

Dear Region Director:

This report is designed to provide a comparative summary of treatment patterns and patient outcomes for End Stage Renal Disease (ESRD) patients in this region, as compared to all patients in the United States. The statistics reported here include dialysis patients treated during 2016-2019 in the chronic dialysis facilities in this region and are based primarily on Medicare claims and data collected for CMS. Selected statistics from this profile are summarized below and region-to-region comparisons of key statistics are provided in the *Charts and Tables of Key Statistics by Region*.

Selected highlights for this Region are provided on the first few pages. For a complete description of the methods and data reported here please see the *Guide to the Region Profiles for FY 2021*. The Guide is available on the Dialysis Data website at www.DialysisData.org. We hope this profile is of interest to you and is helpful in your survey efforts. We welcome your feedback on ways to improve future profiles.

What's New This Year

As part of a continuing effort to improve the quality and relevance of this report for your region, the following changes have been incorporated into the Region Profile for FY 2021:

(1) Medicare Advantage patients are now excluded from the following measures:

- Standardized Hospitalization Ratio (SHR) for emergency department visits (Table 4)
- Influenza summaries (Table 6)
- Transfusion summaries (Table 7)
- Access-related infection summaries (Table 10)

(2) Summaries of selected measures from this report for nursing home patients are reported in new Table 12 for facilities with at least one dialysis patient in a nursing home during the reporting period.

Region Highlights

Patient Characteristics: On December 31st, 2019, 16% of patients in this region were treated in a nursing home during the year, compared to 15% nationally. See **Table 1** for detailed summaries of all patients treated during 2016-2019 in this region.

Form CMS-2728 collected data from 11,753 incident patients in this region in 2019. **Table 2** describes certain important characteristics of these patients at the time of their first outpatient dialysis session, including patients' demographics, medical coverage, primary cause of ESRD, modality, pre-treatment nephrological care, transplant options, and vascular access type. In 2019, the average age of patients in this region at incidence was 64 years, compared to the national average of 64 years. Among the incident patients in this region in 2019, 83% were informed of their transplant options, compared to 84% nationally. Also in 2019, 16% of incident patients in this region were not under the care of a nephrologist prior to ESRD therapy, compared to 16% nationally.

Mortality: There were 8,364 deaths among the patients treated in this region during 2019, while 8,463 would be expected based on their age, race, ethnicity, sex, diabetes status, duration of ESRD, nursing home status, BMI and comorbidities at incidence, as well as state population death rates. The Standardized Mortality Ratio (SMR) of observed to expected deaths is 0.97, which is 4% lower than expected. Of the deaths in this region in 2019, 31% were preceded by withdrawal from dialysis, compared to the national average of 27%. See **Table 3** of this profile for more detailed mortality statistics during 2016-2019 in this region.

First Year Mortality: There were 2,118 deaths among the incident patients treated in this region during 2018, while 2,113 would be expected based on their age, race, ethnicity, sex, diabetes status, nursing home status, BMI and comorbidities at incidence, as well as state population death rates. The First Year Standardized Mortality Ratio (SMR) of observed to expected deaths is 0.98, which is 5% lower than expected. Of the deaths among incident patients in this region in 2018, 33% were preceded by withdrawal from dialysis, compared to the national average of 29%. See **Table 3** of this profile for more detailed first year mortality statistics during 2016-2018 in this region.

Hospitalization: The Standardized Hospitalization Ratio (SHR) of observed to expected hospital admissions for patients in this region during 2019 is 0.95, indicating that these patients had 6% fewer admissions than expected based on characteristics of patients treated in this region. The Standardized Readmission Ratio (SRR) of observed to expected hospital readmissions in this region during 2019 is 1.01, indicating that these patients had 6% more readmissions than expected. See **Table 4** of this profile for additional hospitalization statistics during 2016-2019 in this region.

Transplantation: 1,643 patients under age 75 in this region during 2019 received their first transplant, while 1,609 would be expected based on the age of these patients. The Standardized Transplantation Ratio (STR) of observed to expected number of patients transplanted for this region is 1.17, which is 25% higher than expected. See **Table 5** of this profile for additional transplantation statistics during 2016-2019 in this region.

Kidney Transplant Waitlist for Prevalent Patients: The 2019 age-adjusted percent waitlisted in this region is 19%, which is 1% higher than the national adjusted percentage. See **Table 5** of this profile for additional transplant waitlist statistics during 2016-2019 in this region.

Kidney Transplant Waitlist for Incident Patients: The 2018 SWR in this region is 1.18, which is 23% more patients waitlisted or living donor transplants than expected in this region. See **Table 5** of this profile for for additional transplant waitlist statistics during 2016-2018 in this region.

Influenza Vaccination: On December 31, 2019, 78% of the Medicare dialysis patients treated in this region were vaccinated against influenza between August 1 and December 31, 2019, compared to 78% nationally. This difference is not statistically significant ($p \geq 0.05$) and is plausibly due to random chance. See **Table 6** of this profile for more information about vaccinated patients during 2016-2019 in this region.

Anemia Management: In 2019, 22.2% of eligible hemodialysis patient-months in this region had a hemoglobin value below 10 g/dL, compared to 22.3% nationally. Also in 2019, 23.1% of eligible peritoneal dialysis patient-months had a hemoglobin value below 10 g/dL, compared to 23.4% nationally. See **Table 7** of this profile for additional anemia management statistics in this region during 2016-2019.

Dialysis Adequacy: Of the eligible hemodialysis patient-months in this region in 2019, % had a Kt/V ≥ 1.2 , compared to 97% nationally. Of the eligible peritoneal dialysis patient-months in this region in 2019, % had a Kt/V ≥ 1.7 , compared to 91% nationally. See **Table 8** of this profile for more information on dialysis during 2016-2019 in this region.

Mineral Metabolism: In 2019, 14% of eligible patient-months in this region had a serum phosphorus value >7.0 mg/dL, compared to 14% nationally. Also in 2019, 1.2% of eligible patient-months in this region had a calcium uncorrected value >10.2 mg/dL, compared to 1.2% nationally. See **Table 9** of this profile for more mineral metabolism summaries in this region during 2016-2019.

Vascular Access: In 2019, 16% of the incident hemodialysis patients in this region had an arteriovenous (AV) fistula in use, compared to 14% in the nation. This region's 2019 Standardized Fistula Rate (SFR) for prevalent patients is 64%, which is 2% higher than the national SFR. Of the prevalent patients receiving hemodialysis treatment in this region, the long-term catheter rate was 13%, compared to 13% nationally. See **Table 10** of this profile for additional information about vascular access in this region during 2016-2019.

TABLE 1: Summaries for All Dialysis Patients Treated as of December 31st of each Year^{*1}, 2016-2019

Measure Name	This Region				United States
	2016	2017	2018	2019	2019
1a Patients treated on 12/31 of year (n)	46,150	47,179	48,051	48,780	487,798
1b Average age (years)	62.2	62.4	62.6	62.9	62.7
1c Age (% of 1a; sums to 100%)					
< 18	0.3	0.3	0.3	0.2	0.2
18-64	52.9	52.2	51.5	50.6	51.4
65+	46.8	47.5	48.3	49.2	48.4
1d Female (% of 1a)	42.9	42.5	42.3	42.1	42.6
1e Race (% of 1a; sums to 100%) ^{*2}					
African American	28.9	28.6	28.3	28.1	34.2
Asian/Pacific Islander	5.6	5.8	5.9	6.0	6.3
Native American	1.8	1.8	1.8	1.9	1.2
White	63.4	63.5	63.6	63.6	57.8
Other/Unknown/Missing	0.3	0.4	0.4	0.4	0.4
1f Ethnicity (% of 1a; sums to 100%)					
Hispanic	16.9	16.9	17.0	17.0	18.8
Non-Hispanic	82.8	82.8	82.7	82.6	80.7
Unknown	0.3	0.3	0.3	0.5	0.4
1g Cause of ESRD (% of 1a; sums to 100%)					
Diabetes	45.6	46.2	46.5	46.7	46.6
Hypertension	26.6	26.6	26.8	26.8	30.0
Glomerulonephritis	12.2	11.9	11.6	11.2	9.9
Other/Unknown	15.1	14.8	14.6	14.6	12.8
Missing	0.5	0.5	0.6	0.7	0.7
1h Average duration of ESRD (years)	4.9	4.9	4.9	5.0	5.0
1i Years since start of ESRD (% of 1a; sums to 100%)					
<1	16.4	16.3	16.0	15.9	15.6
1-2	17.6	17.5	17.4	17.2	16.8
2-3	13.9	14.1	14.0	14.0	13.6
3-6	25.7	25.8	26.2	26.4	26.6
6+	26.4	26.4	26.3	26.5	27.3
1j Nursing facility patients ^{*3} (% of 1a)	15.7	15.8	15.8	15.7	14.8
1k Modality (% of 1a; sums to 100%)					
In-center hemodialysis	87.1	87.0	86.5	85.7	86.3
Home hemodialysis	1.9	1.9	2.0	2.3	2.2
Continuous ambulatory peritoneal dialysis	1.7	1.5	1.4	1.5	1.4
Continuous cycling peritoneal dialysis	9.0	9.2	9.7	10.1	9.8
Other modality ^{*4}	0.3	0.3	0.3	0.3	0.3

n/a = not applicable.

[*1] See *Guide, Section IV*.

[*2] 'Asian' includes Indian sub-continent. 'Native American' includes Alaskan Native. 'White' includes Middle Eastern and Arab.

[*3] Includes patients who were treated at a nursing facility at any time during the year. The source of nursing facility history of patients is the Nursing Home Minimum Dataset.

[*4] Other modality includes other dialysis, uncertain modality, and patients not on dialysis but still temporarily assigned to the facility (discontinued dialysis, recovered renal function, and lost to follow up).

TABLE 2: Characteristics of New Dialysis Patients (Form CMS-2728) ^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019	
		2017	2018	2019		
Patient Characteristics						
2a	Total number of patients with forms (n)	11,946	11,857	11,954	11,753	117,531
2b	Age (average years [0-95]) ^{*2}	63.5	63.6	64.0	63.9	63.9
2c	Female (% of 2a)	42.0	41.4	41.2	41.2	41.8
2d	Race ^{*3} (% of 2a; sums to 100%)					
	African American	21.0	21.1	20.8	21.2	26.6
	Asian/Pacific Islander	5.3	5.5	5.5	5.8	5.9
	Native American	1.6	1.6	1.7	1.8	1.1
	White	71.8	71.5	71.7	70.9	66.1
	Other/Unknown/Missing	0.3	0.3	0.3	0.3	0.3
2e	Hispanic (% of 2a)	13.9	13.9	14.0	14.6	16.1
2f	Primary cause of ESRD (% of 2a; sums to 100%)					
	Diabetes	48.9	48.9	49.2	48.9	48.7
	Hypertension	26.2	27.0	27.0	26.3	29.4
	Glomerulonephritis	8.7	8.1	7.9	7.5	6.5
	Other/Missing	16.3	15.9	15.9	17.4	15.5
2g	Medical Coverage ^{*4} (% of 2a; sums to 100%)					
	Employer group only	13.1	12.6	12.3	12.3	12.2
	Medicare only	31.3	32.5	33.4	33.1	34.8
	Medicaid only	12.7	12.9	12.8	13.5	13.3
	Medicare and Medicaid only	12.7	12.5	12.5	12.0	12.2
	Medicare and Other	19.2	18.4	18.0	17.8	15.7
	Other/Unknown	7.8	7.7	7.5	7.7	7.4
	None	3.2	3.4	3.5	3.5	4.3
2h	Body Mass Index ^{*5} (Median; Weight/Height ²)					
	Male	28.1	28.1	28.2	28.2	28.1
	Female	29.1	29.2	29.2	29.2	29.1
2i	Employment ^{*6}					
	Six months prior to ESRD treatment	35.2	36.1	36.7	37.7	36.5
	At first ESRD treatment	25.4	26.5	27.1	27.1	25.6
2j	Primary Modality (% of 2a; sums to 100%)					
	Hemodialysis	89.4	88.9	88.0	87.4	87.9
	CAPD/CCPD	10.6	11.1	12.0	12.6	12.1
	Other/Unknown/Missing	0.0	0.0	0.0	0.0	0.0
2k	Number of incident hemodialysis patients (n)	10,738	10,598	10,580	10,335	103,353
2l	Access used at first outpatient dialysis (% of 2k; sums to 100%)					
	Arteriovenous fistula	18.6	18.6	17.8	16.7	14.8
	Arteriovenous graft	3.1	3.1	3.0	2.9	3.0
	Catheter	78.2	78.2	79.0	80.0	81.8
	Other/Unknown/Missing	0.2	0.2	0.2	0.3	0.3
2m	Arteriovenous fistulae placed (% of 2k) ^{*7}	35.3	34.5	32.8	30.2	27.8
Average Lab Values Prior to Dialysis ^{*2}						
2n	Hemoglobin (g/dL [5-20])	9.4	9.4	9.4	9.4	9.3
2o	Serum Albumin (g/dL [0.8-6.0])	3.2	3.2	3.3	3.3	3.3
2p	Serum Creatinine (mg/dL [0-33])	6.4	6.4	6.3	6.3	6.4
2q	GFR (ml/min [0-30])	10.7	10.7	10.7	10.8	10.8

(continued)

TABLE 2 (continued): Characteristics of New Dialysis Patients (Form CMS-2728)^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019
		2017	2018	2019	
Care Prior to ESRD Therapy					
2r Received ESA prior to ESRD (% of 2a)	14.9	15.3	16.3	17.0	16.1
2s Pre-ESRD nephrologist care (% of 2a; sums to 100%)					
No	20.5	18.7	17.1	15.5	16.4
Yes, <6 months	13.7	14.2	14.9	16.3	16.7
Yes, 6-12 months	19.2	20.1	20.5	20.5	20.4
Yes, >12 months	34.0	34.9	35.9	35.7	32.3
Unknown	12.6	12.1	11.6	12.0	14.2
2t Informed of transplant options (% of 2a)	85.7	86.9	86.4	82.9	84.0
2u Patients not informed of transplant options (n)	1,510	1,379	1,434	1,875	18,753
2v Reason not informed (% of 2u; may not sum to 100%) ^{*8}					
Medically unfit	37.8	35.4	31.1	19.7	17.4
Unsuitable due to age	24.2	24.4	22.2	14.1	13.2
Psychologically unfit	3.0	2.8	2.6	1.5	1.5
Patient declined information	2.1	2.2	1.5	1.2	1.1
Patient has not been assessed	38.8	39.8	47.3	66.5	69.9
Comorbid Conditions					
2w Pre-existing Comorbidity (% yes of 2a)					
Congestive heart failure	28.8	28.8	29.2	29.6	29.6
Atherosclerotic heart disease ^{*9}	15.2	14.7	14.2	14.0	13.1
Other cardiac disorder ^{*9}	20.0	19.9	20.9	21.6	21.6
CVD, CVA, TIA	8.6	8.5	8.7	8.9	9.1
Peripheral vascular disease	10.6	10.1	10.0	10.1	9.5
History of hypertension	87.0	87.5	87.9	87.8	88.7
Diabetes ^{*9}	62.5	63.1	64.1	64.0	65.1
Diabetes on insulin	42.0	42.8	43.5	43.9	44.2
COPD	9.6	9.3	9.5	9.5	9.5
Current smoker	6.6	6.7	7.0	7.1	7.1
Cancer	7.4	7.5	7.7	7.9	7.4
Alcohol dependence	1.6	1.7	1.8	1.9	1.8
Drug dependence	1.3	1.3	1.5	1.7	1.6
Inability to ambulate	6.5	6.7	6.7	6.5	7.0
Inability to transfer	3.5	3.4	3.5	3.2	3.7
2x Average number of comorbid conditions	3.1	3.1	3.2	3.2	3.2

n/a= not applicable.

[*1] See *Guide, Section V*.

[*2] For continuous variables, all summaries are computed based only on responses in range indicated in brackets for the variable.

[*3] 'Asian' includes Indian sub-continent. 'Native American' includes Alaskan Native. 'White' includes Middle Eastern and Arab.

[*4] 'Medicare and Other' excludes patients with Medicare and Medicaid only. 'Other/Unknown' includes patients with unknown status and patients receiving medical benefits under other health insurance plans or plans that are not covered in the categories above.

[*5] The median BMI is computed for adult patients at least 20 years old with height, weight, and BMI values in acceptable ranges. Acceptable range for height, weight, and BMI are 122-208cm, 32-318 kg and 10-55 respectively.

[*6] Full-time, part-time, or student (% of 18-60 year olds).

[*7] Includes all patients with AV fistulae, regardless of whether they received their hemodialysis treatments using their fistulae.

[*8] Values may not sum to exactly 100% because of patients for which multiple reasons are selected, or when other or no reason is selected.

[*9] 'Atherosclerotic heart disease' includes ischemic heart disease (coronary artery disease) and myocardial infarction. 'Other cardiac disorder' includes cardiac arrest, cardiac dysrhythmia, and pericarditis. 'Diabetes' includes patients with diabetes as the primary cause of ESRD.

TABLE 3: Mortality Summary for All Dialysis Patients (2016-2019) & New Dialysis Patients (2016-2018) *1

Measure Name	This Region				United States	
	2016	2017	2018	2019		
All Dialysis Patients					2019	
3a	Patients (n=number)	62,863	64,785	66,304	67,458	753,499
3b	Patient years (PY) at risk (n)	45,681	46,700	47,630	48,445	505,623
3c	Deaths (n)	7,912	8,186	8,302	8,364	87,985
3d	Expected deaths (n)	7,931	8,230	8,378	8,463	88,306
3e	Withdrawal from dialysis prior to death (% of 3c)	30.4	30.2	30.8	31.1	26.7
3f	Deaths due to infections (% of 3c)	11.7	11.4	11.5	10.8	10.1
3g	Deaths due to cardiac causes (% of 3c)	43.6	44.7	45.1	46.1	46.5
3h	Deaths due to liver disease (% of 3c)	1.8	1.6	1.5	1.6	1.5
3i	Dialysis unrelated deaths *2 (n; excluded from SMR)	51	56	54	57	587
3j	Standardized Mortality Ratio (SMR; 3c /3d)	0.98	0.97	0.97	0.97	0.99
3k	P-value *3	.	.	.	.	n/a
New Dialysis Patients					2018	
3l	Patients (n=number)	11,946	11,857	11,954		119,543
3m	Patient years (PY) at risk (n)	10,537	10,516	10,624		106,237
3n	Deaths (n)	2,258	2,156	2,118		21,180
3o	Expected deaths (n)	2,254	2,157	2,113		21,128
3p	Withdrawal from dialysis prior to death (% of 3n)	31.7	33.2	33.2		29.4
3q	Deaths due to infections (% of 3n)	10.4	10.9	10.2		9.6
3r	Deaths due to cardiac causes (% of 3n)	39.0	40.1	41.2		42.1
3s	Deaths due to liver disease (% of 3n)	2.7	2.8	2.7		2.5
3t	Standardized Mortality Ratio (SMR; 3n /3o)	0.97	0.96	0.97		1.00
3u	P-value *3	.	.	.		n/a

n/a = not applicable.

[*1] See *Guide, Section VI*.

[*2] Defined as deaths due to street drugs and accidents unrelated to treatment.

[*3] Ratios within the range 0.95 to 1.05 will not have a p-value. A p-value ≥ 0.05 indicates that the ratio is >1.05 or <0.95 plausibly due to random chance.

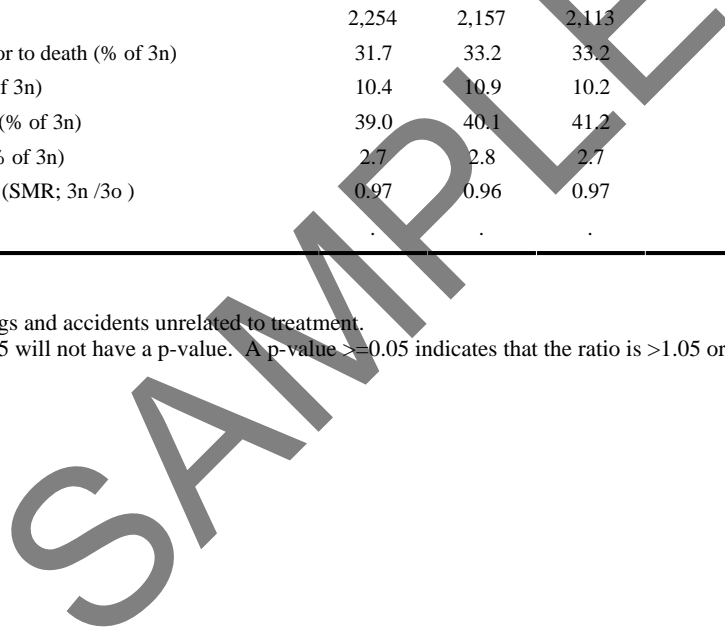


TABLE 4: Hospitalization Summary for Medicare Dialysis Patients^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019
		2017	2018	2019	
Medicare Dialysis Patients					
4a Medicare dialysis patients (n)	48,018	49,367	49,707	49,818	549,638
4b Patient years (PY) at risk (n)	31,723	31,945	31,994	31,788	323,108
Days Hospitalized Statistics					
4c Total days hospitalized (n)	419,416	428,376	432,047	429,251	4,528,042
4d Expected days hospitalized (n)	430,009	439,920	445,625	443,646	4,531,936
4e Standardized Hospitalization Ratio for Days (4c/4d)	0.91	0.91	0.91	0.91	0.99
4f P-value ^{*2}	<0.01	0.012	<0.01	<0.01	n/a
Admission Statistics					
4g Total admissions (n)	57,326	58,944	59,794	59,764	616,290
4h Expected total admissions (n)	57,807	59,466	60,397	60,493	617,250
4i Standardized Hospitalization Ratio for Admissions (4g/4h)	0.95	0.95	0.95	0.95	0.99
4j P-value ^{*2}	.	.	.	.	n/a
4k Patients with septicemia (% of 4a)	11.6	11.8	12.1	11.8	11.1
4l One day admissions (% of 4g)	10.1	10.0	9.6	9.6	9.4
4m Average length of stay (days per admission)	7.1	7.1	7.1	7.0	7.3
Emergency Department (ED) Statistics					
4n Total ED visits (n)	92,905	94,667	93,891	93,285	963,017
4o Expected total ED visits (n)	94,152	95,951	95,294	94,742	963,504
4p Standardized Hospitalization Ratio for ED (4n/4o)	0.96	0.96	0.96	0.96	0.99
4q P-value ^{*2}	.	.	.	.	n/a
4r Patients with ED visit (% of 4a)	58.3	57.6	57.4	56.7	53.0
4s ED visits that result in hospitalization (% of 4n)	41.8	41.9	42.4	42.3	43.1
4t Admissions that originate in the ED (% of 4g)	68.5	68.2	67.8	67.2	67.3
Readmission Statistics					
4u Index discharges (n)	54,892	55,851	55,475	54,109	541,085
4v Total readmissions (n)	14,767	15,029	14,907	14,591	145,912
4w Expected total readmissions (n)	14,280	14,419	14,322	14,044	140,439
4x Standardized Readmission Ratio (SRR; 4v/4w)	1.00	1.01	1.01	1.01	1.04

n/a = not applicable.

 [*1] See *Guide, Section VII*.

 [*2] Ratios within the range 0.95 to 1.05 will not have a p-value. A p-value ≥ 0.05 indicates that the ratio is >1.05 or <0.95 plausibly due to random chance.

TABLE 5: Transplantation and Waitlist Summary for All Dialysis Patients (2016-2019) & New Dialysis Patients (2016-2018) under Age 75^{*1}

Measure Name	This Region				United States	
	2016	2017	2018	2019	2019	
Transplantation: All Transplants						
5a	Eligible patients (n)	50,149	51,619	52,603	53,206	593,803
5b	Transplants (n)	1,540	1,592	1,684	1,850	18,698
Transplantation: First Transplants						
5c	Eligible patients (n)	46,523	47,961	48,931	49,514	551,237
5d	Patient years (PY) at risk (n)	33,964	34,730	35,301	35,703	372,042
5e	Actual 1st transplants ^{*2} (n)	1,335	1,394	1,494	1,643	16,593
5f	Expected 1st transplants (n)	1,295	1,357	1,456	1,609	16,743
5g	Standardized Transplantation Ratio (STR; 5e/5f)	1.19	1.19	1.17	1.16	0.99
5h	P-value ^{*3}	<0.01	0.031	<0.01	<0.01	n/a
Waitlist: All Dialysis Patients						
5i	Eligible patients (n)	50,285	51,618	52,556	53,440	534,395
5j	Patient-months at risk (n) ^{*4}	427,626	436,512	442,650	447,345	4,473,454
5k	Patient-months on the waitlist (% of 5j) ^{*4}	21.9	20.7	19.7	19.0	18.6
5l	Patient-months on the waitlist by subgroup (%) ^{*4 *5}					
	Age < 40	33.2	31.4	30.5	30.0	28.9
	Age 40-74	20.5	19.5	18.5	17.8	17.4
	Male	23.0	21.8	20.9	20.1	19.8
	Female	20.3	19.1	18.0	17.4	16.7
	African American	22.1	20.9	19.8	18.9	17.5
	Asian/Pacific Islander	31.3	29.8	28.6	27.4	27.5
	Native American	19.5	18.2	16.2	14.6	11.9
	White, Hispanic	22.9	21.8	20.4	19.7	20.2
	White, Non-Hispanic	21.0	19.8	19.0	18.3	17.4
	Other/Unknown race	22.8	23.0	22.7	22.6	22.7
	Diabetes	17.4	16.3	15.6	15.1	15.0
	Non-diabetes	25.6	24.4	23.3	22.4	21.6
	Previous kidney transplant	37.4	34.6	32.3	31.2	31.8
	No previous kidney transplant	20.5	19.5	18.6	17.9	17.5
	<2 years since start of ESRD	16.1	15.7	15.5	15.4	14.0
	2-4 years since start of ESRD	27.1	25.6	24.4	23.5	23.1
	5+ years since start of ESRD	23.3	21.4	19.7	18.4	19.1
5m	Age-adjusted percentage of patient-months waitlisted	21.6	20.4	19.6	18.9	18.1
Waitlist: New Dialysis Patients						
		2016	2017	2018		2018
5n	Eligible Patients (n)	7,815	7,681	7,686		76,859
5o	Patient-years (PY) at risk (n)	6,921	6,839	6,832		68,320
5p	First waitlist events (n) ^{*6}	713	710	748		7,478
5q	Expected 1st waitlist events (n) ^{*6}	736	726	708		7,084
5r	Standardized Waitlist Ratio (SWR) ^{*6}	1.13	1.11	1.17		1.05
5s	P-value ^{*3}	0.043	0.062	0.178		n/a

n/a = not applicable.

[*1] See *Guide Section VIII (Transplantation) and Section IX (Waitlist)*.

[*2] Among first transplants that occurred after the start of dialysis from 2016-2019, 3.9% of transplants in the U.S. were not included because the transplant occurred less than 91 days after the start of ESRD and 0.9% because the patient was not assigned to a facility at time of transplant.

[*3] Ratios within the range 0.95 to 1.05 will not have a p-value. A p-value greater than or equal to 0.05 indicates that the standardized ratio is greater than 1.05 or less than 0.95 plausibly due to random chance.

[*4] A patient may be counted up to 12 times per year.

[*5] The waitlist percentage for each subgroup is calculated as a rate of waitlisted patient-months to patient-months at risk in each subgroup. A missing value indicates that there were no eligible patients in the subgroup.

[*6] An event is defined as a waitlisting or living-donor transplant.

TABLE 6: Influenza Vaccination Summary for Medicare Dialysis Patients Treated on December 31st of Each Year^{*1}, Flu Seasons August 2016-December 2019

Measure Name	This Region				United States
	2016	2017	2018	2019	
					2019
6a Eligible patients on 12/31 (n)	30,740	30,763	30,250	30,159	301,587
6b Patients vaccinated between Aug. 1 and Dec. 31 (% of 6a)	74.0	78.9	79.2	78.2	77.6
6c P-value ^{*2} (for 6b compared to U.S. value) ^{*3}	0.075	0.076	0.052	0.057	n/a
					2018
6d Patients vaccinated between Aug. 1 and Mar. 31 of following year (% of 6a)	74.9	79.8	79.9		79.0
6e P-value ^{*2} (for 6d compared to U.S. value) ^{*4}	0.067	0.038	0.059		n/a
6f Patients vaccinated between Aug. 1 and Dec. 31 by subgroup ^{*5}					2019
Age < 18	62.1	56.1	60.2	55.6	57.4
Age 18-39	66.6	71.3	72.2	71.7	70.6
Age 40-64	71.2	76.6	77.2	76.1	75.9
Age 65-74	75.9	80.6	80.6	79.7	79.3
Age 75+	79.2	83.4	83.3	81.7	81.1
Male	73.7	78.5	78.9	77.9	77.4
Female	74.5	79.5	79.6	78.6	77.9
African American	69.9	74.7	75.0	73.7	74.4
Asian/Pacific Islander	78.0	82.8	82.1	80.9	78.8
Native American	72.6	77.5	76.2	75.4	78.8
White	75.5	80.2	80.7	79.8	79.5
Other/unknown race	70.3	72.9	75.9	75.4	74.0
Hispanic	75.7	81.1	81.2	80.6	79.5
< 1 year since start of ESRD	65.6	69.7	68.3	65.0	64.0
1-2 years since start of ESRD	73.8	77.9	78.7	77.4	76.7
3+ years since start of ESRD	76.2	81.7	81.9	81.5	81.0

n/a = not applicable

[*1] Based on patients with Medicare as primary insurer; see *Guide, Section X*.

[*2] A p-value greater than or equal to 0.05 indicates that the difference between percent of patients vaccinated at the region and national percentage is plausibly due to random chance.

[*3] Compared to the U.S. value for that year and time period (08/01-12/31): 74% (2016), 78% (2017), 78% (2018), 78% (2019).

[*4] Compared to the U.S. value for that year and time period (08/01-03/31): 74% (2016), 79% (2017), 79% (2018).

[*5] A missing value indicates that there were no eligible patients in the subgroup.

TABLE 7: Anemia Management Summaries for Adult Dialysis Patients^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019
		2017	2018	2019	
Hemoglobin and ESA for Adult Hemodialysis (HD) Patients					
7a Eligible HD patients (n)	50,177	51,414	52,193	52,923	522,665
7b Eligible HD patient-months (n) ^{*2}	473,976	484,819	492,884	497,943	4,979,426
7c Average hemoglobin ^{*3} (g/dL) (average of 7b)	10.8	10.8	10.8	10.8	10.7
7d Hemoglobin categories (% of 7b; sums to 100%)					
<10 g/dL	20.9	20.4	21.5	22.2	22.3
10-<11 g/dL	34.4	34.2	34.6	34.9	35.1
11-12 g/dL	29.9	30.2	29.4	29.0	29.0
>12 g/dL	12.5	13.1	12.4	12.2	11.7
Missing/Out of range	2.4	2.0	2.0	1.8	1.9
7e ESA prescribed (% of 7b)	75.3	74.1	74.1	75.0	75.2
Hemoglobin and ESA for Adult Peritoneal Dialysis (PD) Patients					
7f Eligible PD patients (n)	6,258	6,476	6,830	7,322	72,388
7g Eligible PD patient-months (n) ^{*2}	52,202	53,656	55,992	59,487	594,871
7h Average hemoglobin ^{*3} (g/dL) (average of 7g)	10.9	11.0	10.9	10.9	10.9
7i Hemoglobin categories (% of 7g; sums to 100%)					
<10 g/dL	22.4	22.2	23.0	23.1	23.4
10-<11 g/dL	28.7	28.8	29.1	29.1	29.4
11-12 g/dL	25.7	26.1	25.8	26.0	26.0
>12 g/dL	18.7	19.5	18.8	18.6	18.0
Missing/Out of range	4.5	3.4	3.3	3.2	3.2
7j ESA prescribed (% of 7g)	55.8	55.7	55.8	55.4	56.1
Standardized Transfusion Ratio (STrR)					
7k Adult Medicare patients (n)	35,975	36,480	36,272	36,150	395,270
7l Patient years (PY) at risk (n)	23,247	23,337	23,190	22,924	232,441
7m Total transfusions (n)	7,957	7,677	7,505	7,096	74,142
7n Expected total transfusions (n)	8,175	7,879	7,682	7,259	73,698
7o Standardized Transfusion Ratio ^{*4}	0.92	0.93	0.92	0.92	1.00
7p P-value ^{*5}	0.141	0.065	0.139	0.016	n/a

n/a = not applicable.

[*1] See *Guide, Section XI*. Transfusion summaries include adult Medicare Dialysis Patients only.

[*2] Patients may be counted up to 12 times per year.

[*3] Based on in-range values; see *Guide* for range values.

[*4] Calculated as a ratio of observed transfusions to expected transfusions (7m to 7n); not shown if there are fewer than 10 patient-years at risk for transfusions.

[*5] Ratios within the range 0.95 to 1.05 will not have a p-value. A p-value greater than or equal to 0.05 indicates that the standardized ratio is greater than 1.05 or less than 0.95 plausibly due to random chance.

TABLE 8: Dialysis Adequacy Summaries for All Dialysis Patients ^{*1}, 2016-2019

Measure Name	This Region				United States 2019	
	2016	2017	2018	2019		
Adult Hemodialysis (HD) Adequacy						
8a	Eligible HD patients (n)	50,177	51,414	52,193	52,923	522,665
8b	Eligible HD patient-months (n) ^{*2}	473,976	484,819	492,884	497,943	4,979,426
8c	Average serum albumin (g/dL) (average of 8b)	3.8	3.8	3.8	4.2	4.7
8d	Serum albumin categories (% of 8b; sums to 100%)					
	< 3.0 g/dL	3.6	3.6	3.2	2.5	2.6
	3.0-<3.5 g/dL	14.2	14.5	12.8	10.4	10.3
	3.5-<4.0 g/dL	47.4	48.1	46.1	42.8	42.7
	>=4.0 g/dL	31.5	31.1	35.1	41.7	41.7
	Missing	3.3	2.7	2.7	2.6	2.8
8e	Ultrafiltration rate average ^{*3} (ml/kg/hr) (average of 8b)	7.8	7.7	7.6	7.5	7.6
8f	Ultrafiltration rate categories (% of 8b; sums to 100%)					
	<=13 (ml/kg/hr)	82.1	83.7	84.7	85.3	85.1
	>13 (ml/kg/hr)	9.8	8.9	8.1	7.5	7.8
	Missing/Out of range	8.1	7.4	7.2	7.2	7.1
8g	Eligible HD Kt/V patients (n) ^{*4}	46,879	48,407	49,306	50,077	494,695
8h	Eligible HD Kt/V patient-months (n) ^{*2 *4}	434,730	447,395	453,808	450,748	4,507,477
8i	Average Kt/V (average of 8h) ^{*3 *4}	1.6	1.6	1.6	1.7	1.6
8j	Kt/V categories (% of 8h; sums to 100%) ^{*4}					
	<1.2	2.2	2.1	1.9	1.6	1.6
	1.2-<1.8	70.3	71.2	71.4	69.9	70.7
	>=1.8	25.6	25.1	25.4	27.4	26.4
	Missing/Out of range	2.0	1.6	1.3	1.2	1.3
Adult Peritoneal Dialysis (PD) Adequacy						
8k	Eligible PD patients (n)	6,258	6,476	6,830	7,322	72,388
8l	Eligible PD patient-months (n) ^{*2}	52,202	53,656	55,992	59,487	594,871
8m	Average Weekly Kt/V (average of 8l) ^{*3 *4}	2.3	2.3	2.3	2.2	2.2
8n	Weekly Kt/V categories (% of 8l; sums to 100%) ^{*4}					
	<1.7	5.7	5.3	4.7	5.1	5.0
	1.7-<2.5	63.4	65.9	66.2	67.5	67.9
	>=2.5	25.6	24.6	25.3	23.7	23.4
	Missing/Out of range	5.4	4.1	3.8	3.7	3.7
8o	Average serum albumin (g/dL) (average of 8l)	3.5	3.5	3.5	3.6	3.6
8p	Serum Albumin Categories (% of 8l; sums to 100%)					
	< 3.0 g/dL	11.0	11.2	10.0	7.4	7.6
	3.0-<3.5 g/dL	30.7	30.9	29.1	24.5	25.1
	3.5-<4.0 g/dL	40.2	41.1	42.1	43.1	43.0
	>=4.0 g/dL	13.2	13.3	15.5	21.7	21.2
	Missing	4.8	3.5	3.3	3.2	3.2

(continued)

TABLE 8 (continued): Dialysis Adequacy Summaries for All Dialysis Patients ^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019
		2017	2018	2019	
Pediatric Kt/V ^{*4}					
8q Eligible Pediatric HD patients (n)	81	76	72	70	688
8r Eligible Pediatric HD patient-months (n) ^{*2}	555	507	500	473	4,734
8s Average Kt/V (average of 8r) ^{*3}	1.7	1.7	1.7	1.7	1.7
8t Kt/V categories (% of 8r; sums to 100%)					
<1.2	2.8	2.8	2.2	2.6	3.0
1.2-<1.8	61.6	59.2	59.4	58.9	57.4
>= 1.8	31.1	33.2	33.2	34.6	35.4
Missing/Out of Range	4.5	4.8	5.2	4.0	4.1
8u Eligible Pediatric PD Patients (n)	95	95	91	87	856
8v Eligible Pediatric PD patient-months (n) ^{*2}	692	694	664	653	6,529
8w Average Weekly Kt/V (average of 8v) ^{*3}	2.3	2.4	2.4	2.3	2.4
8x Weekly Kt/V categories (% of 8v; sums to 100%)					
<1.7	14.1	15.1	12.2	11.0	11.2
1.7-<2.5	38.5	44.3	44.9	45.5	45.2
>=2.5	21.4	28.4	27.3	26.0	27.8
Missing/Out of Range	26.0	12.3	15.5	17.5	15.7

n/a = not applicable.

[*1] See *Guide, Section XII*. Unless otherwise noted, all summaries are based on data reported in CROWNWeb and the patient must be on HD (or PD) for the entire reporting month to be included in patient counts and summaries.

[*2] Patients may be counted up to 12 times per year.

[*3] Based on in-range values; see *Guide* for range values.

[*4] Kt/V summaries are supplemented with Medicare claims if missing in CROWNWeb. HD Kt/V summaries are restricted to patients who dialyze thrice weekly. See section of *Guide* titled *Determination of Thrice Weekly Dialysis* for more information. The most recent value over a 4-month (adult) or 6-month (pediatric) period is selected for PD Kt/V.

SAMPLE

TABLE 9: Mineral Metabolism Summaries for All Adult Dialysis Patients^{*1}, 2016-2019

Measure Name	This Region				United States
	2016	2017	2018	2019	2019
9a Eligible adult patients (n) ^{*2}	55,258	56,656	57,711	58,793	580,378
9b Eligible adult patient-months (n) ^{*2 *3}	527,159	539,524	549,969	558,656	5,586,559
9c Average Phosphorous ^{*4} (mg/dL) (average of 9b ^{*5})	5.3	5.3	5.3	5.4	5.4
9d Phosphorous categories (% of 9b ^{*5} ; sums to 100%)					
<3.5 mg/dL	8.6	8.5	8.1	7.6	7.7
3.5-4.5 mg/dL	25.2	25.0	24.4	23.5	23.5
4.6-5.5 mg/dL	29.7	30.0	30.0	30.0	30.1
5.6-7.0 mg/dL	21.1	21.2	21.6	22.1	21.8
>7.0 mg/dL	12.3	12.6	13.3	14.3	14.3
Missing/Out of range	3.2	2.8	2.8	2.5	2.6
9e Average Calcium Uncorrected ^{*4} (mg/dL) (average of 9b)	8.9	8.9	8.9	8.9	8.9
9f Calcium Uncorrected categories (% of 9b; sums to 100%)					
<8.4 mg/dL	17.7	17.2	17.5	19.5	19.2
8.4-10.2 mg/dL	77.2	78.9	78.7	77.1	77.3
>10.2 mg/dL	1.5	1.3	1.3	1.2	1.2
Missing/Out of range	3.6	2.6	2.5	2.2	2.3
9g Average uncorrected calcium > 10.2 mg/dL (average of 9b ^{*4 *6})	2.5	1.9	1.9	1.7	1.7

n/a = not applicable.

[*1] See *Guide, Section XIII*. Summaries are based on data reported in CROWNWeb and the patient must be assigned to the facility the entire month to be included.

[*2] Includes patients on ESRD more than 90 days who switch between HD and PD during the month and patients for whom modality is unknown.

[*3] Patients may be counted up to 12 times per year.

[*4] The acceptable range for calcium is 0.1 – 20 mg/dL. Values outside of this range are considered missing, which are counted towards the numerator.

[*5] Eligible patients included in the phosphorous summaries differ slightly from what is reported in 9b since it includes patient-months within the first 90 days of ESRD.

[*6] Hypercalcemia is averaged from uncorrected serum or plasma calcium values over a rolling 3-month period.

TABLE 10: Vascular Access Information for all Adult Dialysis Patients and Access-Related Infection Summaries for all Medicare Patients^{*1}, 2016-2019

Measure Name	2016	This Region			United States 2019	
		2017	2018	2019		
Vascular Access						
10a	Prevalent adult hemodialysis (HD) patients ^{*2}	53,039	54,235	55,065	55,707	550,129
10b	Prevalent adult hemodialysis patient months ^{*2 *3}	495,214	505,742	513,597	518,757	5,187,574
10c	Vascular access type in use (% of 10b; sums to 100%)					
	Arteriovenous fistula	64.7	64.9	64.9	64.4	62.9
	Arteriovenous graft	16.5	16.7	16.6	16.5	17.8
	Catheter	16.4	16.3	16.5	17.2	17.4
	Other/Missing	2.4	2.1	2.1	1.8	1.9
10d	Standardized Fistula Rate (SFR) ^{*4}	64.4	64.6	64.8	64.4	62.5
10e	Long-Term Catheter Rate ^{*5}	12.3	11.9	12.1	12.6	12.9
Vascular Access at First Treatment						
10f	Incident adult hemodialysis patients (n)	10,766	10,649	10,649	10,507	105,074
10g	Vascular access type in use (% of 10f; sums to 100%)					
	Arteriovenous fistula	17.9	17.7	17.3	16.0	14.1
	Arteriovenous graft	3.5	3.6	3.5	3.2	3.3
	Catheter	77.4	76.9	76.5	75.9	77.3
	Other/Missing	1.2	1.8	2.7	4.9	5.2
10h	Arteriovenous fistulae in placed ^{*6} (% of 10f)	19.9	19.3	19.0	17.0	15.1
Infection: Peritoneal dialysis (PD)						
10i	Eligible PD patients (n)	4,668	4,797	4,859	5,132	55,198
10j	Eligible PD patient-months ^{*3}	35,385	35,882	36,347	37,565	386,397
10k	PD catheter infection rate per 100 PD patient-months ^{*7}	2.5	2.5	2.5	2.5	2.1
10l	P-value ^{*8} of 10k (compared to U.S. value ^{*9})	0.164	0.142	0.100	0.175	n/a

n/a = not applicable

[*1] See *Guide, Section XIV*. Vascular Access type is based on data reported in CROWNWeb. For the prevalent summaries (rows 10a-10e), the patient must be assigned to the facility for the entire calendar month to be included. The PD infection summaries are based on Medicare Dialysis claims.

[*2] Patient months with a catheter that have limited life expectancy, including under hospice care in the current reporting month, or with metastatic cancer, end stage liver disease, coma or anoxic brain injury in the past 12 months, were excluded.

[*3] Patients may be counted up to 12 times per year.

[*4] Includes patients with an autogenous arteriovenous (AV) fistula as the sole means of vascular access. SFR is calculated as an adjusted rate of AV fistula in use reported in 10c.

[*5] Includes patients using a catheter continuously for three months or longer. Patients with other or missing access types (10c) are also counted as catheter in use in the numerator.

[*6] Includes all patients with fistulae, regardless of whether or not they received their hemodialysis treatments using their fistulae.

[*7] The ICD-9 PD catheter infection code for PD patients is 996.68 which is effective thru 9/30/2015 and the ICD-10 PD catheter infection code for PD patients is T8571XA which is effective beginning 10/1/2015.

[*8] A p-value greater than or equal to 0.05 indicates the differences between the percent of patients with infection at the facility and national percentage is plausibly due to random change.

[*9] Compared to U.S. value for that year: 2.89 (2016), 2.65 (2017), 2.65 (2018), and 2.06 (2019).

TABLE 11: Comorbidities Reported on Medicare Claims for Medicare Dialysis Patients Treated as of December 31st of Each Year^{*1}, 2016-2019

Measure Name	This Region				United States
	2016	2017	2018	2019	2019
11a Medicare dialysis patients on 12/31(n)	34,507	35,119	35,114	35,148	358,009
11b Comorbidity (% yes of 11a)					
Infections					
AIDS/HIV positive	1.5	1.5	1.5	1.5	1.7
Intravascular/implanted device-related ^{*2}	9.2	9.0	8.8	8.2	8.5
Hepatitis B	1.6	1.6	1.6	1.4	1.4
Hepatitis other	5.8	5.7	5.3	4.7	4.8
Metastatic	3.5	3.1	3.1	3.1	3.2
Pneumonia	7.0	8.7	9.8	10.6	10.5
Tuberculosis	0.5	0.5	0.4	0.6	0.6
Other	35.0	35.5	35.3	34.9	35.0
Cardiovascular					
Cardiac arrest	1.6	1.8	1.7	1.6	1.7
Cardiac dysrhythmia	37.0	37.9	38.8	39.3	38.2
Cerebrovascular disease	23.4	23.4	23.4	23.4	24.5
Congestive heart failure	51.2	52.6	53.5	54.3	54.7
Ischemic heart disease	48.8	49.0	49.3	49.4	49.6
Myocardial infarction	9.6	10.4	11.0	11.6	11.3
Peripheral vascular disease ^{*3}	43.7	43.4	43.7	43.8	44.6
Other					
Alcohol dependence	3.1	3.1	3.2	3.2	3.1
Anemia	8.8	8.9	9.3	10.1	10.6
Cancer	11.3	11.4	11.8	11.9	11.5
Chronic obstructive pulmonary disease	32.2	32.4	32.0	31.9	31.7
Diabetes	66.0	66.8	67.1	67.2	68.3
Drug dependence	3.7	3.9	3.9	4.1	3.8
Gastrointestinal tract bleeding	4.6	4.5	4.2	4.3	4.4
Hyperparathyroidism	86.7	85.8	87.8	87.6	87.3
11c Average number of comorbid conditions	5.0	5.0	5.1	5.1	5.1

n/a = not applicable.

[*1] Based on patients with Medicare as primary insurer on 12/31 each year; See *Guide, Section XV*.

[*2] This category includes bloodstream and other infections related to intravascular access and other implanted devices, not limited to dialysis access.

[*3] Peripheral vascular disease includes venous, arterial and nonspecific peripheral vascular diseases.

TABLE 12: Selected Summaries for Nursing Home (NH) Patients*¹, 2016-2019

Measure Name	This Region				United States 2019
	2016	2017	2018	2019	
Mortality summary for all NH dialysis patients*³					
12.3a Patients (n=number)	9,627	10,012	10,332	10,491	104,908
12.3b Patient years (PY) at risk (n)	6,726.0	6,924.4	7,132.5	7,200.7	72,006.6
12.3c Deaths (n)	2,737	2,817	2,857	2,846	28,457
12.3d Expected deaths (n)	2,214.6	2,304.7	2,358.0	2,363.4	23,634.1
12.3c/12.3b Rate (deaths per 100 PYs at risk)	40.9	40.4	40.1	39.1	39.5
12.3j SMR (deaths/expected deaths)	1.23	1.20	1.20	1.18	1.20
12.3e Withdrawal from dialysis prior to death (% of 12.3c)	38.0	37.9	38.6	38.6	34.1
Hospitalization summary for NH Medicare dialysis patients					
12.4a Medicare dialysis patients (n)	8,808	9,142	9,384	9,467	94,673
12.4b Patient years (PY) at risk (n)	5,534.0	5,643.5	5,733.5	5,701.2	57,011.6
12.4g Total admissions (n)	19,736	20,518	21,020	21,099	210,991
12.4h Expected total admissions (n)	13,909.6	14,824.9	15,353.1	15,366.5	153,664.7
12.4g/12.4b Rate (admissions per 100 PYs at risk)	344.9	351.3	354.0	357.2	370.1
12.4i SHR (admissions/expected admissions)	1.38	1.34	1.32	1.33	1.37
Diagnoses associated with hospitalization (% of 12.4a)					
Septicemia	24.7	25.5	25.5	24.4	24.7
Acute myocardial infarction	8.8	9.8	10.6	10.8	10.5
Congestive heart failure	44.7	46.7	47.1	46.4	47.1
Cardiac dysrhythmia	33.9	34.9	34.9	34.4	34.3
Cardiac arrest	3.7	4.1	3.8	3.7	4.0
Comorbidities reported on Medicare claims					
12.11a Medicare dialysis patients on 12/31 (n)	4,803	4,945	5,089	5,107	51,066
12.11b Comorbidity (% yes of 12.11a)					
Infections					
AIDS/HIV positive	1.4	1.4	1.3	1.4	1.5
Intravascular/implanted device-related* ⁴	13.6	13.2	13.0	12.2	12.8
Hepatitis B	1.9	2.0	1.9	1.7	1.8
Hepatitis other	8.0	7.6	7.4	6.7	7.0
Metastatic	8.0	7.4	7.2	7.2	7.4
Pneumonia	15.4	18.5	19.6	21.2	21.0
Tuberculosis	0.6	0.6	0.7	0.8	0.8
Other	58.3	59.0	58.9	58.7	59.0
Cardiovascular					
Cardiac arrest	3.6	4.0	3.8	3.7	3.8
Cardiac dysrhythmia	56.4	57.2	57.6	58.5	57.8
Cerebrovascular disease	42.7	42.5	42.1	41.9	44.5
Congestive heart failure	71.4	72.7	72.5	73.4	74.4
Ischemic heart disease	67.8	68.3	67.5	67.7	68.5
Myocardial infarction	16.7	18.0	19.0	19.9	19.6
Peripheral vascular disease* ⁴	67.3	66.7	66.9	66.6	68.5

(continued)

TABLE 12 (continued): Selected Summaries for Nursing Home (NH) Patients^{*1}, 2016-2019

Measure Name	This Region				United States 2019
	2016	2017	2018	2019	
Anemia^{*5}					
12.7a Eligible adult HD patients (n)	7,997	8,270	8,504	8,589	84,735
12.7b Eligible adult HD patient-months (n) ^{*2}	73,867	76,182	78,466	78,848	788,475
12.7d Hemoglobin (HD) < 10 g/dL (% of 12.7b)	27.9	27.7	29.0	29.9	30.6
12.7e ESA prescribed (% of 12.7b)	80.1	79.1	78.7	79.6	79.8
12.7f Eligible adult PD patients (n)	383	393	400	426	4,200
12.7g Eligible adult PD patient-months (n) ^{*2}	2,594	2,599	2,616	2,772	27,723
12.7i Hemoglobin (PD) < 10 g/dL (% of 7g)	27.5	28.5	29.9	30.4	31.2
12.7j ESA prescribed (% of 7g)	58.2	58.5	59.0	58.4	59.6
Dialysis Adequacy^{*5 *6}					
12.8a Eligible adult HD Kt/V patients (n)	7,527	7,860	8,132	8,277	81,666
12.8b Eligible adult HD Kt/V patient-months (n) ^{*2}	68,531	71,427	73,889	73,931	739,310
12.8j Kt/V (HD) < 1.2 (% of 12.8b)	2.5	2.4	2.3	2.0	2.1
12.8k Eligible adult PD Kt/V patients (n)	383	393	400	426	4,200
12.8l Eligible adult PD Kt/V patient-months (n) ^{*2}	2,594	2,599	2,616	2,772	27,723
12.8n Kt/V (PD) < 1.7 (% of 12.8l)	9.0	8.2	7.9	8.9	9.2
Vascular Access^{*5 *7}					
12.10a Prevalent adult hemodialysis patients (n)	7,954	8,209	8,435	8,526	84,123
12.10b Prevalent adult hemodialysis patient months (n) ^{*2}	73,042	75,242	77,427	77,788	777,881
12.10c Arteriovenous fistula in use (% of 12.10b)	58.9	59.2	59.3	58.8	56.8
12.10e Long-Term Catheter Rate (LTCR)	16.0	15.2	15.5	15.8	16.5

n/a = not applicable; Kt/V: K = dialyzer clearance of urea; t = dialysis time; V = patient's total body water.

[*1] See Guide, Section XVI corresponding to the parent table in the DFR state profile.

[*2] A patient may be counted up to 12 times per year.

[*3] Deaths due to street drugs and accidents unrelated to treatment are excluded.

[*4] Intravascular/implanted device-related category includes bloodstream and other infections related to intravascular access and other implanted devices, not limited to dialysis access. Peripheral vascular disease includes venous, arterial and nonspecific peripheral vascular diseases.

[*5] Summaries are based on data reported in CROWNWeb and the patient must be on HD (or PD) for the entire reporting month to be included in patient counts and summaries.

[*6] Summaries are supplemented with Medicare claims if missing in CROWNWeb. HD Kt/V summaries are restricted to patients who dialyze thrice weekly. The PD summaries use the most recent value over a 4-month look-back period.

[*7] Patient months with a catheter that have limited life expectancy, including under hospice care in the current reporting month, or with metastatic cancer, end stage liver disease, coma or anoxic brain injury in the past 12 months, were excluded.