.	Distribution of Peritoneal Equilibration Test (PET) results for adult peritoneal dialysis patients, October 2001–March 2002. 2002 ESRD CPM Project.	46
51.	Distribution of single dwell volumes and 24-hour total infused dialysate volumes for adult CAPD patients, October 2001–March 2002. 2002 ESRD CPM Project.	46
52.	Distribution of mean single nighttime dwell volumes for all adult cycler patients, October 2001–March 2002. 2002 ESRD CPM Project.	47
53.	Distribution of the mean number of nighttime exchanges for all adult cycler patients, October 2001–March 2002. 2002 ESRD CPM Project.	47
54.	Distribution of mean single daytime dwell volumes for adult cycler patients with a daytime dwell, October 2001–March 2002. 2002 ESRD CPM Project.	47
55.	Distribution of the mean number of daytime exchanges for adult cycler patients with a daytime dwell, October 2001–March 2002. 2002 ESRD CPM Project.	47
56.	Percent of adult peritoneal dialysis patients meeting 1997 NKF/DOQI guidelines for weekly Kt/V_{urea} and weekly creatinine clearance (PD Adequacy CPM III). 2002 ESRD CPM Project.	48
57.	Distribution of mean hemoglobin values for adult peritoneal dialysis patients in the US, by race, October 2001–March 2002. 2002 ESRD CPM Project.	49
58.	Percent of adult peritoneal dialysis patients with mean hemoglobin < 10 gm/dL, by race, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	51
59.	Mean weekly Epoetin dose (units/kg/week) by hemoglobin category for adult peritoneal dialysis patients prescribed Epoetin, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	51
60.	Percent of adult peritoneal dialysis patients who were prescribed Epoetin by hemoglobin category, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	51
61.	Percent of adult peritoneal dialysis patients with specific anemia management indicators, October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	51
62.	Percent of adult peritoneal dialysis patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP), October 2001–March 2002 compared to previous study periods. 2002 ESRD CPM Project.	52
63.	Distribution of mean delivered calculated, single session Kt/V values for all pediatric (< 18 years) in-center hemodialysis patients, by age group, October–December 2001. 2002 ESRD CPM Project.	53

64. Percent of all pediatric (aged ≥ 12 and < 18 years) male in-center hemodialysis patients with mean delivered calculated, single session $Kt/V \geq 1.2$, by race, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 54
65. Percent of all pediatric (aged ≥ 12 and < 18 years) female in-center hemodialysis patients with mean delivered calculated, single session $Kt/V \geq 1.2$, by race, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 54
66. Distribution of mean dialysis session length (minutes) for all pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 54
67. Distribution of mean delivered blood pump flow rates 60 minutes into the dialysis session for all pediatric (aged < 18 years) in-center hemodialysis patients by access type, October-December 2001. 2002 ESRD CPM Project. 55
68. Vascular access type for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients on their last hemodialysis session during the study period, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 56
69. Distribution of mean hemoglobin values (gm/dL) for all pediatric (aged < 18 years) in-center hemodialysis patients, by race, October-December 2001. 2002 ESRD CPM Project. 56
70. Percent of all pediatric (aged < 18 years) in-center hemodialysis patients with mean hemoglobin ≥ 11 gm/dL, by selected patient characteristics and clinical parameters, October-December 2001. 2002 ESRD CPM Project. 57
71. Mean prescribed weekly IV Epoetin dose (units/kg/week) for all pediatric (aged < 18 years) in-center hemodialysis patients, by age, October-December 2001. 2002 ESRD CPM Project. 58
72. Percent of pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients with mean hemoglobin ≥ 11 gm/dL, by gender and race, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 58
73. Mean prescribed weekly IV Epoetin dose (units/kg/week) for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients, by hemoglobin category, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 58
74. Iron management parameters for pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients, October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 59
75. Percent of all pediatric (aged < 18 years) in-center hemodialysis patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP), by age, October-December 2001. 2002 ESRD CPM Project. 60
76. Percent of pediatric (aged ≥ 12 and < 18 years) in-center hemodialysis patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP) and $\geq 3.5/3.2$ gm/dL (BCG/BCP), October-December 2001 compared to previous study periods. 2002 ESRD CPM Project. 60

VIII. Appendices

Appendix 1. ESRD Clinical Performance Measures (CPMs) for 2002 Data Collection Effort

Study period for HD patients is Oct, Nov, Dec 2001; for PD patients is Oct, Nov, Dec 2001 and Jan, Feb, Mar 2002

Hemodialysis (HD) Adequacy

1. HD Adequacy CPM I: Monthly Measurement of Delivered Hemodialysis Dose.

HD Adequacy Guideline 1: Regular Measurement of the Delivered Dose of Hemodialysis (Evidence).

The dialysis care team should routinely measure and monitor the delivered dose of hemodialysis.

HD Adequacy Guideline 6: Frequency of Measurement of Hemodialysis Adequacy (Opinion).

The delivered dose of hemodialysis should be measured at least once a month in all adult and pediatric hemodialysis patients. The frequency of measurement of the delivered dose of hemodialysis should be increased when:

1. Patients are noncompliant with their hemodialysis prescriptions (missed treatments, late for treatments, early sign-off from hemodialysis treatments, etc.).
2. Frequent problems are noted in delivery of the prescribed dose of hemodialysis (such as variably poor blood flows, or treatment interruptions because of hypotension or angina pectoris).
3. Wide variability in urea kinetic modeling results is observed in the absence of prescription changes.
4. The hemodialysis prescription is modified.

Numerator:

Number of patients in denominator with documented monthly adequacy measurements (URR or Kt/V) during the study period. (The study period for HD patients is Oct, Nov, Dec 2001).

Denominator:

All adult (≥ 18 years old) HD patients in the sample for analysis.

2. HD Adequacy CPM II: Method of Measurement of Delivered Hemodialysis Dose.

HD Adequacy Guideline 2: Method of Measurement of Delivered Dose of Hemodialysis (Evidence).

The delivered dose of hemodialysis in adult and pediatric patients should be measured using formal urea kinetic modeling (UKM), employing the single-pool, variable volume model.

Numerator:

Number of patients in denominator for whom delivered HD dose was calculated using formal urea kinetic modeling or Daugirdas II during the study period.

Denominator:

All adult (≥ 18 years old) HD patients in the sample for analysis.

3. HD Adequacy CPM III: Minimum Delivered Hemodialysis Dose.

HD Adequacy Guideline 4: Minimum Delivered Dose of Hemodialysis (Adults-Evidence, Children-Opinion). The dialysis care team should deliver a Kt/V of at least 1.2 (single-pool, variable volume) for both adult and pediatric hemodialysis patients. For those using the urea reduction ratio (URR), the delivered dose should be equivalent to a Kt/V of 1.2, i.e., an average URR of 65%; however URR can vary substantially as a function of fluid removal.

Numerator:

Number of patients in denominator whose average delivered dose of HD (calculated from data points on the data collection form) was a Kt/V ≥ 1.2 during the study period.

Denominator:

All adult (≥ 18 years old) HD patients in the sample for analysis who have been on HD for six months or more and dialyzing three times per week.

4. HD Adequacy CPM IV: Method of Post-Dialysis Blood Urea Nitrogen (BUN) Sampling.

HD Adequacy Guideline 8: Acceptable Methods for Blood Urea Nitrogen (BUN) Sampling (Evidence).

Blood samples for BUN measurement must be drawn in a particular manner. Pre-dialysis BUN samples should be drawn immediately prior to dialysis, using a technique that avoids dilution of the blood sample with saline or heparin. Post-dialysis BUN samples should be drawn using the Slow Flow/Stop Pump Technique that prevents sample dilution with recirculated blood and minimizes the confounding effects of urea rebound.

Numerator:

Number of facilities in denominator with written policies requiring post-dialysis blood urea nitrogen (BUN) sampling to be done using the Slow Flow/Stop Pump Technique (15-60 seconds after slowing or stopping blood flow) during the study period.

Denominator:

All dialysis facilities included in the sample for analysis.

5. HD Adequacy CPM V: Baseline Total Cell Volume Measurement of Dialyzers Intended for Reuse.

HD Adequacy Guideline 11: Baseline Measurement of Total Cell Volume (Evidence).

If a hollow-fiber dialyzer is to be reused, the total cell volume (TCV) of that hemodialyzer should be measured prior to its first use. Batch testing and/or use of an average TCV for a group of hemodialyzers is not an acceptable practice.

Numerator:

Facilities in the denominator that during the study period pre-primed 100% of dialyzers intended for reuse.

Denominator:

All facilities in the sample for analysis that reuse dialyzers.

Peritoneal Dialysis (PD) Adequacy

6. PD Adequacy CPM I: Measurement of Total Solute Clearance at Regular Intervals.

PD Adequacy Guideline 4: Measures of Peritoneal Dialysis Dose and Total Solute Clearance (Opinion).

Both total weekly creatinine clearance normalized to 1.73 m² body surface area (BSA) and total weekly Kt/V_{urea} should be used to measure delivered peritoneal dialysis doses.

PD Adequacy Guideline 11: Dialysate and Urine Collections (Opinion).

Two to three total solute removal measurements are required during the first six months of peritoneal dialysis (See Guideline 3). After six months, if the dialysis prescription is unchanged:

1. Perform both complete dialysate and urine collections every four months; and
2. Perform urine collections every two months until the renal weekly Kt/V_{urea} is <0.1.

Thereafter, urine collections are no longer necessary, as the residual renal function contribution to total Kt/V_{urea} becomes negligible (See Guideline 5).

Numerator:

Number of patients in denominator with total solute clearance for urea and creatinine measured at least once in a 6 month time period. (The study period for PD patients is Oct, Nov, Dec 2001 and Jan, Feb, Mar 2002).

Denominator:

All adult (≥ 18 years old) PD patients in sample for analysis, excluding tidal dialysis patients.

7. PD Adequacy CPM II: Calculate Weekly Kt/V_{urea} and Creatinine Clearance in a Standard Way.

PD Adequacy Guideline 4: Measures of Peritoneal Dialysis Dose and Total Solute Clearance (Opinion).

Both total weekly creatinine clearance normalized to 1.73 m² body surface area (BSA) and total weekly Kt/V_{urea} should be used to measure delivered peritoneal dialysis doses.

PD Adequacy Guideline 6: Assessing Residual Renal Function (Evidence).

Residual renal function (RRF), which can provide a significant component of total solute and water removal, should be assessed by measuring the renal component of Kt/V_{urea} and estimating the patient's glomerular filtration rate (GFR) by calculating the mean of urea and creatinine clearance.

PD Adequacy Guideline 9: Estimating Total Body Water and Body Surface Area (Opinion).

V (total body water) should be estimated by either the Watson or Hume method in adults using actual body weight.

Watson method:

For Men: V (liters) = $2.447 + 0.3362 \cdot Wt(\text{kg}) + 0.1074 \cdot Ht(\text{cm}) - 0.09516 \cdot \text{Age}(\text{years})$

For Women: $V = -2.097 + 0.2466 \cdot Wt + 0.1069 \cdot Ht$

Hume method:

For Men: $V = -14.012934 + 0.296785 \cdot Wt + 0.192786 \cdot Ht$

For Women: $V = -35.270121 + 0.183809 \cdot Wt + 0.344547 \cdot Ht$

BSA should be estimated by either the DuBois and DuBois method, the Gehan and George method, or the Haycock method using actual body weight.

For all formulae, Wt is in kg and Ht is in cm:

DuBois and DuBois method: BSA (m²) = $0.007184 \cdot Wt^{0.425} \cdot Ht^{0.725}$

Gehan and George method: BSA (m²) = $0.0235 \cdot Wt^{0.51456} \cdot Ht^{0.42246}$

Haycock method: BSA (m²) = $0.024265 \cdot Wt^{0.5378} \cdot Ht^{0.3964}$

Numerator:

The number of patients in denominator with all of the following:

- Weekly creatinine clearance normalized to 1.73 m² body surface area (BSA) and total weekly Kt/V_{urea} used to measure delivered PD dose; and
- Residual renal function (unless negligible*) is assessed by measuring the renal component of Kt/V_{urea} and estimating the patient's glomerular filtration rate (GFR) by calculating the mean of urea and creatinine clearance; and
- Total body water (V) estimated by either the Watson or Hume method using actual body weight, and BSA estimated by either the DuBois and DuBois method, the Gehan and George method, or the Haycock method of using actual body weight, during the study period.

* negligible = < 200 mL urine in 24 hours.

Denominator:

All adult (≥ 18 years old) PD patients in the sample for analysis, excluding tidal dialysis patients.

8. PD Adequacy CPM III: Delivered Dose of Peritoneal Dialysis.

PD Adequacy Guideline 15: Weekly Dose of CAPD (Evidence).

For CAPD, the delivered peritoneal dialysis dose should be a total Kt/V_{urea} of at least 2.0 per week and a total creatinine clearance (CrCl) of at least 60 L/week/1.73 m².

PD Adequacy Guideline 16: Weekly Dose of NIPD and CCPD (Opinion).

For NIPD, the weekly delivered peritoneal dialysis dose should be a total Kt/V_{urea} of at least 2.2 and a weekly total CrCl of at least 66 L/1.73 m².

For CCPD, the weekly delivered peritoneal dialysis dose should be a total Kt/V_{urea} of at least 2.1 and a weekly total CrCl of at least 63 L/1.73 m².

Numerator:

a. For CAPD patients in the denominator, the delivered PD dose was a weekly Kt/V_{urea} of at least 2.0 and a weekly CrCl of at least 60 L/week/1.73 m² or evidence that the prescription was changed according to NKF-K/DOQI recommendations, during the study period.

b. For cycler patients in the denominator without a daytime dwell (NIPD), the delivered PD dose was a weekly Kt/V_{urea} of at least 2.2 and a weekly CrCl of at least 66 L/week/1.73 m² or evidence that the prescription was changed according to NKF-K/DOQI recommendations, during the study period. For cycler patients in the denominator with a daytime dwell (CCPD), the delivered PD dose was a weekly Kt/V_{urea} of at least 2.1 and a weekly CrCl of at least 63 L/week/1.73 m² or evidence that the prescription was changed according to NKF-K/DOQI recommendations, during the study period.

Denominator:

All adult (≥ 18 years old) PD patients in the sample for analysis, excluding tidal dialysis patients.

Vascular Access

9. Vascular Access CPM I: Maximizing Placement of Arterial Venous Fistulae (AVF).

Vascular Access Guideline 29A: Goals of Access Placement-Maximizing Primary Arterial Venous Fistulae (Opinion). Primary arterial venous fistulae (AVF) should be constructed in at least 50% of all new patients electing to receive hemodialysis as their initial form of renal replacement therapy. Ultimately, 40% of prevalent patients should have a native AV fistula. (See Guideline 3, Selection of Permanent Vascular Access and Order of Preference of AV Fistulae).

Numerator:

- The number of incident patients in the denominator who were dialyzed using an AVF during their last HD treatment during the study period. (The study period for HD patients is Oct, Nov, Dec 2001).
- The number of prevalent patients in the denominator who were dialyzed using an AVF during their last HD treatment during the study period.

Denominator:

- Incident adult (≥ 18 years old) HD patients (defined as those patients initiating their most recent course of HD on or between Jan 1 and Aug 31, 2000) in the sample for analysis.
- Prevalent adult (≥ 18 years old) HD patients in the sample for analysis.

10. Vascular Access CPM II: Minimizing Use of Catheters as Chronic Dialysis Access.

Vascular Access Guideline 30A: Goals of Access Placement- Use of Catheters for Chronic Dialysis (Opinion). Less than 10% of chronic maintenance hemodialysis patients should be maintained on catheters as their permanent chronic dialysis access. In this context, chronic catheter access is defined as the use of a dialysis catheter for more than three months in the absence of a maturing permanent access.

Numerator:

The number of patients in the denominator who were dialyzed with a chronic catheter continuously for 90 days or longer prior to the last HD session during the study period.

Denominator:

All adult (≥ 18 years old) patients in the sample for analysis.

11. Vascular Access CPM III: Monitoring Arterial Venous Grafts for Stenosis

Vascular Access Guideline 10: Monitoring Dialysis AV Grafts for Stenosis (Evidence/Opinion).

Physical examination of an access graft should be performed weekly and should include, but not be limited to, inspection and palpation for pulse and thrill at the arterial, mid, and venous sections of the graft (Opinion). Dialysis arterial venous graft accesses should be monitored for hemodynamically significant stenosis. The DOQI Work Group recommends an organized monitoring approach with regular assessment of clinical parameters of the arterial venous access and dialysis adequacy. Data from the monitoring tests, clinical assessment, and dialysis adequacy measurements should be collected and maintained for each patient's access and made available to all staff. The data should be tabulated and tracked within each dialysis center as part of a Quality Assurance/Continuous Quality Improvement (QA/CQI) program (Opinion). Prospective monitoring of arterial venous grafts for hemodynamically significant stenosis, when combined with correction, improves patency and decreases the incidence of thrombosis (Evidence). Techniques, not mutually exclusive, that can be used to monitor for stenosis in arterial venous grafts include:

- Intra-access flow (Evidence)
 - Static venous pressures (Evidence)
 - Dynamic venous pressures (Evidence)
- Other studies or information that can be useful in detecting arterial venous graft stenosis include:
- Measurement of access recirculation using urea concentrations (See Guideline 12) (Evidence)
 - Measurement of recirculation using dilution flow techniques (nonurea-based) (Evidence)
 - Unexplained decreases in the measured amount of hemodialysis delivered (URR, Kt/V) (Evidence)
 - Physical findings of persistent swelling of the arm, clotting of the graft, prolonged bleeding after needle withdrawal, or altered characteristics of pulse or thrill in a graft (Evidence/Opinion)
 - Elevated negative arterial pre-pump pressures that prevent increasing to acceptable blood flow (Evidence/Opinion)
 - Doppler ultrasound (Evidence/Opinion)
- Persistent abnormalities in any of these parameters should prompt referral for venography (Evidence).

Numerator:

The number of patients in the denominator whose AV graft was routinely monitored (screened) for the presence of stenosis during the study period by one of the following methods and with the stated frequency: Color-flow Doppler at least once every 3 months; Static venous pressure at least once every 2 weeks; Dynamic venous pressure every HD session; Dilution technique at least once every 3 months.

Denominator:

All adult (≥ 18 years old) patients in the sample for analysis who were on HD continuously during the study period and who were dialyzed through an arterial venous graft during their last HD session during the study period.

Anemia Management

12. Anemia Management CPM I: Target Hemoglobin for Epoetin Therapy.

Anemia Management Guideline 4: Target Hemoglobin (Hgb) for Epoetin Therapy (Evidence/Opinion).

The target range for hemoglobin should be 11 gm/dL - 12 gm/dL (Evidence). This target is for Epoetin therapy and is not an indication for blood transfusion therapy (Opinion).

Numerator:

Number of patients in denominator with documented mean Hgb of 11-12 gm/dL during the study period. (The study period for HD patients is Oct, Nov, Dec 2001 and Oct, Nov, Dec 2001 and Jan, Feb, Mar 2002 for PD patients).

Denominator:

All adult (≥ 18 years old) HD or PD patients in the sample for analysis, exclude patients with mean Hgb > 12 gm/dL who are not prescribed Epoetin at any time during the study period.

13. Anemia Management CPM IIa: Assessment of Iron Stores among Anemic Patients or Patients Prescribed Epoetin.

Anemia Management Guideline 5: Assessment of Iron Status (Evidence).

Iron status should be monitored by the percent transferrin saturation and the serum ferritin concentration.

Anemia Management Guideline 6A: Target Iron Level (Evidence).

Chronic renal failure patients should have sufficient iron to achieve and maintain a Hgb of 11 to 12 gm/dL.

Anemia Management Guideline 7A: Monitoring Iron Status (Opinion).

During the initiation of Epoetin therapy and while increasing the Epoetin dose in order to achieve an increase in hematocrit/hemoglobin, the transferrin saturation and the serum ferritin concentration should be checked every month in patients not receiving intravenous iron, and at least once every 3 months in patients receiving intravenous iron, until target hematocrit/hemoglobin is reached.

Anemia Management Guideline 7B: Monitoring Iron Status (Opinion).

Following attainment of the target hematocrit/hemoglobin, transferrin saturation and serum ferritin concentration should be determined at least once every 3 months.

Numerator:

a. The number of HD patients in the denominator with at least one documented transferrin saturation and serum ferritin concentration result every three months.

b. The number of PD patients in the denominator with at least two documented transferrin saturation and serum ferritin concentration results over the six-month study period.

[Note: Not directly comparable to Numerator "a", but most feasible given probable frequency of visits for PD patients.]

Denominator:

a. All adult (≥ 18 years old) HD patients included in the sample for analysis, if first monthly Hgb is < 11 gm/dL for at least one of the study months or if prescribed Epoetin at any time during the study period regardless of Hgb.

b. All adult (≥ 18 years old) PD patients included in the sample for analysis, if first monthly Hgb is < 11 gm/dL for at least one of the two-month periods during the six-month study period or if prescribed Epoetin at any time during the study period regardless of Hgb.

14. Anemia Management CPM IIb: Maintenance of Iron Stores-Target.

Anemia Management Guideline 6B: Target Iron Level (Evidence).

To achieve and maintain target Hgb of 11-12 gm/dL, sufficient iron should be administered to maintain a transferrin saturation of $\geq 20\%$, and a serum ferritin concentration of ≥ 100 ng/mL.

Numerator:

a. The number of HD patients in the denominator with at least one documented transferrin saturation $\geq 20\%$ and at least one documented serum ferritin concentration ≥ 100 ng/mL during a three month period.

b. The number of PD patients in the denominator with at least one documented transferrin saturation $\geq 20\%$ and at least one documented serum ferritin concentration ≥ 100 ng/mL during the six-month study period.

[Note: Not directly comparable to Numerator "a", but most feasible given probable frequency of visits for PD patients.]

Denominator:

a. All adult (≥ 18 years old) HD patients included in sample, if first monthly Hgb is < 11 gm/dL for at least one of the study months or if prescribed Epoetin at any time during the study period regardless of Hgb.

b. All adult (≥ 18 years old) PD patients included in sample, if first monthly Hgb is < 11 gm/dL for at least one of the two-month periods during the six-month study period or if prescribed Epoetin at any time during the study period regardless of Hgb.

15. Anemia management CPM III: Administration of Supplemental Iron.

Anemia Management Guideline 8A: Administration of Supplemental Iron (Evidence).

Supplemental iron should be administered to prevent iron deficiency and to maintain adequate iron stores so that chronic renal failure patients can achieve and maintain a Hgb of 11 to 12 gm/dL in conjunction with Epoetin therapy.

Anemia Management Guideline 8C: Administration of Supplemental Iron (Evidence/Opinion).

The adult pre-dialysis, home hemodialysis, and peritoneal dialysis patient may not be able to maintain adequate iron status with oral iron. Therefore, 500 to 1000 mg of iron dextran may be administered intravenously in a single infusion, and repeated as needed, after an initial one-time test dose of 25 mg.

Anemia Management Guideline 8D: Administration of Supplemental Iron (Opinion/Evidence).

A trial of oral iron is acceptable in the hemodialysis patient, but is unlikely to maintain the transferrin saturation > 20%, serum ferritin concentration > 100 ng/mL, and Hgb at 11-12 gm/dL.

Anemia Management Guideline 8G: Administration of Supplemental Iron (Opinion/Evidence).

Most patients will achieve a Hgb 11 to 12 gm/dL with transferrin saturation and serum ferritin concentration < 50% and < 800 ng/mL, respectively. In patients in whom transferrin saturation is 50% and/or serum ferritin concentration is 800 ng/mL, intravenous iron should be withheld for up to three months, at which time the iron parameters should be re-measured before intravenous iron is resumed. When the transferrin saturation and serum ferritin concentration have fallen to 50% and 800 ng/mL, respectively, intravenous iron can be resumed at a dose reduced by one-third to one-half.

Anemia Management Guideline 8H: Administration of Supplemental Iron (Opinion).

It is anticipated that once optimal hematocrit/hemoglobin and iron stores are achieved, the required maintenance dose of intravenous iron may vary from 25 to 100 mg/week for hemodialysis patients. The goal is to provide a weekly dose of intravenous iron in hemodialysis patients that will allow the patient to maintain the target hematocrit/hemoglobin at a safe and stable iron level. The maintenance iron status should be monitored by measuring the transferrin saturation and serum ferritin concentration every three months.

Numerator:

- a. The number of HD patients in the denominator prescribed intravenous iron in at least one of the study months.
- b. The number of PD patients in denominator prescribed intravenous iron in at least one of the two-month periods during the six-month study period

Denominator:

- a. All adult (≥ 18 years old) HD patients included in the sample for analysis if first monthly Hgb < 11 gm/dL for at least one month out of a three month period or prescribed Epoetin at any time during the study period regardless of Hgb level, with at least one transferrin saturation < 20% or at least one serum ferritin concentration < 100 ng/mL. EXCLUDE patients with mean transferrin saturation $\geq 50\%$ or mean serum ferritin concentration ≥ 800 ng/mL and EXCLUDE patients in first three months of dialysis and prescribed oral iron.
- b. All adult (≥ 18 years old) PD patients included in the sample for analysis if the first Hgb in a two-month period < 11 gm/dL for at least one of the two-month periods during the six-month study period or prescribed Epoetin at any time during the study period regardless of Hgb level, with at least one transferrin saturation < 20% or at least one serum ferritin concentration < 100 ng/mL. EXCLUDE patients with mean transferrin saturation $\geq 50\%$ or mean serum ferritin concentration ≥ 800 ng/mL and EXCLUDE patients in first three months of dialysis and prescribed oral iron.

Appendix 2. 2002 CPM Data Collection Form – In-Center Hemodialysis

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002

[Before completing please read instructions at the bottom of this page and on pages 4, 5 and 6]

PATIENT IDENTIFICATION <div style="background-color: #cccccc; text-align: center; padding: 20px; margin: 10px 0;">Place Patient Data Label Here</div>	MAKE CORRECTIONS TO PATIENT INFORMATION ON LABEL IN THE SPACE BELOW
12. Patient's Ethnicity (Check appropriate box). <input type="checkbox"/> non-Hispanic <input type="checkbox"/> Hispanic, Mexican American (Chicano) <input type="checkbox"/> Hispanic, Puerto Rican <input type="checkbox"/> Hispanic, Cuban American <input type="checkbox"/> Hispanic, Other <input type="checkbox"/> Unknown	
13. If the above patient information is incorrect make corrections in space above then continue to question 12. Please verify patient's race and verify question 12 above. If patient unknown or was not dialyzed in the unit at any time during OCT 2001 – DEC 2001 return the blank form to the Network.	
14. Patient's height (MUST COMPLETE): _____ inches OR _____ centimeters	
15. Does patient have limb amputation(s): <input type="checkbox"/> Yes <input type="checkbox"/> No	
16. Has the patient ever been diagnosed with any type of diabetes? <input type="checkbox"/> Yes (go to 17) <input type="checkbox"/> No (go to 18) <input type="checkbox"/> Unknown (go to 18)	
17. If question 16 was answered YES, is the patient currently taking medications to control the diabetes? o Yes o No (go to 18) If YES, is the patient using insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Individual Completing Form (Please print): First name: _____ Last name: _____ Title: _____ Phone number: (_____) _____ - _____ Fax number: (_____) _____ - _____	

INSTRUCTIONS FOR COMPLETING THE IN-CENTER HEMODIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002

The label on the top left side of this form contains the following patient identifying information (#'s 1-11). If the information is incorrect make corrections to the right of the label.

- | | |
|---|---|
| 1. LAST and first name.
3. SOCIAL Security Number (SSN).
5. SEX (1=Male; 2=Female; 3=Unknown).
7. PRIMARY cause of renal failure by HCFA-2728 code.
9. ESRD Network number.
Do not make corrections to this item | 2. DATE of birth (DOB) as MM/DD/YYYY.
4. HEALTH Insurance Claim Number (HIC).
6. RACE (1=American Indian/Alaska Native; 2=Asian; 3=Black; 4=White; 5=Unknown; 6=Pacific Islander; 7=Mid East Arabian; 8=Indian Subcontinent; 9=Other Multiracial).
8. DATE, as MM/DD/YYYY, that the patient began a regular course of dialysis.
10. Facility's Medicare provider number.
11. The most RECENT date this patient returned to hemodialysis following: transplant failure, an episode of regained kidney function, or switched modality. |
|---|---|
12. Patient's Ethnicity. Please verify the patient's ethnicity and check appropriate box.
 13. Review the patient and facility-specific information contained on the pre-printed label. Please verify the patient's race, item 6 above. If any of the information is incorrect write corrections in the space to the right of the label. If the patient is unknown or if the patient was not dialyzed in the unit at any time during OCT 2001 through DEC 2001, send the blank form back to the ESRD Network office with the name and address of the facility providing services to this patient on December 31, 2001, if known.
 14. Enter the patient's height in inches or centimeters. HEIGHT MUST BE ENTERED, do not leave this field blank. You may ask the patient his/her height to obtain this information. If the patient had both legs amputated, record pre-amputation height and check YES for item 15.
 15. For the purpose of this study, check NO if this patient has had toe(s), finger(s), or mid-foot (Symes) amputation; but **check YES if this patient has had a below-knee, below-elbow, or more proximal (extensive) amputation.**
 16. Check either "Yes", or "No", or "Unknown" to indicate if the patient has ever been diagnosed with any type of diabetes. If YES, proceed to question 17.
 17. If the answer to 16 is YES, please check either "Yes" or "No" to indicate if the patient is currently taking medications to control the diabetes. If the answer to 17 is YES, please check either "Yes" or "No" to indicate if the patient is currently using insulin.

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)			
LAB DATA. The following data are requested for OCT, NOV, & DEC 2001. For each question, use the FIRST LAB VALUES OF THE MONTH. Do not leave any questions blank. ENTER THE FOLLOWING CODES IN THE SPACES BELOW IF LAB VALUES CANNOT BE LOCATED: <u>NF</u> if Not Found. <u>HOSP</u> if patient was hospitalized during the month. <u>TRANS</u> if patient was absent during the month.			
18. ANEMIA MANAGEMENT: Enter the FIRST Hemoglobin (Hgb) determined by the laboratory for EACH MONTH: OCT, NOV, DEC 2001. Also enter the appropriate erythropoietic prescription/dose information prior to the first monthly Hgb. Enter the first monthly Serum Ferritin concentration and Transferrin Saturation. Enter the appropriate iron prescription/dose information for each month.			
	OCT 2001	NOV 2001	DEC 2001
A. First monthly pre-dialysis laboratory hemoglobin (Hgb):	_____ . _____ g/dL	_____ . _____ g/dL	_____ . _____ g/dL
B.1. Was there a prescription for Epoetin during the seven days immediately before the Hgb in 18A. was drawn?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
For patients prescribed Epoetin: B.2. What was the PRESCRIBED Epoetin dose in units for each treatment during the seven days immediately BEFORE the Hgb in 18A. was drawn? (See instructions on page 4).	_____ units/tx _____ units/tx _____ units/tx	_____ units/tx _____ units/tx _____ units/tx	_____ units/tx _____ units/tx _____ units/tx
B.3. How many times per week was Epoetin prescribed?	_____ x per week	_____ x per week	_____ x per week
B.4. What was the prescribed route of administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC
C.1. Was there a prescription for Darbepoetin (Aranesp™) during the month immediately before the Hgb in 18A. was drawn?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
For patients prescribed Darbepoetin: C.2. What was the PRESCRIBED Darbepoetin dose in micrograms for the MONTH immediately BEFORE the Hgb in 18A. was drawn? (See instructions on page 4 and 5).	_____ mcg/month	_____ mcg/month	_____ mcg/month
C.3. How many times per month was Darbepoetin prescribed?	_____ x per month	_____ x per month	_____ x per month
C.4. What was the prescribed route of administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC
D. First monthly Serum Ferritin concentration:	_____ ng/mL	_____ ng/mL	_____ ng/mL
E. First monthly Transferrin Saturation:	_____ %	_____ %	_____ %
F. Was iron prescribed at any time during the month?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)
G. If yes, what was the prescribed route of iron administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> PO	<input type="checkbox"/> IV <input type="checkbox"/> PO	<input type="checkbox"/> IV <input type="checkbox"/> PO
H. If the patient was prescribed IV iron, what was the dose of IV iron administered during the month?	_____ mg/month	_____ mg/month	_____ mg/month

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)			
19. SERUM ALBUMIN: Enter the FIRST monthly serum albumin FOR EACH MONTH: OCT, NOV, DEC 2001. Check the method used (green or purple) by the lab to determine the serum albumin. If method unknown, please call lab to find out. Do not leave blank.			
	OCT 2001	NOV 2001	DEC 2001
A. First monthly serum albumin:	_____ . _____ gm/dL	_____ . _____ gm/dL	_____ . _____ gm/dL
B. Check lab method used: BCG = bromcresol green; BCP = bromcresol purple	<input type="checkbox"/> BCG <input type="checkbox"/> BCP	<input type="checkbox"/> BCG <input type="checkbox"/> BCP	<input type="checkbox"/> BCG <input type="checkbox"/> BCP
20. ADEQUACY: Enter the first monthly pre-and post-dialysis BUN FOR EACH MONTH: OCT, NOV, DEC 2001. The pre-and post-dialysis BUNs must be drawn on the same day of the month. Also, enter the patient's actual DELIVERED time on dialysis when the BUNs were drawn and the <u>code</u> for the name of the dialyzer used at the time the BUNs were drawn (see attached chart for the dialyzer codes.).			
	OCT 2001	NOV 2001	DEC 2001
A. How many times per week was this patient scheduled to receive dialysis?	_____ times per week	_____ times per week	_____ times per week
B. First monthly Pre-dialysis BUN:	_____ mg/dL	_____ mg/dL	_____ mg/dL
C. First monthly Post-dialysis BUN:	_____ mg/dL	_____ mg/dL	_____ mg/dL
D. First monthly recorded URR	_____ . _____ %	_____ . _____ %	_____ . _____ %
E. First monthly recorded Kt/V (If both URR and Kt/V were recorded, answer both 20D & 20E).	_____ . _____	_____ . _____	_____ . _____
F.1. Method used to calculate Kt/V	<input type="checkbox"/> UKM <input type="checkbox"/> Daugirdas II <input type="checkbox"/> Equilibrated <input type="checkbox"/> Derived from URR (no pt. weights) <input type="checkbox"/> Other/Unknown_____	<input type="checkbox"/> UKM <input type="checkbox"/> Daugirdas II <input type="checkbox"/> Equilibrated <input type="checkbox"/> Derived from URR (no pt. weights) <input type="checkbox"/> Other/Unknown_____	<input type="checkbox"/> UKM <input type="checkbox"/> Daugirdas II <input type="checkbox"/> Equilibrated <input type="checkbox"/> Derived from URR (no pt. weights) <input type="checkbox"/> Other/Unknown_____
F.2. Is residual urine function used to calculate Kt/V?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
G. Patient's PRE- & POST-dialysis weight when above BUNs were drawn: (<i>Circle either lbs or kgs</i>).	Pre: _____ lbs / kgs Post: _____ lbs / kgs	Pre: _____ lbs / kgs Post: _____ lbs / kgs	Pre: _____ lbs / kgs Post: _____ lbs / kgs
H. Actual DELIVERED time on dialysis at session when BUNs drawn:	____ hrs ____ min	____ hrs ____ min	____ hrs ____ min
I. Delivered blood pump flow rate @ 60 min. from the start of the dialysis session at which BUNs are drawn.	_____ mL/min	_____ mL/min	_____ mL/min
J. Code for dialyzer used for dialysis at session when BUNs drawn: (See chart).	_____	_____	_____

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)	
21. VASCULAR ACCESS: Please answer the following questions concerning the patient's vascular access.	
A. What type of access was used on the last hemodialysis session on or between 10/1/2001 and 12/31/2001 at the patient's primary in-center facility? <input type="checkbox"/> AV Fistula (go to questions 21C1&C2) <input type="checkbox"/> Catheter (go to questions 21B1&B2) <input type="checkbox"/> Unknown (go to question 22) <input type="checkbox"/> Synthetic Graft (go to questions 21C1&C2) <input type="checkbox"/> Port Access (go to question 21B1&B2) <input type="checkbox"/> Bovine Graft (go to questions 21C1&C2) <input type="checkbox"/> Other _____ (go to question 22)	
B.1. Reason for catheter or port access: <input type="checkbox"/> Fistula or graft maturing, not ready to cannulate <input type="checkbox"/> No fistula or graft surgically planned (check all that apply) <input type="checkbox"/> Temporary interruption of fistula or graft due to clotting or revisions <input type="radio"/> Peripheral vascular disease <input type="checkbox"/> All fistula or graft sites have been exhausted <input type="radio"/> Patient size too small for AV fistula or graft <input type="checkbox"/> No fistula or graph surgically created at this time <input type="radio"/> Renal transplantation scheduled <input type="checkbox"/> <input type="radio"/> Patient preference <input type="checkbox"/> <input type="radio"/> Provider preference <input type="checkbox"/> Other _____	
B.2. Had a catheter or port access been used exclusively for the past 90 days or longer ?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown
C.1. Was routine surveillance for the presence of stenosis performed between 10/1/01 and 12/31/01?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to question 22)
C.2. If answer to question 21C1 is "Yes," please check all methods of surveillance (below) that were utilized. (See instructions on page 6). <input type="checkbox"/> Color-Flow Doppler at least once between 10/1/01 and 12/31/01 <input type="checkbox"/> Static Venous Pressure at least once every 2 weeks between 10/1/01 and 12/31/01 <input type="checkbox"/> Dynamic Venous Pressure every HD session between 10/1/01 and 12/31/01 <input type="checkbox"/> Dilution Technique at least once between 10/1/01 and 12/31/01 <input type="checkbox"/> Other _____	
22. Did the patient FIRST start hemodialysis during January 1, 2001-August 31, 2001 (see item #8 on page 1)? DO NOT include patients who have changed modality, had a newly failed transplant, or returned after an episode of regained kidney function (See instructions on page 6). <input type="checkbox"/> Yes (answer 22.A-B) <input type="checkbox"/> No (collection form completed)	
A. What type of access was in use at the Initiation of a maintenance course of hemodialysis (See item #8 on page 1)? <input type="checkbox"/> AV Fistula <input type="checkbox"/> Synthetic Graft <input type="checkbox"/> Bovine Graft <input type="checkbox"/> Catheter <input type="checkbox"/> Port Access <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	
B. What type of access was in use 90 days later? <input type="checkbox"/> AV Fistula <input type="checkbox"/> Synthetic Graft <input type="checkbox"/> Bovine Graft <input type="checkbox"/> Catheter <input type="checkbox"/> Port Access <input type="checkbox"/> Other _____ <input type="checkbox"/> Unknown	
INSTRUCTIONS FOR COMPLETING QUESTIONS 18 THROUGH 22 (Continued from page 1): To answer questions 18 through 22, review the patient's clinic or facility medical record for OCT 1, 2001 through DEC 31, 2001. Do not leave any items blank. Enter the following if the information cannot be located: <u>NF</u> if not found, <u>HOSP</u> if hospitalized during the entire time period, <u>TRANS</u> if the patient was absent during the entire time period.	
18A: Enter the patient's FIRST MONTHLY pre-dialysis hemoglobin (Hgb) value determined by the laboratory for EACH month: OCT, NOV, and DEC 2001.	
18B.1-B.4: Check the appropriate box to indicate if there was a prescription for Epoetin during the seven days IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A. For patients prescribed Epoetin, enter the PRESCRIBED Epoetin DOSE in units for each treatment during the seven days IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A, even if the patient did not receive the Epoetin dose. Include any prescribed dose missed due to treatment skipped or error, etc., when entering each treatment dose. Enter 0 units if the patient was on "Hold" for a treatment (for the purposes of this collection, a "hold" order will be considered a 0 unit prescribed dose). If Epoetin is prescribed less frequently than every treatment, leave the units/tx space blank to indicate one or two doses per the seven day period. Enter the number of times per week that Epoetin was prescribed. Check the appropriate space to indicate the prescribed route of administration for Epoetin (intravenous [IV] or subcutaneous [SC]). If patient received Epoetin IV and SC, please check both spaces.	
18C.1-C.4: Check the appropriate box to indicate if there was a prescription for Darbepoetin (Aranesp™) during the month IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A. For patients prescribed Darbepoetin, enter the PRESCRIBED DARBEPOETIN DOSE in micrograms per month (mcg/month) during the month IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A, even if the patient did not receive the Darbepoetin dose. Include	

(Continued on page 5)

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)
any prescribed dose missed due to dose skipped or error, etc., when entering the dose. Enter 0 mcg/month if the patient was on "Hold" (for the purposes of this collection, a "hold" order will be considered a 0 mcg/month prescribed dose). Enter the number of times per month that Darbepoetin was prescribed. Check the appropriate space to indicate the prescribed route of administration for Darbepoetin (intravenous [IV] or subcutaneous [SC]). If the patient received Darbepoetin IV and SC, please check both spaces.
18D: Enter the patient's FIRST MONTHLY serum ferritin concentration recorded in EACH month for which data were available during the months of OCT, NOV, and DEC 2001. If a serum ferritin concentration test was not performed monthly, enter the value for the month when performed and record "NP" for the other month(s).
18E: Enter the patient's FIRST MONTHLY transferrin saturation recorded in EACH month for which data were available during the months of OCT, NOV, and DEC 2001. If a transferrin saturation test was not performed monthly, enter the value for the month when performed and record "NP" for the other month(s).
18F: Check either "Yes" or "No" to indicate if iron was prescribed at any time during the months of OCT, NOV, and DEC 2001. If there was no prescription for iron go to question 19.
18G: If the answer to 18F is "Yes," please check the appropriate space to indicate the route of iron administration (intravenous [IV] or by mouth [PO]) each month for the months of OCT, NOV, and DEC 2001. If patient received iron by mouth and IV, please check both spaces.
18H: If the patient was prescribed IV iron, enter the dose of IV iron (in mg) that was administered during the month.
19A: Enter the patient's FIRST serum albumin value recorded EACH month for OCT, NOV, and DEC 2001.
19B: Check the method used by the laboratory to determine the serum albumin values (bromcresol green or bromcresol purple). If you do not know what method the laboratory used, call the laboratory to find out this information. DO NOT LEAVE THIS QUESTION BLANK.
20A: Please indicate the number of dialysis sessions this patient was scheduled to receive per week in OCT, NOV, and DEC 2001. If the prescription varied during a month, enter the prescription in effect for the first week of that month.
20B and 20C: Enter the patient's FIRST pre-and post-dialysis BUN values recorded EACH month for OCT, NOV, and DEC 2001. The pre-and post-dialysis BUN values must be drawn on the same date. If pre- and post-dialysis BUNs are only performed quarterly, enter the values for the month when performed and record "NP" (i.e., not performed) for the other two months.
20D and 20E: Enter the patient's FIRST URR and/or Kt/V recorded each month for OCT, NOV, and DEC 2001. If both Kt/V and URR were recorded for this patient, please enter both.
<p>20F.1: Check the box which describes the method used by your dialysis center or its designee to calculate Kt/V.</p> <p>Formal UKM: Please check the box marked "UKM" if you know that your facility (or designee) monitors adequacy of dialysis using the method that provides a single-pool, variable volume Kt/V. This method requires a computer (or special calculator) to calculate the Kt/V value and <i>all</i> of the following datapoints: pre- and post-dialysis BUN for the first treatment of the week, the pre-dialysis BUN for the second treatment of the week, and pre- and post-dialysis weights for the first treatment of the week, the actual treatment time, and the actual in vivo clearance of the dialyzer as measured in the dialysis unit (not the in vitro clearance reported by the manufacturer).</p> <p>Daugirdas II: Please check the box marked "Daugirdas II" if you know that your facility (or designee) monitors adequacy using a method that provides a natural log single-pool Kt/V. This method requires the following data points: pre- and post-BUN, actual treatment time in hours, pre- and post-dialysis weight in kg or post-dialysis weight in kg and ultrafiltration (UF) volume in liters. The formula is:</p> $Kt/V = -\ln(\text{post-BUN}/\text{pre-BUN} - 0.008 \times t) + (4 - 3.5 \times \text{post-dialysis BUN}/\text{pre-dialysis BUN}) \times \text{UF}/\text{post-dialysis weight}.$ <p>Equilibrated: Please check the box marked "Equilibrated" only if the post-dialysis BUN was drawn at least 30 minutes after the end of the dialysis treatment. Do not mark this box if your facility or designee uses a formula to calculate an equilibrated Kt/V from a single-pool Kt/V.</p> <p>Derived from URR (no pt. weights): Please check the box marked "Derived from URR" only if the Kt/V is calculated only from the pre- and post-dialysis BUN values and no other patient or treatment data (including no pt. weights). Check this box if a Kt/V value is derived only from pre- and post-dialysis BUN levels, such as a Kt/V value derived by the Basile or Jindal equations. This result may be calculated and provided by your laboratory along with other laboratory results.</p> <p>Other/Unknown: Please check the "Other/Unknown" box if you do not use any of the adequacy methods described above OR you do not know the method used. If using another method and you know what it is, please write that method in the space provided.</p>
20F.2: Check the appropriate box to indicate whether residual urine function is used to calculate Kt/V.
20G: Enter the patient's PRE- and POST-dialysis weight at the session when the pre- and post-dialysis BUN levels were drawn. Circle either lbs or kgs as appropriate.

IN-CENTER HEMODIALYSIS (HD) CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)
20H: Enter the patient's ACTUAL DELIVERED time on dialysis during the session when the BUN levels were drawn. DO NOT ENTER THE PRESCRIBED TIME ON DIALYSIS. If using finish time minus start time to calculate actual delivered time on dialysis, deduct time for any interruptions in dialysis which occurred.
20I: Please record the delivered blood pump flow rate in mL/min at 60 min. from the start of the hemodialysis session. Do not record the prescribed blood pump flow rate or the highest achieved blood pump flow rate.
20J: Using the enclosed Dialyzer Code Chart, enter the code for the dialyzer used on the date the blood samples were drawn for the pre- and post-dialysis BUNs in OCT, NOV, and DEC 2001. If the dialyzer used is not listed on the chart, enter the code for "other" (9999).
21A: Check the appropriate space to indicate type of vascular access used on last hemodialysis session on or between OCT 1, 2001 and DEC 31, 2001 at the patient's primary in-center facility. Exclude dialysis sessions performed at temporary facilities because of holiday travel or hospitalizations. ("Port Access" is considered a vascular access device which consists of a valve and cannula that is subcutaneously implanted and is accessed by dialysis needles).
21B.1 and 21B.2: Complete 21B.1 and 21B.2 only if vascular access checked in question 21A was a catheter or port access .
21B.1: If the vascular access marked for question 21A was a catheter or port access, indicate in the appropriate space the reason for the catheter or port access .
21B.2: If the vascular access marked for question 21A was a catheter or port access, indicate in the appropriate space if one or more catheters or port accesses had been used continuously in this patient for the past 90 days or longer between OCT 1, 2001 and DEC 31, 2001.
21C.1 and 21C.2: Complete 21C.1-21C.2 only if vascular access used on most recent dialysis session was an AV fistula, synthetic graft or bovine graft .
21C.1: If the vascular access marked for question 21A was an AV fistula, synthetic graft or bovine graft, indicate if there was routine surveillance for the presence of stenosis between OCT 1, 2001 and DEC 31, 2001. Routine surveillance is the sequential measurement of access flow or venous pressure. The appropriate interval between sequential measurements depends on the technique used to monitor for stenosis, and is described below. For the purpose of this review , techniques used to monitor access flow include (a) one of the dilution methods in which the needles are reversed and recirculation is deliberately induced, or (b) conventional Color-Flow Doppler. In the former, the dilution indicator may be a change in (1) the velocity of ultrasound in blood, (2) hemoglobin/hematocrit, (3) temperature, (4) solute concentration, or (5) conductivity. Pump blood flow must be accurately measured to use this technique. Techniques used to monitor venous pressure include dynamic and static venous dialysis pressures. Dynamic venous pressure monitoring uses low blood pump flow rates usually set at 200 mL per minute. Static pressure monitoring is performed at zero blood pump flow. If access flow was monitored, it should have been measured on a regular basis by one of the available dilution techniques or by conventional Color-Flow Doppler at a minimum frequency of once every three months . If dynamic venous pressure was monitored it should have been measured at every hemodialysis session . If static venous pressure was monitored it should have been measured at a minimum frequency of once every two weeks . For the purpose of this review , clinical assessment such as prolonged bleeding after needle withdrawal, or altered characteristics of thrill or bruit, as well as dialysis adequacy measurements using Kt/V or URR, supplement but do NOT constitute monitoring techniques. For the purpose of this review , recirculation methods do NOT constitute monitoring for the presence of AV graft stenosis.
21C.2: If the vascular access marked for question 21A was an AV fistula, synthetic graft or bovine graft, check all surveillance methods utilized based on the definitions and intervals given above in 21C.1. If other techniques and/or corresponding intervals were used check "other" and write in the technique and corresponding intervals.
22: Check the appropriate space to indicate if the patient FIRST started hemodialysis during January 1, 2001-August 31, 2001 (see item #8 on page 1). These patients would have begun a regular maintenance course of hemodialysis during January 1, 2001-August 31, 2001. DO NOT include patients who have changed modality, had a newly failed transplant, or returned after an episode of regained kidney function, and were placed on maintenance hemodialysis during the time frame January 1, 2001-August 31, 2001. If "Yes", answer questions 22A-B. If "No", questions 22A-B should be left blank and the form has been completed.
22A: Check the appropriate space to indicate type of vascular access in use upon Initiation of a maintenance course of hemodialysis (see item #8 on page 1) during the time frame January 1, 2001-August 31, 2001. Exclude patients who have received intermittent dialysis treatments for volume overload or congestive heart failure. ("Port Access" is considered a vascular access device which consists of a valve and cannula that is subcutaneously implanted and is accessed by dialysis needles).
22B: Check the appropriate space to indicate type of vascular access, for the patient identified in 22A, in use 90 days after the patient first started hemodialysis. ("Port Access" is considered a vascular access device which consists of a valve and cannula that is subcutaneously implanted and is accessed by dialysis needles).

Appendix 3. 2002 CPM Data Collection Form – Peritoneal Dialysis

**PERITONEAL DIALYSIS CLINICAL PERFORMANCE
MEASURES DATA COLLECTION FORM 2002**

[Before completing please read instructions at the bottom of this page and on pages 4 and 5]

<p>PATIENT IDENTIFICATION</p> <div style="border: 1px solid gray; height: 80px; margin: 10px 0; text-align: center; background-color: #e0e0e0;"> <p>Place Patient Data Label Here</p> </div>	<p align="center">MAKE CORRECTIONS TO PATIENT INFORMATION ON LABEL IN THE SPACE BELOW</p>
<p>12. Patient's Ethnicity (Check appropriate box). <input type="checkbox"/> non-Hispanic <input type="checkbox"/> Hispanic, Mexican American (Chicano) <input type="checkbox"/> Hispanic, Puerto Rican <input type="checkbox"/> Hispanic, Cuban American <input type="checkbox"/> Hispanic, Other <input type="checkbox"/> Unknown</p>	
<p>13. If the above patient information is incorrect make corrections in space above then continue to question 12. Please verify patient's race and verify question 12 above. If patient unknown or was not dialyzed in the unit at any time during OCT 2001 – MAR 2002 return the blank form to the Network.</p>	
<p>14a. Patient's height (MUST COMPLETE): _____ inches OR _____ centimeters</p>	
<p>14b. Patient's weight (abdomen empty) (first clinic visit weight after Oct. 1, 2001): _____ lbs. OR _____ kg.</p>	
<p>15. Does patient have limb amputation(s): <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>16. Has the patient ever been diagnosed with any type of diabetes? <input type="checkbox"/> Yes (go to 17) <input type="checkbox"/> No (go to 18) <input type="checkbox"/> Unknown (go to 18)</p>	
<p>17. If question 16 was answered YES, is the patient currently taking medications to control the diabetes? <input type="checkbox"/> Yes <input type="checkbox"/> No (go to 18) If YES, is the patient using insulin? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>	
<p>Individual Completing Form (Please print):</p> <p>First name: _____ Last name: _____ Title: _____</p> <p>Phone number: (_____) _____ - _____ Fax number: (_____) _____ - _____</p>	

INSTRUCTIONS FOR COMPLETING THE IN-CENTER PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002

The label on the top left side of this form contains the following patient identifying information (#'s 1-11). If the information is incorrect make corrections to the right of the label.

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. LAST and first name. 3. SOCIAL Security Number (SSN). 5. SEX (1=Male; 2=Female; 3=Unknown). 7. PRIMARY cause of renal failure by HCFA-2728 code. 9. ESRD Network number.
Do not make corrections to this item. | <ol style="list-style-type: none"> 2. DATE of birth (DOB) as MM/DD/YYYY. 4. HEALTH Insurance Claim Number (HIC). 6. RACE (1=American Indian/Alaska Native; 2=Asian; 3=Black; 4=White; 5=Unknown; 6=Pacific Islander; 7=Mid East Arabian; 8=Indian Subcontinent; 9=Other Multiracial). 8. DATE, as MM/DD/YYYY, that the patient began a regular course of dialysis. 10. Facility's Medicare provider number. 11. The most RECENT date this patient returned to peritoneal dialysis following: transplant failure, an episode of regained kidney function, or switched modality. |
|---|--|
12. Patient's Ethnicity. Please verify the patient's ethnicity and check appropriate box.
 13. Review the patient and facility-specific information contained on the pre-printed label. Please verify the patient's race, item 6 above. If any of the information is incorrect write corrections in the space to the right of the label. If the patient is unknown or if the patient was not dialyzed in the unit at any time during OCT 2001 through MAR 2002, send the blank form back to the ESRD Network office with the name and address of the facility providing services to this patient on December 31, 2001, if known.
 - 14a. Enter the patient's height in inches or centimeters. HEIGHT MUST BE ENTERED, do not leave this field blank. You may ask the patient his/her height to obtain this information. If the patient had both legs amputated, record pre-amputation height and check YES for item 15.
 - 14b. Enter the patient's weight (abdomen empty) in pounds or kilograms. Use the FIRST CLINIC VISIT weight on or after October 1, 2001.
 15. For the purpose of this study, check NO if this patient has had toe(s), finger(s), or mid-foot (Symes) amputation; but **check YES if this patient has had a below-knee, below-elbow, or more proximal (extensive) amputation.**
 16. Check either "Yes", or "No", or "Unknown" to indicate if the patient has ever been diagnosed with any type of diabetes. If **YES**, proceed to question 17.
 17. If the answer to 16 is **YES**, please check either "Yes" or "No" to indicate if the patient is currently taking medications to control the diabetes. If the answer to 17 is **YES**, please check either "Yes" or "No" to indicate if the patient is currently using insulin.

PLEASE COMPLETE ITEMS 18 THROUGH 24 ON PAGE 2, 3, AND 4 OF THIS DATA COLLECTION FORM.

INSTRUCTIONS FOR COMPLETING THESE ITEMS ARE ON PAGES 5 AND 6.

PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)			
LAB DATA. The following data are requested for each two-month time period: OCT-NOV 2001, DEC 2001-JAN 2002, FEB-MAR 2002. For each question, where appropriate, use the first lab values obtained in each time period. ENTER THE FOLLOWING CODES IN THE SPACES BELOW IF LAB VALUES CANNOT BE LOCATED: NE if Not Found. HOSP if patient was hospitalized during the entire time period. TRANS if patient was absent during the entire time period.			
18. ANEMIA MANAGEMENT: Enter the FIRST Hemoglobin (Hgb) determined by the laboratory for EACH TWO-MONTH TIME PERIOD: OCT-NOV 2001, DEC 2001-JAN 2002, FEB-MAR 2002. Also enter the appropriate erythropoietic prescription/dose information prior to the first Hgb in each two-month time period. Enter the first monthly Serum Ferritin concentration and Transferrin Saturation, and the route of iron administration for each two-month time period.			
	OCT-NOV 2001	DEC 2001-JAN 2002	FEB-MAR 2002
A. First laboratory hemoglobin (Hgb) during the two-month time period:	_____ . _____ g/dL	_____ . _____ g/dL	_____ . _____ g/dL
B.1. Was there a prescription for Epoetin immediately before the Hgb in 18A. was drawn?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
For patients prescribed Epoetin:			
B.2. What was the PRESCRIBED Epoetin dose in units/wk at the time <u>immediately BEFORE</u> the Hgb in 18A. was drawn? (See instructions on page 5).	_____ units/wk	_____ units/wk	_____ units/wk
B.3. What was the prescribed route of administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC
B.4. How many times per week was Epoetin prescribed?	_____ x per week	_____ x per week	_____ x per week
C.1. Was there a prescription for Darbepoetin (Aranesp™) during the month immediately before the Hgb in 18A. was drawn?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
For patients prescribed Darbepoetin:			
C.2. What was the PRESCRIBED Darbepoetin dose in micrograms for the MONTH immediately BEFORE the Hgb in 18A. was drawn? (See instructions on page 5).	_____ mcg/month	_____ mcg/month	_____ mcg/month
C.3. How many times per month was Darbepoetin prescribed?	_____ x per month	_____ x per month	_____ x per month
C.4. What was the prescribed route of administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC	<input type="checkbox"/> IV <input type="checkbox"/> SC
D. First Serum Ferritin concentration during the two-month time period:	_____ ng/mL	_____ ng/mL	_____ ng/mL
E. First Transferrin Saturation during the two-month time period:	_____ %	_____ %	_____ %
F. Was iron prescribed at any time during the two-month time period?	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)	<input type="checkbox"/> Yes <input type="checkbox"/> No (go to 19)
G. If yes, what was the prescribed route of iron administration? (Check all that apply).	<input type="checkbox"/> IV <input type="checkbox"/> IM <input type="checkbox"/> PO	<input type="checkbox"/> IV <input type="checkbox"/> IM <input type="checkbox"/> PO	<input type="checkbox"/> IV <input type="checkbox"/> IM <input type="checkbox"/> PO
H. If the patient was prescribed IV iron, what was the dose of IV iron administered during the two-month time period?	_____ mg/month	_____ mg/month	_____ mg/month
19. SERUM ALBUMIN: Enter the FIRST serum albumin FOR EACH TWO-MONTH TIME PERIOD: OCT-NOV 2001, DEC 2001-JAN 2002, FEB-MAR 2002. Check the method used (green or purple) by the lab to determine the serum albumin. If method unknown, please call lab to find out. Do not leave blank.			
	OCT-NOV 2001	DEC 2001-JAN 2002	FEB-MAR 2002
A. First serum albumin during the two-month time period:	_____ . _____ gm/dL	_____ . _____ gm/dL	_____ . _____ gm/dL
B. Check lab method used: BCG = bromcresol green; BCP = bromcresol purple	<input type="checkbox"/> BCG <input type="checkbox"/> BCP	<input type="checkbox"/> BCG <input type="checkbox"/> BCP	<input type="checkbox"/> BCG <input type="checkbox"/> BCP
20. PERITONEAL DIALYSIS ADEQUACY: The remainder of this form lists a series of questions regarding adequacy measurements for this patient. Please answer questions 20A and B FOR EACH TWO-MONTH TIME PERIOD indicated. Then continue to pages 3 and 4.			
	OCT-NOV 2001	DEC 2001-JAN 2002	FEB-MAR 2002
A. Was the patient on peritoneal dialysis at any time during this period?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
B. Was the patient on hemodialysis or did patient receive a transplant at any time during this period?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)				
<p>21. ADEQUACY: The following data are requested for the first ADEQUACY determination during the months OCTOBER 2001 through MARCH 2002. Starting with the first adequacy measurement in these months, enter the adequacy measurements/results listed below that were obtained. (Please DO NOT record more than one adequacy measurement done for any one month.) Please read instructions on Pages 5 and 6 before completing this section.</p>		<p>22. PERITONEAL DIALYSIS PRESCRIPTION: For the following questions – record the PD prescription in effect immediately prior to the time the adequacy measures/results recorded in Question 21 were performed. In addition, if the prescription was changed following the adequacy measurement, please record the new prescription in the column indicated. Please read instructions on Page 6 before completing this section.</p>		
	<input type="checkbox"/> Check box if adequacy measurement was not done during OCT 2001-MAR 2002		Prescription prior to date in 21A	➔ New Prescription ____/____/____ (mm) (dd) (yy)
21A. Date of first adequacy measurement between 10-1-2001 to 3-31-2002	____/____/____ (mm) (dd) (yy)	22A. Number of dialysis days per week	_____ (# days)	_____ (# days)
21B. Patient's dialysis modality when adequacy measures were performed	<input type="checkbox"/> CAPD <input type="checkbox"/> Cycler	<p>22B. CAPD PRESCRIPTION (this includes patients with one overnight exchange using an assist device)</p>		
21C. Patient's weight at the time of this adequacy assessment (abdomen empty) (Circle lbs or kgs)	_____ lbs /kgs	1. Total dialysate volume infused per 24 hours	_____ mL/24 hrs	_____ mL/24 hrs
21D. Weekly Kt/V _{urea} (dialysate and urine clearance)	____ . _____	2. Total number of exchanges per 24 hours (including overnight exchange)	_____ (# exchanges)	_____ (# exchanges)
21E. Method by which V above was calculated: Check one. (See instructions on page 5)	<input type="checkbox"/> %BW <input type="checkbox"/> Hume <input type="checkbox"/> Watson <input type="checkbox"/> Other	<p>22C. CYCLER PRESCRIPTION</p>		
21F. Weekly Creatinine Clearance (dialysate and urine clearance)	____ . ____ L/wk	1. Total dialysate volume infused per 24 hours	_____ mL/24 hrs	_____ mL/24 hrs
21G. Is this Creatinine Clearance corrected for body surface area, using standard methods? (See instructions on page 6)	<input type="checkbox"/> Yes <input type="checkbox"/> No	2. Total dialysis time		
21H. 24 hr DIALYSATE volume (prescribed and ultrafiltration)	_____ mL	a. Total nighttime dialysis time	____hrs ____min	____hrs ____min
21I. 24 hr DIALYSATE urea nitrogen:	____ . ____ mg/dL	b. Total daytime dialysis time	____hrs ____min	____hrs ____min
21J. 24 hr DIALYSATE creatinine:	____ . ____ mg/dL	c. Total amount of time the patient is dry during 24 hours	____hrs ____min	____hrs ____min
21K. 24 hr URINE volume: (If 24 hr urine was not collected check NP. If patient's urine production was negligible, i.e., < 200 cc of urine/24 hr, then check anuric and go to question 21N)	_____ mL <input type="checkbox"/> NP <input type="checkbox"/> anuric	(Note: 2a+b+c = 24 hours)		
21L. 24 hr URINE urea nitrogen:	____ . ____ mg/dL	3. Nighttime Prescription (excluding last bag fill)		
21M. 24 hr URINE creatinine:	____ . ____ mg/dL	a. Volume of a single nighttime exchange	_____ mL/exchange	_____ mL/exchange
21N. SERUM BUN at the time this adequacy assessment was done	____ . ____ mg/dL	b. Number of dialysis exchanges during the nighttime	_____ (#/nighttime)	_____ (#/nighttime)
21O. SERUM creatinine at the time this adequacy assessment was done	____ . ____ mg/dL	4. Daytime Prescription (including last bag fill)		
21P.1. Most recent 4 hour dialysate/plasma creatinine ratio (D/P Cr) from a peritoneal equilibration test (PET).	____ . _____	a. Volume of a single daytime exchange	_____ mL/exchange	_____ mL/exchange
2. Date of most recent D/P Cr	____/____/____ (mm) (dd) (yy)	b. Number of dialysis exchanges during the daytime	_____ (#/daytime)	_____ (#/daytime)
		22D. Does the prescription described above include TIDAL dialysis?	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
		22E. Based on this adequacy result,		
		1. Was the collection repeated?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		2. Was the prescription changed?	<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<p>Note: If this prescription was changed, enter the new prescription date and information in the adjacent column. _____</p>		

PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FOR 2002: (CONTINUED)			
<p>23. ADEQUACY: The following data are requested for the second ADEQUACY determination during the months NOVEMBER 2001 through MARCH 2002. Starting with the second adequacy measurement in these months, enter the adequacy measurements results listed below that were obtained. (Please DO NOT record more than one adequacy measurement done for any one month.) Please read instructions on Page 6 before completing this section.</p>		<p>24. PERITONEAL DIALYSIS PRESCRIPTION: For the following questions – record the PD prescription in effect immediately prior to the time the adequacy measures/results recorded in Question 23 were performed. In addition, if the prescription was changed following the adequacy measurement, please record the new prescription in the column indicated. Please read instructions on Page 6 before completing this section.</p>	
	<input type="checkbox"/> Check box if adequacy measurement was not done during NOV 2001-MAR 2002	Prescription prior to date in 23A	New Prescription ____/____/____ (mm) (dd) (yy)
23A. Date of second adequacy measurement between 11-1-2001 to 3-31-2002	____ / ____ / ____ (mm) (dd) (yy)	24A. Number of dialysis days per week	____ (# days)
23B. Patient's dialysis modality when adequacy measures were performed	<input type="checkbox"/> CAPD <input type="checkbox"/> Cyclor	24B. CAPD PRESCRIPTION (this includes patients with one overnight exchange using an assist device)	
23C. Patient's weight at the time of this adequacy assessment (abdomen empty) (Circle lbs or kgs)	_____ lbs /kgs	1. Total dialysate volume infused per 24 hours	_____ mL/24 hrs
23D. Weekly Kt/V _{urea} (dialysate and urine clearance)	____ . ____	2. Total number of exchanges per 24 hours (including overnight exchange)	_____ (# exchanges)
23E. Method by which V above was calculated: Check one. (See instructions on page 5)	<input type="checkbox"/> %BW <input type="checkbox"/> Hume <input type="checkbox"/> Watson <input type="checkbox"/> Other	24C. CYCLER PRESCRIPTION	
23F. Weekly Creatinine Clearance (dialysate and urine clearance)	____ . ____ L/wk	1. Total dialysate volume infused per 24 hours	_____ mL/24 hrs
23G. Is this Creatinine Clearance corrected for body surface area, using standard methods? (See instructions on page 6)	<input type="checkbox"/> Yes <input type="checkbox"/> No	2. Total dialysis time	_____ mL/24 hrs
23H. 24 hr DIALYSATE volume (prescribed and ultrafiltration)	_____ mL	a. Total nighttime dialysis time	____ hrs ____ min
23I. 24 hr DIALYSATE urea nitrogen:	____ . ____ mg/dL	b. Total daytime dialysis time	____ hrs ____ min
23J. 24 hr DIALYSATE creatinine:	____ . ____ mg/dL	c. Total amount of time the patient is dry during 24 hours	____ hrs ____ min
23K. 24 hr URINE volume: (If 24 hr urine was not collected check NP. If patient's urine production was negligible, i.e., < 200 cc of urine/24 hr, then check anuric and go to question 23N)	_____ mL <input type="checkbox"/> NP <input type="checkbox"/> anuric	(Note: 2a+b+c = 24 hours)	____ hrs ____ min
23L. 24 hr URINE urea nitrogen:	____ . ____ mg/dL	3. Nighttime Prescription (excluding last bag fill)	_____ mL/exchange
23M. 24 hr URINE creatinine:	____ . ____ mg/dL	a. Volume of a single nighttime exchange	_____ mL/exchange
23N. SERUM BUN at the time this adequacy assessment was done	____ . ____ mg/dL	b. Number of dialysis exchanges during the nighttime	_____ (#/nighttime)
23O. SERUM creatinine at the time this adequacy assessment was done	____ . ____ mg/dL	4. Daytime Prescription (including last bag fill)	_____ mL/exchange
23P.1. Most recent 4 hour dialysate/plasma creatinine ratio (D/P Cr) from a peritoneal equilibration test (PET)	____ . ____	a. Volume of a single daytime exchange	_____ mL/exchange
2. Date of most recent D/P Cr	____ / ____ / ____ (mm) (dd) (yy)	b. Number of dialysis exchanges during the daytime	_____ (#/daytime)
		24D. Does the prescription described above include TIDAL dialysis?	<input type="checkbox"/> Yes <input type="checkbox"/> No
		24E. Based on this adequacy result,	<input type="checkbox"/> Yes <input type="checkbox"/> No
		1. Was the collection repeated?	<input type="checkbox"/> Yes <input type="checkbox"/> No
		2. Was the prescription changed?	<input type="checkbox"/> Yes <input type="checkbox"/> No
Note: If this prescription was changed, enter the new prescription date and information in the adjacent column.			

PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)
INSTRUCTIONS FOR COMPLETING QUESTIONS 18 THROUGH 20 (continued from page 1): To answer questions 18 through 20 review the patient's clinic or facility medical record FOR EACH TWO-MONTH TIME PERIOD: OCT 1, 2001 through NOV 30, 2001, DEC 1, 2001 through JAN 31, 2002, and FEB 1, 2002 through MAR 31, 2002. Do not leave any items blank. Enter the following if the information cannot be located: <u>NE</u> if not found, <u>HOSP</u> if hospitalized during the entire time period, <u>TRANS</u> if patient was absent during the entire time period.
18A: Enter the patient's FIRST hemoglobin (Hgb) value determined by the laboratory for EACH two-month time period.
18B.1-B.4: Check the appropriate box to indicate if there was a prescription for Epoetin IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A was obtained. For patients prescribed Epoetin , enter the PRESCRIBED WEEKLY Epoetin DOSE at the time IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A was obtained, even if the patient did not receive the Epoetin dose (" Immediately before " refers to the week prior to the test). If prescribed less frequently than weekly, divide the prescribed Epoetin dose by the number of weeks in the dosing interval to obtain weekly Epoetin dose. If the Epoetin dose is prescribed by the number of days, divide the dose by the number of days and multiply by 7 to obtain weekly Epoetin dose (example-EPO 5000 units every 10 days. 5000 units divided by 10 days and multiplied by 7 days equals 3500 units per week). If using the sliding scale for Epoetin dosing, total all the doses given during the week and enter the value. Enter 0 units if the patient was on "hold" immediately before the hemoglobin measurement (for the purposes of this collection, a "hold" order will be considered a 0 unit prescribed dose). Enter the number of times per week that Epoetin was prescribed. Check the appropriate space to indicate the prescribed route of administration for EPO (intravenous [IV] or subcutaneous [SC]).
18C.1-C.4: Check the appropriate box to indicate if there was a prescription for Darbepoetin (Aranesp™) during the month IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A. For patients prescribed Darbepoetin , enter the PRESCRIBED DARBEPOETIN DOSE in micrograms per month (mcg/month) during the month IMMEDIATELY BEFORE the hemoglobin measurement reported in 18A, even if the patient did not receive the Darbepoetin dose. Include any prescribed dose missed due to dose skipped or error, etc., when entering the dose. Enter 0 mcg/month if the patient was on "Hold" (for the purposes of this collection, a "hold" order will be considered a 0 mcg/month prescribed dose). Enter the number of times per month that Darbepoetin was prescribed. Check the appropriate space to indicate the prescribed route of administration for Darbepoetin (intravenous [IV] or subcutaneous [SC]). If the patient received Darbepoetin IV and SC, please check both spaces.
18D: Enter the patient's FIRST serum ferritin concentration recorded EACH two-month time period. If a serum ferritin concentration test was not performed every two-month time period, enter the value for the time period when performed and record "NP" for the other time period(s).
18E: Enter the patient's FIRST transferrin saturation recorded EACH two-month time period. If a transferrin saturation test was not performed every two-month time period, enter the value for the time period when performed and record "NP" for the other time period(s).
18F: Check either "Yes" or "No" to indicate if iron was prescribed at any time during the two-month time periods.
18G: If the answer to 18F is "Yes," please check the appropriate space to indicate the route of iron administration (intravenous [IV], intramuscular [IM] or by mouth [PO]) for each two-month time period. Check every route of administration that was prescribed each time period.
18H: If the patient was prescribed IV iron, enter the dose of IV iron (in mg) that was administered during the two-month time period.
19A: Enter the patient's FIRST serum albumin value recorded EACH two-month time period.
19B: Check the method used by the laboratory to determine the serum albumin levels (bromocresol green or bromocresol purple). If you do not know what method the laboratory used, call the laboratory to find out this information. DO NOT LEAVE THIS QUESTION BLANK.
20A: Check the appropriate response (yes or no) for each two-month time period, indicating whether this patient was on peritoneal dialysis at any time during each of the specified two-month time periods.
20B: Check the appropriate response (yes or no) for each two-month time period, indicating whether this patient was on hemodialysis or received a transplant at any time during each of the specified two-month time periods.
INSTRUCTIONS FOR COMPLETING QUESTIONS 21 THROUGH 24: To answer questions 21 through 24 review the patient's clinic or facility medical record and provide the requested data for each of the first two adequacy measurements and PD prescriptions in effect immediately prior to the adequacy measurements during the months OCTOBER 2001 through MARCH 2002. DO NOT record more than one adequacy measurement done for any one month.
21A: Enter the first date on which adequacy of dialysis was assessed for the first measure obtained between OCT 1, 2001 through MAR 31, 2002. DO NOT record more than one adequacy measurement done for any one month. Check the labeled box above date area if an adequacy measurement was not done during the time frame.
21B: Check the modality of peritoneal dialysis this patient was on at the time the corresponding adequacy of dialysis measure was obtained. CHECK either CAPD or Cycler.
21C: Enter the patient's weight (with abdomen empty) at the clinic/facility visit when the adequacy measurements were obtained, circle lbs or kgs as appropriate.
21D: Enter the TOTAL WEEKLY Kt/V_{urea} for the first adequacy measurement indicated on 21A between OCT 1, 2001 through MAR 31, 2002. NOTE: If you have a value for weekly Kt/V_{urea} for this adequacy assessment, please complete the corresponding values for questions 21H-21J for 24-hour dialysate volume, 24-hour dialysate urea (or creatinine) and question 21K for 24-hour urine volume. If the patient is not anuric, complete the corresponding values for questions 21L-21M, the 24-hour urine urea (or creatinine), if these values are available. Enter NP for all values when not performed. If your unit calculates a daily Kt/V_{urea} , multiply this result by 7.0 and enter the result in the appropriate space(s). If this patient did not dialyze each day of the week, then multiply the daily Kt/V_{urea} by the number of days the patient did dialyze.
21E: Check the method used to calculate the V in the Kt/V_{urea} measurement; % BW = percent of body weight; Hume and Watson are two nomograms used to calculate V based on several of these parameters - weight, height, age, gender. If method used to calculate V is not known, please call lab to ascertain method. Please do not leave blank.

PERITONEAL DIALYSIS CLINICAL PERFORMANCE MEASURES DATA COLLECTION FORM 2002 (CONTINUED)	
21F:	Enter the TOTAL WEEKLY CREATININE CLEARANCE for the first adequacy measurement indicated on 21A between OCT 1, 2001 through MAR 31, 2002. NOTE: If you have a value for weekly creatinine clearance for this adequacy assessment, please complete the corresponding values for questions 21H-21J for 24-hour dialysate volume, 24-hour dialysate urea (or creatinine) and question 21K for 24-hour urine volume. If the patient is not anuric, complete the corresponding values for questions 21L-21M, the 24-hour urine urea (or creatinine), if these values are available. Enter NP for all values when not performed. If your unit calculates a daily creatinine clearance multiply this result by 7.0 and enter the result in the appropriate space(s). If this patient did not dialyze each day of the week, then multiply the daily creatinine clearance by the number of days the patient did dialyze.
21G:	Check Yes or No if the weekly creatinine clearance was normalized for body surface area (i.e., the result is multiplied by 1.73m ² and divided by the patient's body surface area [BSA]). Standard methods for establishing BSA are: the DuBois and DuBois method; the Gehan and George method; and the Haycock method. If you do not have this information, call the laboratory that provided the creatinine clearance value for this information. Please do not leave blank.
21H, I, and J:	Enter the measured 24-hour DIALYSATE volume (includes prescribed and ultrafiltration volumes), urea nitrogen and creatinine obtained for the first adequacy measurement obtained between OCT 1, 2001 through MAR 31, 2002. If a 24-hour dialysate volume, urea nitrogen or creatinine were NOT measured in this time period, enter NP (for not performed) in the appropriate spaces. ONLY ENTER ACTUAL MEASURED 24-HOUR DIALYSATE VOLUME. DO NOT ENTER AN EXTRAPOLATED DIALYSATE VOLUME. Please report the 24-hour dialysate volume as a combination of the prescribed fill volume and the ultrafiltration volume.
21K, L, and M:	Enter the 24-hour URINE volume, urea nitrogen and creatinine obtained for the first adequacy assessment obtained between OCT 1 2001 through MAR 31, 2002. ONLY ENTER ACTUAL MEASURED 24-HOUR URINE VOLUME—DO NOT ENTER AN EXTRAPOLATED URINE VOLUME. If 24-hour urine volume was not collected check NP for not performed, OR if the patient's urine production was negligible, i.e., < 200 cc of urine/24 hours, then check anuric. If NP or anuric is checked, SKIP TO QUESTION 21N. If urine urea nitrogen and creatinine were NOT measured in this time period, enter NP in the appropriate spaces.
21N, O:	Enter the SERUM BUN and SERUM CREATININE obtained for the first adequacy assessment obtained between OCT 1, 2001 through MAR 31, 2002. Enter NP in the appropriate spaces for all time periods when not performed.
21P:	(1) Enter the most recent four hour dialysate/plasma creatinine ratio (D/P Cr) from a peritoneal equilibration test (PET). (2) Enter the date of the most recent D/P Cr. The test result and corresponding date of the most recent D/P Cr may be outside the 6-month time frame. If never performed record "NP".
22:	To respond to questions 22A through 22E record the peritoneal dialysis (PD) prescription in effect immediately prior to the first adequacy measures/results recorded in question 21 performed between OCT 1, 2001 through MAR 31, 2002. In addition, if the prescription was changed following the adequacy measurement, please record the new prescription in the column labeled "New Prescription" as well as indicating the date that the new prescription was initiated. Complete all items that are applicable.
22A:	Enter the number of days per week for which this patient undergoes peritoneal dialysis.
22B:	CAPD PRESCRIPTION. Use the CAPD prescription category for all CAPD patients including patients with one overnight exchange using an assist device. (1) Enter the total dialysate volume in mL infused over a 24-hour period and (2) the <u>number of exchanges per 24-hour period</u> PRESCRIBED for CAPD at the time the first adequacy measurements were performed.
22C:	CYCLER PRESCRIPTION. (1) Enter the total dialysate volume in mL infused over a 24-hour period. (2) Total dialysis time - (Note: 2a+b+c = 24 hours): (2a) Enter the total nighttime dialysis time, (2b) the total daytime dialysis dwell time, and (2c) the <u>total amount of time the patient is dry during 24 hours</u> . If the patient is never dry in 24 hours enter a value of 0 hours. The hours entered in 2a, b, & c should equal 24 hours. (3) Nighttime Prescription (excluding last bag fill): (3a) Enter <u>the volume of a single nighttime exchange</u> and (3b) the <u>number of dialysis exchanges during the nighttime</u> PRESCRIBED for CYCLER NIGHTTIME at the time the first adequacy measurements were performed. Include in the CYCLER NIGHTTIME prescription only those exchanges provided by an automated device. DO NOT include in this category any last bag fill or option that the patient carries after unhooking from the cyclor or any daytime dwells as these exchanges are recorded in the DAYTIME PRESCRIPTION information. If different inflow volumes are used, report average inflow volume. (4) Daytime Prescription (including last bag fill): (4a) Enter <u>the volume of a single daytime exchange</u> and (4b) the <u>number of dialysis exchanges during the daytime</u> PRESCRIBED for CYCLER DAYTIME at the time the first adequacy measurements were performed. Include in the CYCLER DAYTIME prescription only those exchanges performed after the patient disconnects from the cyclor and/or a last bag fill or option that the patient carries during the day. ANY OTHER EXCHANGES PERFORMED USING THE CYCLER SHOULD BE INCLUDED UNDER CYCLER NIGHTTIME PRESCRIPTION. If different inflow volumes are used, report average inflow volume.
22D:	Check the appropriate box, yes or no, whether this patient's peritoneal dialysis prescription included TIDAL dialysis. TIDAL patients are cyclor patients for whom the dialysate is partially drained between some exchanges.
22E:	(1) Check the appropriate box, yes or no, indicating whether the adequacy collection was repeated, or the prescription changed, following the first adequacy measurement performed between OCT 1, 2001 through MAR 31, 2002. (2) If the prescription was changed enter the new prescription in the column to the right.
23A-P:	See instructions for 21A-21P and complete for second adequacy measurement performed between NOV 1, 2001 through MAR 31, 2002. DO NOT record more than one adequacy measurement done for any one month. Check the labeled box above date area if an adequacy measurement was not done during the time frame.
24A-E:	See instructions for 22A-22E and complete for the peritoneal dialysis (PD) prescription in effect immediately prior to the second adequacy measures/results recorded in question 23 performed between NOV 1, 2001 through MAR 31, 2002.

Appendix 4. 2002 CPM Facility-Specific Data Collection Form**DIALYSIS FACILITY CLINICAL PERFORMANCE
MEASURES DATA COLLECTION FORM 2002**

FACILITY IDENTIFICATION

MAKE CORRECTIONS TO FACILITY INFORMATION
ON LEFT IN THE SPACE BELOW

Place Facility Label Here

1. Does your facility have a written policy for the **TIMING** of the post-dialysis BUN sample collection? (*This question refers to any written policy, endorsed by your facility's management and to which adherence is expected, regarding the timing of blood draws for the assessment of post-dialysis BUN samples.*)

 Yes No

If yes, which of the following would best describe your facility's written policy for the **TIMING** of the post-dialysis BUN sample collection as of October 1, 2001? [**CHECK ONLY ONE ANSWER**]

- | | |
|---|---|
| <input type="checkbox"/> Immediately, without slowing blood flow | <input type="checkbox"/> Immediately after slowing or stopping blood flow |
| <input type="checkbox"/> 15 to 60 seconds after slowing or stopping blood flow | <input type="checkbox"/> 61 to 120 seconds after slowing or stopping blood flow |
| <input type="checkbox"/> > 2 to 15 minutes after slowing or stopping blood flow | <input type="checkbox"/> > 15 minutes after slowing or stopping blood flow |

2. During the time period January 1, 2001 to December 31, 2001, did your facility conduct and document an audit of adherence to the written policy for post-dialysis BUN sample collection? (*An audit refers to an actual physical observation and verification of post-dialysis BUN blood sample draws in order to assess compliance with the policy identified in question 1.*)

 Yes No Unknown

3. During the time period October 1, 2001 to December 31, 2001 did your facility re-process (re-use) dialyzers? (*Please answer "Yes" if your facility re-used one or more dialyzer(s) between October 1, 2001 and December 31, 2001.*)

 Yes No Unknown

If yes, please check the box(es) which most accurately represents the proportion of reprocessed dialyzers for which total cell volume (TCV) is measured in your facility prior to first use: [**CHECK ALL THAT APPLY**]

- | | |
|---|-------------------------------------|
| <input type="checkbox"/> < 95 % | <input type="checkbox"/> 95 - 100 % |
| <input type="checkbox"/> We use the dialyzer manufacturer's product information to infer TCV | |
| <input type="checkbox"/> We use batch testing and/or an average TCV for a group of hemodialyzers to infer TCV | |
| <input type="checkbox"/> Other _____ | |

Individual Completing Form (**Please print**):

First name: _____ Last name: _____ Title: _____

Phone number: (____) _____ - _____ Fax number (____) _____ - _____

Appendix 5. Centers for Medicare & Medicaid Services (CMS) Offices and ESRD Networks

CMS Offices

Centers for Medicare & Medicaid Services
Center for Beneficiary Choices
Quality Measurement and Health Assessment
Group
S3-02-01
7500 Security Boulevard
Baltimore, MD 21244
(410) 786-5785

Centers for Medicare & Medicaid Services -
Region I
Division of Clinical Standards and Quality,
Clinical Standards Branch
Room 2275
JFK Federal Building
Boston, MA 02203-0003
(617) 565-3136

Centers for Medicare & Medicaid Services -
Region VI
Division of Clinical Standards and Quality
Room 714
1301 Young Street
Dallas, TX 75202
(214) 767-4443

Centers for Medicare & Medicaid Services -
Region VII
Division of Clinical Standards and Quality,
Medical Review Branch
Richard Bolling Federal Building
601 East 12th Street, Room 242
Kansas City, MO 64106-2808
(816) 426-5746

Centers for Medicare & Medicaid Services -
Region X
Division of Clinical Standards and Quality
2201 Sixth Avenue, Mail Stop (RX-42)
Seattle, WA 98121-2500
(206) 615-2317

ESRD Networks

ESRD Network Organization No. 1
ESRD Network of New England, Inc.
30 Hazel Terrace
Woodbridge, CT 06525
Region I: ME, NH, VT, MA, CT, RI
(203) 387-9332

ESRD Network Organization No. 2
ESRD Network of New York, Inc.
1249 Fifth Avenue A-419
New York, NY 10029
Region I: NY
(212) 289-4524

ESRD Network Organization No. 3
TransAtlantic Renal Council
Cranbury Gates Office Park
109 South Main Street, Suite 21
Cranbury, NJ 08512-9595
Region I: NJ, PR, VI
(609) 490-0310

ESRD Network Organization No. 4
University of Pittsburgh Medical Center
200 Lothrop Street
Pittsburgh, PA 15213-2582
Region I: PA, DE
(412) 647-3428

ESRD Network Organization No. 5
Mid-Atlantic Renal Coalition
1527 Huguenot Road
Midlothian, VA 23113
Region I: DC, MD, VA, WV
(804) 794-3757

ESRD Network Organization No. 6
Southeastern Kidney Council, Inc.
1000 St. Albans Drive
Suite 270
Raleigh, NC 27609
Region VI: GA, NC, SC
(919) 855-0882

ESRD Network Organization No. 7
ESRD Network of Florida, Inc.
One Davis Boulevard, Suite 304
Tampa, FL 33606
Region VI: FL
(813) 251-8686

ESRD Network Organization No. 8
Network Eight, Inc.
P.O. Box 55868
Jackson, MS 39296-5868
Region VI: AL, MS, TN
(601) 936-9260

ESRD Network Organization No. 9 & 10
The Renal Network, Inc.
911 East 86th Street, Suite 202
Indianapolis, IN 46240-1858
Region VII: KY, IN, OH, IL
(317) 257-8265

ESRD Network Organization No. 11
Renal Network of the Upper Midwest, Inc.
970 Raymond Avenue, Suite 205
St. Paul, MN 55114
Region VII: MI, MN, WI, ND, SD
(651) 644-9877

ESRD Network Organization No. 12
7505 NW Tiffany Springs Parkway, Suite 230
Kansas City, MO 64153
Region VII: MO, IA, NE, KS
(816) 880-9990

ESRD Network Organization No. 13
6600 N Meridan Ave, Ste 155
Oklahoma City, OK 73116-1411
Region VI: AR, LA, OK
(405) 843-8688

ESRD Network Organization No. 14
ESRD Network of Texas, Inc.
14114 Dallas Parkway, # 660
Dallas, TX 75240-4349
Region VI: TX
(972) 503-3215

ESRD Network Organization No. 15
Intermountain ESRD Network, Inc.
1301 Pennsylvania Street, Suite 750
Denver, CO 80203-5012
Region X: NM, CO, WY, UT, AZ, NV
(303) 831-8818

ESRD Network Organization No. 16
Northwest Renal Network
4702 42nd Avenue, SW
Seattle, WA 98116
Region X: MT, AK, ID, OR, WA
(206) 923-0714

ESRD Network Organization No. 17
TransPacific Renal Network
25 Mitchell Boulevard
Suite 7
San Rafael, CA 94903
Region X: No. CA, HI, Mariana Isl., GU, AS
(415) 472-8590

ESRD Network Organization No. 18
Southern California Renal Disease Council,
Inc.
6255 Sunset Boulevard, Suite 2211
Los Angeles, CA 90028
Region X: So. CA
(323) 962-2020

Appendix 6. ESRD CPM Quality Improvement Committee Members

Kenneth Abreo, MD
The Forum of ESRD Networks
Shreveport, LA 71130-3932

Lawrence Agodoa, MD +
NIH/NIDDK
Bethesda, MD 20892-5454

Anatole Besarab, MD ^ *
The Forum of ESRD Networks
Detroit, MI 48202

Evelyn Butera, MS, RN, CNN
American Nephrology Nurses Association
Redwood City, CA 94063-1402

Teresa Casey, RD, LD
CMS/OCSQ/CSG
Baltimore, MD 21244

Jan Deane, RN, CNN
The Forum of ESRD Networks
St. Paul, MN 55114

Mary Denno, RN, MSN, CNN
American Nephrology Nurses Association
Warrington, PA 18976

Lesley Dinwiddie, MSN, RN, FNP, CNN *
The Forum of ESRD Networks
Cary, NC 27511

Brenda Dyson
American Association of Kidney Patients
Jackson, MS 39296-5868

Paul Eggers, PhD
NIH/NIDDK
Bethesda, MD 20892

Barbara Fivush, MD +
American Society of Pediatric Nephrology
Baltimore, MD 21287

Michael Flanigan, MD ^
Iowa City, IA 52242

Diane Frankenfield, PhD ^ * +
CMS/CBC/QMHAG
Baltimore, MD 21244

Pamela Frederick, MSB ^ *
CMS/CBC/QMHAG
Baltimore, MD 21244

Richard Goldman, MD ^
Renal Physicians Association
Albuquerque, NM 87110

Curtis Johnson, Pharm D
Madison, WI 53705-2222

Paul L. Kimmel, MD
Washington, DC 20037

Linda McCann, RD, CSR, LD
National Kidney Foundation
Rocklin, CA 95765-5069

William McClellan, MD, MPH
Atlanta, GA 30329

Tony Messana
National Renal Administrators Association
Drexel Hill, PA 19026

William F. Owen, Jr., MD *
Renal Physicians Association
McGaw Park, IL 60085-6730

Barbara Prowant, MS, RN, CNN ^
Columbia, MO 54201

Debbie Read
CMS/OA/MC/OTKCRA/DCSQ
Kansas City, MO 64106-2808

Michael Rocco, MD ^
Winston-Salem, NC 27157-1053

Myra Thomas
National Renal Administrators Association
Moultrie, GA 31768

Jay Wish, MD
The Forum of ESRD Networks
Cleveland, OH 44106

Jack Work, MD *
The Forum of ESRD Networks
Atlanta, GA 30322

Pediatric Subcommittee

Andrew Brem, MD +
Providence, RI 02903

Aaron Friedman, MD +
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Stuart Goldstein, MD +
Houston, TX 77030

Alicia M. Neu, MD +
Baltimore, MD 21287-2535

Bradley Warady, MD +
Kansas, City, MO 64108

Sandra Watkins, MD +
Seattle, WA 98195-9300

^ Peritoneal Dialysis Subcommittee Member

* Vascular Access Subcommittee Member

+ Pediatric Subcommittee Member

Appendix 7. List of Publications/Abstracts/Supplemental Reports of ESRD CPM and Core Indicators Data

Publications

1. McClellan WM, Frederick P, Helgerson S, Hayes R, Ballard D, McMullan M. A Health Care Quality Improvement Program for End-Stage Renal Disease (ESRD). *Health Care Financing Review* 1995; 16:129-140.
2. McClellan WM, Helgerson S, Frederick P, Wish J. Implementing the Health Care Quality Improvement Program in the Medicare End-Stage Renal Disease Program: A new era of quality improvement. *Advances in Renal Replacement Therapy* 1995; 2:89-95.
3. McClellan Wm. Quality of patient care in the Medicare End-Stage Renal Disease (ESRD) Program: The basis and implementation of the 1994-1997 ESRD Health Care Quality Improvement Program (HCQRP). *Nephrology and Hypertension* 1996; 5:224-229.
4. Helgerson SD, McClellan WM, Frederick PR, Beaver SK, Frankenfield DL, McMullan M. Improvement in adequacy of delivered dialysis for adult in-center hemodialysis patients in the United States, 1993 to 1995. *Am J Kidney Dis* 1997; 29:851-861.
5. Rocco MV, Flanigan MJ, Beaver S, Frederick P, Gentile DE, McClellan WM, Polder J, Prowant BF, Taylor L, Helgerson SD. Report from the 1995 Core Indicators for Peritoneal Dialysis Study Group. *Am J Kidney Dis* 1997; 30:165-173.
6. Flanigan MJ, Rocco MV, Frankenfield DL, Bailie G, Frederick PR, Prowant BF, Taylor L. 1996 Peritoneal Dialysis-Core Indicators Report. *Am J Kidney Dis* 1998; 32:1-9.
7. Flanigan MJ, Bailie GR, Frankenfield DL, Frederick PR, Prowant BF, Rocco MV. 1996 Peritoneal Dialysis Core Indicators Study: Report on nutritional indicators. *Perit Dial Intl* 1998; 18:489-496.
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Supplemental Reports**1994***Supplemental Report #1*

Results of validation study: comparison of data abstracted by ESRD facility staff and by ESRD Network staff (April 1995)

Supplemental Report #2

Questions and answers regarding core indicator results for a variety of facility and patient characteristics (May 1995)

Supplemental Report #3

The mortality and morbidity experience from January through June 1994 for patients described by core indicators values in October through December, 1993 (October 1995)

Special Populations Report

Results for American Indians and Alaska Natives identified in the 1994 ESRD Core Indicators Project (April 1995)

1995*Supplemental Report # 1*

*Association of body weight with adequacy of dialysis (August 1996)

Special Populations Report

Results for American Indians and Alaska Natives receiving in-center hemodialysis in ESRD Networks 11, 15, and 16 (September 1996)

1996*Special Report #A*

Results of 1996 validation study: Analysis of concurrence between Core Indicators data abstracted by dialysis facility staff and ESRD Network staff (April 1997)

Special Report #B

Influenza immunization of ESRD patients October, November, and December 1995 (July 1997)

Supplemental Report #1

Predictors for a delivered hemodialysis treatment of < 0.65 URR (March 1997)

Supplemental Report #2

Sub-optimal serum albumin levels of adult, in-center hemodialysis patients: Results from the 1996 ESRD Core Indicators Project (May 1997)

Supplemental Report #3

Description of a cohort's experience: ESRD Core Indicators Project, 1993-1995 (June 1997)

Supplemental Report #4

Gender analysis of the 1996 ESRD Core Indicators data (December 1997)

1997*Special Report #A*

Results of 1997 validation study: Analysis of concurrence between Core Indicators data abstracted by dialysis facility staff and ESRD Network staff (May 1998)

Supplemental Report #1

*Analysis of Core Indicators results by race/ethnicity for adult (aged ≥ 18 years) in-center hemodialysis and peritoneal dialysis patients (February 1998)

Supplemental Report #2

*Adequacy measures for adult peritoneal dialysis patients (March 1998)

Supplemental Report #3

*The management of anemia in adult in-center hemodialysis and peritoneal dialysis patients (April 1998)

1998*Special Report #A*

Results of 1998 validation study: Analysis of concurrence between Core Indicators data abstracted by dialysis facility staff and ESRD Network staff (February 1999)

Supplemental Report #1

*Comparison of demographic and selected intermediate outcome measures for health maintenance organization (HMO) and fee-for-service (FFS) adult in-center hemodialysis patients (February 1999)

Supplemental Report #2

*Comparison of selected intermediate clinical measures by years on dialysis (April 1999)

1999*Supplemental Report #1*

*Vascular access for in-center hemodialysis patients: Preliminary findings (February 2000)

Supplemental Reports (continued)

Supplemental Report #2

Network trends, 1993-1999 (July 2000)

2000

Supplemental Report #1

*A study of pediatric (≥ 12 and < 18 years old) in-center hemodialysis patients: Results from the 2000 End Stage Renal Disease (ESRD) Clinical Performance Measures Project (January 2001)

Supplemental Report #2

*Hemodialysis CPMs IV and V: Results from the pilot-test of the facility questionnaire, 1999-2000 (March 2001)

Supplemental Report #3

*Comparison of facility-reported, calculated, and prescribed dialysis adequacy values: Results from the 2000 End-Stage Renal Disease (ESRD) Clinical Performance Measures (CPM) Project (June 2001)

2001

Supplemental Report #1

*Intermediate outcomes for adult Asian in-center hemodialysis patients in the U.S.: Results from the 2001 End Stage Renal Disease (ESRD) Clinical Performance Measures Project (December 2001)

Supplemental Report #2

*Longitudinal analysis of pediatric (≥ 12 and < 18 years old) in-center hemodialysis patients: Results from the 2001 End-Stage Renal Disease (ESRD) Clinical Performance Measures Project (February 2002)

Supplemental Report #4

*Intermediate outcomes for adult in-center hemodialysis patients in the U.S. by cause of ESRD: Results from the 2001 End-Stage Renal Disease (ESRD) Clinical Performance Measures Project (March 2002)

Supplemental Report #5

Intermediate outcomes for adult peritoneal dialysis patients in the U.S. by cause of ESRD: Results from the 2001 End-Stage Renal Disease (ESRD) Clinical Performance Measures Project (March 2002)

* Supplemental Report either has been published or is being developed into a manuscript to be published in either a peer-reviewed journal or in a smaller journal

**2002 NATIONAL CPM DATA COLLECTION – NATIONAL AND NETWORK PROFILES
for Adult (aged ≥ 18 years) In-Center Hemodialysis Patients**

	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
# in sample	454	466	419	455	482	488	483	480	472	442	470	434	480	486	470	468	467	483	8399
Dialysis Adequacy	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
% Pts with Mean Kt/V ≥ 1.2	91	86	88	90	88	89	87	89	89	88	87	89	86	92	91	88	86	89	89
Median Kt/V	1.49	1.47	1.45	1.52	1.49	1.48	1.47	1.48	1.50	1.47	1.47	1.49	1.48	1.58	1.55	1.55	1.48	1.48	1.49
% Pts with Mean URR ≥ 65%	87	84	82	87	84	84	83	84	85	83	84	83	81	89	87	85	82	84	84
Median URR %	71.7	71.1	70.9	72.2	71.5	71.0	70.9	71.2	71.7	71.0	71.0	71.8	71.0	73.2	72.3	72.8	71.5	71.3	71.5
Median Blood Pump Flow (mL/min)	400	400	400	400	400	400	400	417	400	400	400	405	400	400	400	400	400	400	400
Median Dialysis Session Length (min)	210	210	213	225	210	219	210	225	225	220	210	212	218	235	210	235	195	205	212
Vascular Access	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
% Prevalent Pts with AVF	46	38	32	28	25	28	29	29	28	32	29	35	24	23	35	45	33	35	31
% Incident Pts with AVF	45	32	33	27	27	23	22	30	25	28	27	30	13	22	29	49	33	35	29
% Prevalent Pts with AVG	29	39	32	43	46	45	39	50	39	41	44	39	49	57	40	36	50	45	43
% pts with AVG and stenosis monitoring	28	57	54	48	44	25	49	68	59	67	55	60	43	62	39	61	71	36	51
% Prevalent Pts with catheter	25	22	36	29	28	27	32	21	33	27	27	27	27	20	25	19	17	20	26
% Prevalent Pts with catheter ≥ 90 days	17	15	30	24	20	22	26	16	26	21	19	21	22	15	18	13	13	15	19

**2002 NATIONAL CPM DATA COLLECTION – NATIONAL AND NETWORK PROFILES
for Adult (aged ≥ 18 years) In-Center Hemodialysis Patients**

Anemia Mgement	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
Median Hgb	11.6	11.7	11.8	11.7	11.9	11.8	11.7	11.6	11.7	11.9	11.7	11.6	11.6	11.7	11.9	11.9	11.8	11.7	11.7
% Pts with Mean Hgb ≥ 11gm/dL	76	75	78	77	77	76	78	73	74	76	76	75	73	76	81	78	76	77	76
% Pts with Mean Hgb 11-12.0 gm/dL*	45	38	39	43	35	36	40	41	32	34	41	42	39	38	38	33	35	42	38
% Pts with Mean Hgb < 10gm/dL	7	7	10	6	7	9	8	11	8	9	10	9	9	8	7	5	7	7	8
Median wkly IV EPO dose units/kg/wk	201.9	210.8	235.9	200.6	204.5	219.3	171.0	201.5	209.5	220.1	189.3	186.8	196.5	187.3	167.3	176.7	181.7	205.9	199.1
Median wkly SCEPO dose units/kg/wk	172.7	194.1	158.0	166.2	139.1	165.4	248.8	160.0	185.2	217.4	157.6	149.7	130.3	155.7	301.7	107.1	165.9	161.9	167.2
% Pts Rx'd^ SCEPO	7	4	12	3	4	3	4	5	19	13	11	18	9	15	*	14	15	19	10
Iron Mgement	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
% Pts with Mean TSAT ≥ 20%	78	81	82	79	83	85	86	78	77	79	79	74	79	79	77	70	75	85	80
Median TSAT %	26.0	28.0	27.0	27.0	27.7	28.3	28.3	26.7	25.0	26.0	27.2	24.7	26.3	26.3	25.7	25.0	25.7	28.0	26.7
% Pts with Mean Ferritin ≥ 100 ng/mL	89	87	91	90	90	92	94	93	95	93	93	91	92	92	90	89	90	93	92
Median Ferritin ng/mL	436	489	485	512	465	567	657	554	591	633	547	481	603	513	468	467	510	568	533
% Pts Rx'd IV Iron	62	63	64	65	59	60	65	61	70	68	68	62	60	65	63	69	62	60	64

^ Among those patients prescribed Epoetin

* Value suppressed because n ≤ 10

**2002 NATIONAL CPM DATA COLLECTION – NATIONAL AND NETWORK PROFILES (cont.)
for Adult (aged ≥ 18 years) In-Center Hemodialysis Patients**

Albumin	Net 1	Net 2	Net 3	Net 4	Net 5	Net 6	Net 7	Net 8	Net 9	Net 10	Net 11	Net 12	Net 13	Net 14	Net 15	Net 16	Net 17	Net 18	US
% Pts with Mean serum albumin ≥ 4.0/3.7 gm/dL	32	37	33	34	42	38	35	36	31	36	34	31	38	39	33	27	35	43	36
% Pts with Mean serum albumin ≥ 3.5/3.2 gm/dL	80	80	80	83	83	83	83	83	82	84	77	79	86	82	81	73	85	84	82
Median serum BCG albumin (gm/dL)	3.8	3.9	3.8	3.8	3.9	3.8	3.9	3.8	3.8	3.9	3.8	3.8	3.9	3.9	3.8	3.8	3.8	3.9	3.8
Median serum BCP albumin (gm/dL)	3.5	3.5	3.5	3.5	3.8	3.9	3.8	3.7	3.6	3.8	3.6	3.6	3.8	3.7	3.5	3.3	3.6	3.6	3.6

Appendix 9. 2002 ESRD CPM Outcome Comparison Tool – Adult In-Center Hemodialysis Patients – National and Network Data are from October – December 2001.

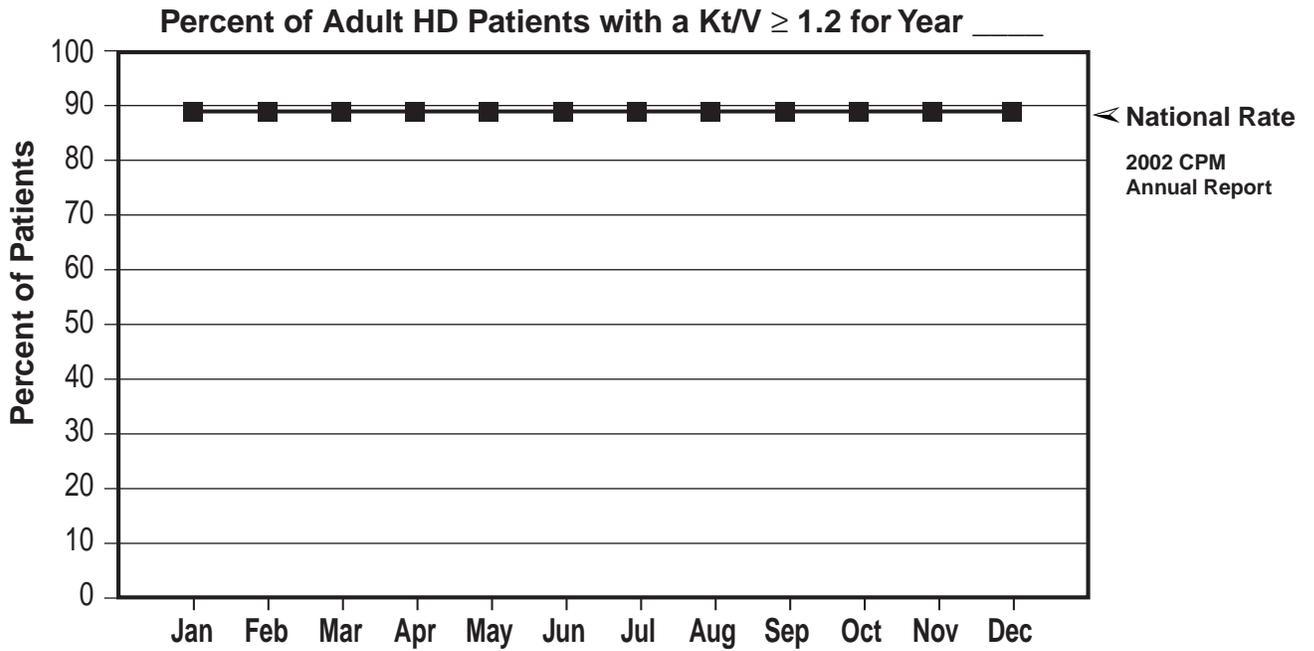
Enter your Network data from Appendix 8 and use this tool to document and compare your facility outcomes to the national data and your Network data.

	US	Network	Facility
Adequacy of Dialysis			
Percent of patients with a mean Kt/V \geq 1.2	89%		
Median Kt/V	1.49		
Median blood pump flow rate (mL/minute)	400		
Median dialysis session length (minutes)	212		
Vascular Access			
Percent of prevalent patients dialyzed with an AVF	31%		
Percent of incident patients dialyzed with an AVF	29%		
Percent of prevalent patients dialyzed with an AV graft	43%		
Percent of prevalent patients dialyzed with a catheter	26%		
Percent of prevalent patients dialyzed with a catheter \geq 90 days	19%		
Anemia Management			
Percent of patients with mean Hgb \geq 11.0 gm/dL	76%		
Percent of targeted [†] patients with mean Hgb 11.0 – 12.0 gm/dL	38%		
Percent of patients with mean Hgb < 10.0 gm/dL	8%		
Median Hgb (gm/dL)	11.7		
Median weekly Epoetin dose (units/kg/week)			
IV	199.1		
SC	167.2		
Percent of patients* prescribed SC Epoetin	10%		
Percent of patients with mean TSAT \geq 20%	80%		
Median TSAT (%)	26.7		
Percent of patients with mean serum ferritin concentration \geq 100 ng/mL	92%		
Median serum ferritin concentration (ng/mL)	533		
Percent of patients prescribed IV iron	64%		
Serum Albumin			
Percent of patients with mean serum albumin \geq 4.0/3.7 gm/dL (BCG/BCP)	36%		
Percent of patients with mean serum albumin \geq 3.5/3.2 gm/dL (BCG/BCP)	82%		
Median serum albumin (gm/dL)			
BCG	3.8		
BCP	3.6		

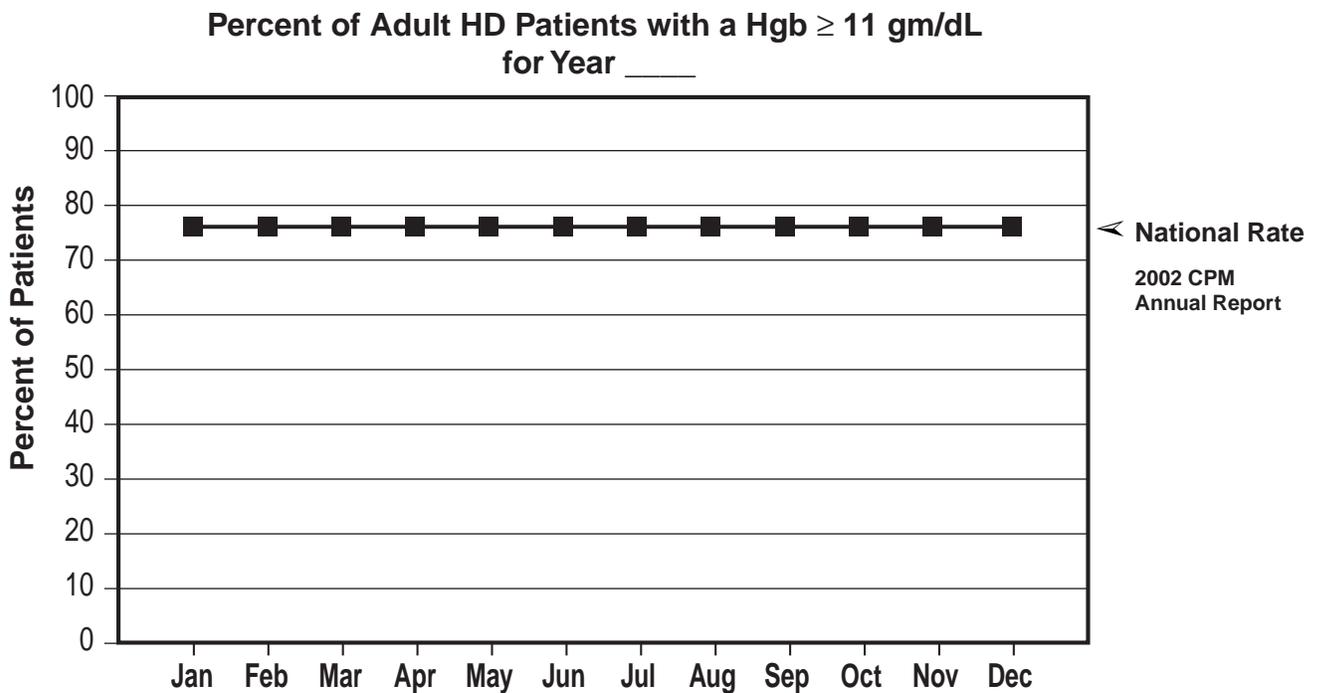
[†] See appendix 1 for complete definition of targeted patients for this CPM.

* Among those patients prescribed Epoetin.

Use the following chart to plot monthly the percent of adult HD patients in your unit that have a Kt/V ≥ 1.2 (Nation = 89%). Post the chart in the facility for all to see.



Use the following chart to plot monthly the percent of adult HD patients in your unit that have a Hgb ≥ 11 gm/dL (Nation = 76%). Post the chart in the facility for all to see.



CUT ALONG THIS LINE

Appendix 10. 2002 ESRD CPM Outcome Comparison Tool – Adult Peritoneal Dialysis Patients – National Data are from October 2001 – March 2002.

Use this tool to document and compare your facility outcomes to the national data.

	US	Facility
Adequacy of Dialysis		
Percent of patients measured for adequacy at least once during the six month study period (both weekly Kt/V_{urea} and weekly creatinine clearance measured)	86%	
Percent of CAPD patients with mean weekly $Kt/V_{urea} \geq 2.0$	72%	
Median weekly Kt/V_{urea} for CAPD patients	2.27	
Percent of Cycler patients with a daytime dwell with mean weekly $Kt/V_{urea} \geq 2.1$	66%	
Median weekly Kt/V_{urea} for Cycler patients with a daytime dwell	2.25	
Percent of Cycler patients without a daytime dwell with mean weekly $Kt/V_{urea} \geq 2.2$	61%	
Median weekly Kt/V_{urea} for Cycler patients without a daytime dwell	2.29	
Anemia Management		
Percent of patients with mean Hgb ≥ 11.0 gm/dL	76%	
Percent of targeted [†] patients with mean Hgb 11.0 – 12.0 gm/dL	36%	
Percent of patients with mean Hgb < 10.0 gm/dL	8%	
Median Hgb (gm/dL)	11.8	
Percent of patients* prescribed SC Epoetin	98%	
Percent of patients with mean TSAT $\geq 20\%$	83%	
Median TSAT (%)	27.4	
Percent of patients with mean serum ferritin ≥ 100 ng/mL	84%	
Median serum ferritin concentration (ng/mL)	287	
Percent of patients prescribed IV iron	20%	
Serum Albumin		
Percent of patients with mean serum albumin $\geq 4.0/3.7$ gm/dL (BCG/BCP)	19%	
Percent of patients with mean serum albumin $\geq 3.5/3.2$ gm/dL (BCG/BCP)	61%	
Median serum albumin (gm/dL)		
BCG	3.6	
BCP	3.3	

[†] See appendix 1 for complete definition of targeted patients for this CPM.

* Among those patients prescribed Epoetin.

CUT ALONG THIS LINE

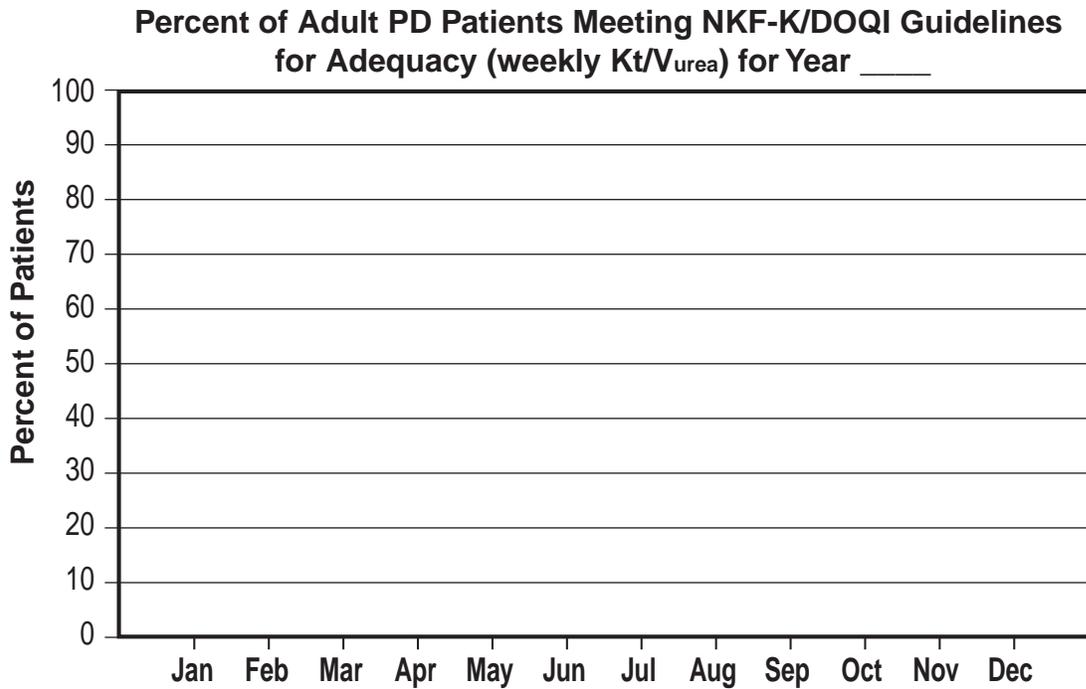
Use the following chart to plot monthly:

The % of adult CAPD patients in your unit that have a $Kt/V_{urea} \geq 2.0$ (Nation = 72%).

The % of adult Cycler patients with a daytime dwell that have a $Kt/V_{urea} \geq 2.1$ (Nation = 66%);

The % of adult Cycler patients without a daytime dwell that have a $Kt/V_{urea} \geq 2.2$ (Nation = 61%).

Post the chart in the facility for all to see.



CUT ALONG THIS LINE

Use the following chart to plot monthly the percent of adult PD patients in your unit that have a Hgb ≥ 11 gm/dL (Nation = 76%).
Post the chart in the facility for all to see.

