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 2020-2023 in the chronic dialysis facilities in this region and are based primarily on data from the ESRD Quality Reporting System (EQRS), 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 2025*. 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 2025: (1) The Standardized Modality Switch Ratio for incident in-center hemodialysis patients (SMoSR) was added to Table 2. This measure provides an adjusted modality outcome for patients who, in their first year of treatment, switch to a home dialysis modality (PD or HHD). Switches to home dialysis in the first year reflect that the facility is providing effective access to modality education and resources that can support patient modality decisions. (2) The percentage of prevalent patients on the waitlist in active status was added to Table 6. This measure is similar to the age-adjusted percentage of patient-months waitlisted measure, but only includes patients in active status and provides information about the facilities' ongoing support, as patients can lapse from active status. (3) Tables C1 and C2 now provide COVID-19 patient counts, deaths, and hospitalizations among Medicare dialysis patients for each year of the reporting period. (4) Table footnotes that may be referenced across multiple tables have been moved to a new Appendix following the tables at the end of the report.

Data Limitations

The COVID Extraordinary Circumstances Exception (ECE) data policy from CMS restricts the use and availability of claims data from March-June 2020 and EQRS clinical data from January—June 2020. Table footnotes provide additional details of data availability for each measure in 2020.

Region Highlights

Patient Characteristics: On December 31 st, 2023, 13.3% of patients in this region were treated in a nursing home during the year, compared to 13.0% nationally. See **Table 1** for detailed summaries of all patients treated during 2020-2023 in this region.

Form CMS-2728 collected data from 12,076 incident patients in this region in 2023. **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 2023, the average age of patients in this region at incidence was 63 years, compared to the national average of 63 years. Among the incident patients in this region in 2023, 92.2% were informed of their transplant options, compared to 93.0% nationally. Also in 2023, 14.9% of incident patients in this region were not under the care of a nephrologist prior to ESRD therapy, compared to 15.6% nationally.

Mortality: There were 8,319 deaths among the patients treated in this region during 2023, while 8,200 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 0.99, which agrees with the 4-year (2020-2023) national reference value of 1.0. Of the deaths in this region in 2023, 27% were preceded by withdrawal from dialysis, compared to the national average of 22%. See **Table 3** of this profile for more detailed mortality statistics during 2020-2023 in this region.

First Year Mortality: There were 1,995 deaths among the incident patients treated in this region during 2022, while 1,976 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 2% lower than expected. Of the deaths among incident patients in this region in 2022, 26% were preceded by withdrawal from dialysis, compared to the national average of 22%. See **Table 3** of this profile for more detailed first year mortality statistics during 2020-2022 in this region.

Hospitalization: The Standardized Hospitalization Ratio (SHR) of observed to expected hospital admissions for patients in this region during 2023 is 0.95, indicating that these patients had 5% 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 2023 is 1.01, indicating that these patients had 1% more readmissions than expected. See **Table 4** of this profile for additional hospitalization statistics during 2020-2023 in this region.

Transplantation: 1,839 patients under age 75 in this region during 2023 received their first transplant, while 1,813 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 1.11, which is 11% higher than expected. See **Table 5** of this profile for additional transplantation statistics during 2020-2023 in this region.

Kidney Transplant Waitlist for Prevalent Patients: The 2023 age-adjusted percent waitlisted in this region is 17.1%, which is 1.1% higher than the national adjusted percentage. See **Table 5** of this profile for additional transplant waitlist statistics during 2020-2023 in this region.

Kidney Transplant Waitlist for Incident Patients: The 2022 Standardized Waitlist Ratio (SWR) in this region is 1.06, which is 6% more patients waitlisted or living donor transplants than expected in this region. See **Table 5** of this profile for additional transplant waitlist statistics during 2020-2022 in this region.

Influenza Vaccination: On December 31, 2023, 79% of all patients treated in this region were vaccinated against influenza between August 1 and December 31, 2023, compared to 78% nationally. This difference is statistically significant (p<0.05) and is unlikely to be due to random chance. See **Table 6** of this profile for more information about vaccinated patients during 2020-2023 in this region.

Anemia Management: In 2023, 22.8% of eligible hemodialysis patient-months in this region had a hemoglobin value below 10 g/dL, compared to 23.0% nationally. In 2023, 22.0% of eligible peritoneal dialysis patient-months had a hemoglobin value below 10 g/dL, compared to 22.6% nationally. See **Table 7** of this profile for additional anemia management statistics in this region during 2020-2023.

Dialysis Adequacy: Of the eligible hemodialysis patient-months in this region in 2023, 97% had a Kt/V >=1.2, compared to 97% nationally. Of the eligible peritoneal dialysis patient-months in this region in 2023, 92% had a Kt/V >=1.7, compared to 92% nationally. See **Table 8** of this profile for more information on dialysis during 2020-2023 in this region.

Mineral Metabolism: In 2023, 16% of eligible patient-months in this region had a serum phosphorus value >7.0 mg/dL, compared to 16% nationally. Also in 2023, 1.0% of eligible patient-months in this region had a calcium uncorrected value >10.2 mg/dL, compared to 1.0% nationally. See **Table 9** of this profile for more mineral metabolism summaries in this region during 2020-2023.

Vascular Access: In 2023, 13% of the incident hemodialysis patients in this region had an arteriovenous (AV) fistula in use, compared to 12% in the nation. This region's 2023 Standardized Fistula Rate (SFR) for prevalent patients is 60%, which is 2% higher than the national SFR. Of the prevalent patients receiving hemodialysis treatment in this region, the long-term catheter rate was 18%, compared to 18% nationally. See **Table 10** of this profile for additional information about vascular access in this region during 2020-2023.



The tables below provide updates of COVID-19 patient counts, deaths, and hospitalizations among Medicare dialysis patients (Table C1) and Medicare nursing home (NH) dialysis patients (Table C2), 2020-2023. National averages for 2023 are reported for comparison.

TABLE C1. COVID among Medicare Dialysis Patients, 2020-2023 $^{\ast 1}$

		'	This I	United States		
	Outcome Description	2020	2021	2022	2023	2023
	W.F. P.L. C. (A)	52.020	52.252	51 425	50.000	
1	Medicare dialysis patients (n)	53,829	53,273	51,435	50,099	n/a
2	Patients ever infected with COVID (n)	6,146	10,204	14,391	13,232	n/a
	Patients ever infected with COVID (% of 1)	11.2	18.5	27.9	26.6	26.4
3	Patients initially infected with COVID (n)	6,105	5,664	7,095	2,574	n/a
	Patients initially infected with COVID (% of 1)	11.1	10.1	14.0	5.4	5.2
	Deaths among Medicare patients					
4	Deaths (n)	8,842	8,603	7,929	7,404	n/a
5	Deaths among patients ever infected with COVID (n)	1,547	2,453	2,822	2,513	n/a
	Deaths among patients ever infected with COVID (% of 4)	16.7	26.5	35.0	33.9	33.9
	Hospitalizations *2 among Medicare patients					
6	Hospitalizations (n)	31,733	31,161	29,996	28,884	n/a
7	Hospitalizations among patients ever infected with	5,345	7,696	10,297	8,887	n/a
	COVID (n)					
	Hospitalizations among patients ever infected with	16.3	23.6	34.1	30.9	30.7
	COVID (% of 6)			▼		

TABLE C2. COVID among Medicare Dialysis Patients Treated in Nursing Home (NH) Facilities, 2020-2023 *1

				United States		
	Outcome Description	2020	2021	2022	2023	2023
1	Medicare NH dialysis patients (n)	9,255	9,124	8,947	9,025	n/a
2	Patients ever infected with COVID (n)	2,390	3,004	3,739	3,376	n/a
	Patients ever infected with COVID (% of 1)	24.6	31.2	41.4	37.6	37.5
3	Patients initially infected with COVID (n)	2,375	1,488	1,910	826	n/a
	Patients initially infected with COVID (% of 1)	24.4	15.1	21.7	9.7	9.2
	Deaths among Medicare NH patients					
4	Deaths (n)	3,105	2,745	2,630	2,617	n/a
5	Deaths among patients ever infected with COVID (n)	731	971	1,149	1,055	n/a
	Deaths among patients ever infected with COVID (% of 4)	22.4	33.2	43.2	40.6	40.3
	Hospitalizations *2 among Medicare NH patients					
6	Hospitalizations (n)	8,005	7,843	7,654	7,620	n/a
7	Hospitalizations among patients ever infected with	2,157	2,575	3,254	2,875	n/a
	COVID (n)					
	Hospitalizations among patients ever infected with COVID	25.7	31.0	42.2	38.0	37.7
	COVID (% of 6)					

^[*1] Includes patients with Medicare as primary insurer or with a Medicare Advantage plan. Table C2 includes patients who were treated in a nursing home at least one day during the year. See *Guide, Section XVII*.

^[*2] Hospitalization is defined as having at least one day in a hospital from Medicare inpatient claims during the reporting period.

TABLE 1: Summaries for All Dialysis Patients Treated as of December 31 st of each Year *1 , 2020-2023

			This l	United States		
	Measure Name	2020	2021	2022	2023	2023
1a	Patients treated on 12/31 of year (n)	49,010	47,791	46,868	46,572	465,724
1b	Average age (years)	62.3	62.5	62.5	62.7	62.5
1c	Age (% of 1a; sums to 100%)					
	< 18	0.3	0.2	0.3	0.3	0.3
	18-64	51.7	51.1	50.7	50.2	51.0
	65+	48.0	48.7	49.1	49.5	48.7
1d	Female (% of 1a)	41.9	41.7	41.6	41.3	41.8
1e	Race (% of 1a; sums to 100%)					
	African American	28.5	28.5	28.6	28.4	33.9
	Asian/Pacific Islander	6.1	6.4	6.5	6.6	6.9
	Native American	2.0	2.1	2.4	2.9	2.1
	White	63.0	62.6	62.2	61.8	56.8
	Other/Unknown/Missing	0.3	0.3	0.4	0.3	0.3
1f	Ethnicity (% of 1a; sums to 100%)					
	Hispanic	19.3	19.8	20.4	20,9	23.2
	Non-Hispanic	80.6	80.1	79.5	7 9.1	76.8
	Unknown	0.1	0.1	0.1	0.1	0.1
1g	Cause of ESRD (% of 1a; sums to 100%)					
	Diabetes	46.5	45.9	45.3	44.8	44.7
	Hypertension	26.8	27.1	27.3	27.6	30.6
	Glomerulonephritis	11.1	10.7	10.4	10.1	8.9
	Other/Unknown	15.2	15.9	16.6	17.1	15.3
	Missing	0.4	0.4	0.4	0.4	0.5
1h	Average duration of ESRD (years)	5.0	4.9	4.9	4.9	4.9
1i	Years since start of ESRD (% of 1a; sums to 100%)					
	<1	16.0	17.1	16.8	17.1	16.8
	1-2	17.7	17.2	18.3	17.9	17.7
	2-3	13.8	14.0	13.6	14.3	14.2
	3-6	26.1	25.5	25.5	25.1	25.2
	6+	26.3	26.2	25.9	25.5	26.1
1j	Nursing facility patients *2 (% of 1a)	12.7	13.0	13.0	13.3	13.0
1k	Modality (% of 1a; sums to 100%)					
	In-center hemodialysis	84.4	83.7	83.0	82.4	83.2
	Home hemodialysis	2.7	2.9	3.2	3.7	3.5
	Continuous ambulatory peritoneal dialysis	1.6	1.4	1.5	1.6	1.5
	Continuous cycling peritoneal dialysis	11.0	11.5	12.0	11.9	11.5
	Other modality	0.4	0.4	0.4	0.3	0.3

^[*1] See Guide, $Section\ IV$ for detailed information regarding the summaries included in Table 1.

^[*2] 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.

TABLE 2: Characteristics of New Dialysis Patients *1 , 2020-2023 (Form CMS-2728)

				United States		
	Measure Name	2020	2021	2022	2023	2023
	Patient Characteristics					
2a	Total number of patients with forms (n)	12,202	12,684	12,197	12,076	120,759
2b	Age (average years [0-95]) *2	62.8	63.0	62.8	63.0	62.9
2c	Female (% of 2a)	41.0	41.2	40.9	40.6	41.2
2d	Race (% of 2a; sums to 100%)					
	African American	23.0	22.9	23.3	22.6	27.8
	Asian/Pacific Islander	6.0	6.1	6.1	6.1	6.2
	Native American	1.9	2.2	3.0	4.5	3.7
	White	68.9	68.6	67.2	66.3	61.8
	Other/Unknown/Missing	0.2	0.3	0.5	0.5	0.5
2e	Hispanic (% of 2a)	17.1	18.0	18.4	18.6	20.4
2f	Primary cause of ESRD (% of 2a; sums to 100%)					
	Diabetes	47.8	46.8	45.3	45.2	44.6
	Hypertension	26.3	26.8	27.5	27.8	31.1
	Glomerulonephritis	7.5	7.0	7.2	6.9	5.9
	Other/Missing	18.3	19.4	20.0	20.0	18.4
2g	Medical Coverage (% of 2a; sums to 100%)			^		
U	Employer group only	12.8	12.1	12.0	11.4	11.3
	Medicare only	34.6	42.4	43.4	43.3	44.4
	Medicaid only	15.1	15.7	15.7	16.1	15.3
	Medicare and Medicaid only	10.7	7.4	7.4	8.1	7.8
	Medicare and Other	14.1	8.7	9.0	9.3	8.3
	Other/Unknown	8.6	9.8	9.2	8.7	9.1
	None	4.2	3.9	3.3	3.1	3.8
2h	Body Mass Index					
	Male	28.2	28.2	27.9	27.8	27.7
	Female	29.3	29.2	28.8	28.7	28.5
2i	Employment (% of 2a)					
	Six months prior to ESRD treatment	36.8	35.7	38.8	37.8	36.8
	At first ESRD treatment	26.0	26.3	28.9	28.6	27.3
2j	Primary Modality (% of 2a; sums to 100%)					
3	Hemodialysis	86.2	86.1	84.9	84.8	85.1
	CAPD/CCPD	13.8	13.9	15.1	15.2	14.9
	Other/Unknown/Missing	0.0	0.0	0.0	0.0	0.0
2k	Number of incident hemodialysis patients (n)	10,575	10,989	10,434	10,273	102,733
21	Access used at first outpatient dialysis (% of 2k; sums to 100%)					
	Arteriovenous fistula	15.1	13.6	13.9	14.1	13.1
	Arteriovenous graft	2.5	2.4	2.7	2.7	3.0
	Catheter	82.1	83.8	83.1	82.9	83.6
	Other/Unknown/Missing	0.3	0.3	0.3	0.3	0.3
2m	Arteriovenous fistulae placed (% of 2k) *3	27.0	24.8	24.3	24.4	22.8
	Average Lab Values Prior to Dialysis *2					
2n	Hemoglobin (g/dL [5-20])	9.4	9.4	9.4	9.3	9.3
2o	Serum Albumin (g/dL [0.8-6.0])	3.4	3.4	3.4	3.4	3.4
2p	Serum Creatinine (mg/dL [0-33])	6.5	6.5	6.5	6.5	6.5
2q	GFR (ml/min [0-30])	9.9	9.9	9.8	9.9	9.9

(continued)

TABLE 2 (continued): Characteristics of New Dialysis Patients *1, 2020-2023 (Form CMS-2728)

			This	This Region					
	Measure Name	2020	2021	2022	2023	2023			
	Care Prior to ESRD Therapy								
2r	Received ESA prior to ESRD (% of 2a)	16.4	16.3	16.7	17.0	16.6			
2s	Pre-ESRD nephrologist care (% of 2a; sums to 100%)	10.4	10.5	10.7	17.0	10.0			
23	No	15.9	16.1	15.3	14.9	15.6			
	Yes, <6 months	17.1	17.8	18.3	18.3	19.0			
	Yes, 6-12 months	19.4	18.9	18.6	18.4	18.6			
	Yes, >12 months	33.9	32.4	32.2	32.2	29.1			
	Unknown	13.7	14.8	15.6	16.1	17.8			
2t	Informed of transplant options (% of 2a)	83.1	90.0	91.6	92.2	93.0			
2u	Patients not informed of transplant options (n)	1,918	1,126	894	843	8,430			
2u 2v	Reason not informed (% of 2u; may not sum to 100%)	1,510	1,120	0 /4	043	0,430			
_ v	Medically unfit	20.6	37.5	41.3	41.5	38.2			
	Unsuitable due to age	7.8	0.0	0.0	0.0	0.0			
	Psychologically unfit	1.0	0.0	0.0	0.0	0.0			
	Patient declined information	1.2	7.8	11.9	8.1	7.1			
	Patient has not been assessed	65.1	52.4	55,3	51.1	53.8			
	r then has not been assessed	05.1	32.4		31.1	33.0			
	Comorbid Conditions								
2w	Pre-existing Comorbidity (% yes of 2a)								
	Congestive heart failure	27.6	26.8	25.7	25.9	25.7			
	Atherosclerotic heart disease	13.0	12.3	11.2	11.5	10.7			
	Other cardiac disorder	20.5	21.0	20.6	21.4	20.7			
	CVD, CVA, TIA	8.6	8.3	8.1	8.1	8.1			
	Peripheral vascular disease	9.0	8.4	7.5	7.8	7.5			
	History of hypertension	87.3	86.9	86.5	87.0	87.9			
	Diabetes	63.8	63.8	62.7	63.1	63.7			
	Diabetes on insulin	42.9	42.4	41.1	40.9	40.8			
	COPD	8.8	8.2	7.8	7.7	7.5			
	Current smoker	7.0	6.8	6.8	7.0	6.6			
	Cancer	7.3	7.1	6.9	6.9	6.6			
	Alcohol dependence	2.0	2.0	2.0	2.0	1.8			
	Drug dependence	1.8	1.8	2.0	2.0	1.7			
	Inability to ambulate	6.0	5.9	5.5	5.4	5.7			
	Inability to transfer	3.1	3.1	2.9	2.8	3.1			
2x	Average number of comorbid conditions	3.1	3.0	3.0	3.0	3.0			
	Standardized Modality Switch Ratio (SMoSR)	2020^	2021	2022		2022			
2y	Eligible patients (n)	11,250	11,773	11,220		112,313			
2y 2z	Patient-years at risk (n)	8,033	8,312	7,944		79,518			
2z 2aa	Number of modality switches (n)	1,019	1,058	1,011		10,111			
2aa 2ab	Expected number of modality switches (n)	1,019	1,053	998		9,993			
ac 2ac	SMoSR (2aa/2ab)*A	1.05	1.09	1.12		1.01			

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide, $Section\ V$ for detailed information regarding the summaries included in Table 2.

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

^[*3] Includes all patients with AV fistulae, regardless of whether they recieved their hemodialysis treatments using their fistulae.

TABLE 3: Mortality Summary for All Dialysis Patients (2020-2023) A New Dialysis Patients (2020-2022) 10 New Dialysis Patients (2020-2022)

			This Region					
	Measure Name	2020 ^	2021	2022	2023	United States		
	All Patients: Standardized Mortality Ratio (SMR)							
3a	Patients (n)	68,122	68,391	67,304	66,598	734,025		
3b	Patient years (PY) at risk (n)	33,081	48,562	47,315	46,956	481,341		
3c	Deaths (n)	6,592	9,698	8,927	8,319	88,886		
3d	Expected deaths (n)	6,750	10,394	9,196	8,200	84,378		
3e	Withdrawal from dialysis prior to death (% of 3c)	26.7	24.5	26.2	26.9	22.5		
3f	Deaths due to infections (% of 3c)	11.4	11.0	10.5	9.9	9.3		
3g	Deaths due to cardiac causes (% of 3c)	44.1	42.7	43.8	44.3	44.9		
3h	Deaths due to liver disease (% of 3c)	1.4	1.3	1.3	1.3	1.2		
3i	Dialysis unrelated deaths (n; excluded from SMR)	40	53	58	53	540		
3j	SMR (3c /3d) *A, *2	0.95	0.91	0.96	0.99	1.05		
3k	P-value *B		0.025			n/a		
	New Patients: First-Year Standardized Mortality Ratio				/			
	(FySMR)							
31	Patients (n)	12,202	12,684	12,197		121,970		
3m	Patient years (PY) at risk (n)	6,826	7,053	6,865		68,650		
3n	Deaths (n)	1,893	2,250	1,995		19,947		
3о	Expected deaths (n)	1,903	2,250	1,976		19,765		
3p	Withdrawal from dialysis prior to death (% of 3n)	25.8	26.5	26.1		22.3		
3q	Deaths due to infections (% of 3n)	10.2	9.8	9.4		8.9		
3r	Deaths due to cardiac causes (% of 3n)	38.4	39.1	38.2		40.2		
3s	Deaths due to liver disease (% of 3n)	2.4	2.5	2.4		2.3		
3t	FySMR (3n/3o)*A,*2	0.96	0.97	0.98		1.00		
3u	P-value *B					n/a		

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide, Section VI for detailed information regarding the summaries included in Table 3.

^[*2] The SMRs (3j, 3t) are not shown if there are fewer than 3 expected deaths (3d,3o).

TABLE 4: Hospitalization Summary for Medicare Dialysis Patients *1 , 2020-2023 $^{^{\wedge}}$

			This I	Region	'	United States
	Measure Name	2020 ^	2021	2022	2023	2023
	M. Para Di Lais Deliante		•	•		
10	Medicare Dialysis Patients	51 065	54.094	52 500	52 224	571,711
4a	Medicare dialysis patients (n)	54,865	54,984	53,508	52,324	
4b	Patient years (PY) at risk (n)	26,152	38,166	36,774	35,752	363,732
	Standardized Hospitalization Ratio (SHR) for					
	Days Hospitlizated *2					
4c	Total days hospitalized (n)	297,060	425,024	423,316	402,201	4,345,040
4d	Expected days hospitalized (n)	312,434	446,815	444,167	419,245	4,298,181
4e	SHR for Days (4c/4d) *A	0.91	0.91	0.92	0.93	1.01
4f	P-value for SHR (Days) *B	0.137	0.029	0.070	0.017	n/a
	Standardized Hospitalization Ratio (SHR) for					
	Hospital Admissions *2, *3					
4g	Total admissions (n)	37,321	51,905	49,317	50,448	526,499
4h	Expected total admissions (n)	37,769	52,651	50,229	51,426	526,581
4i	SHR for Admissions (4g/4h) *A	0.96	0.96	0.95	0.95	0.99
4j	P-value for SHR (Admissions) *B					n/a
4k	Patients with septicemia (% of 4a)	13.2	12.4	12.4	12.3	12.1
41	One day admissions (% of 4g)	9.2	8.8	8.4	8.4	8.1
4m	Average length of stay (days per admission)	7.5	7.7	8.0	7.7	8.1
4n	Admissions that originate in the ED (% of 4g)	81.6	84.0	84.8	84.7	85.8
	Standardized Emergency Department Encounter Ratio	11.				
	(SEDR) *2					
4o	Emergency department (ED) events (n)	26,310	30,388	26,002	21,948	225,643
4p	Expected number of emergency department events (n)	26,557	30,629	26,380	22,337	227,332
4q	SEDR (40/4p) *A	0.99	1.00	1.00	0.99	0.99
4r	P-value for SEDR *B	0.120	< 0.01	0.124	0.029	n/a
	Standardized Ratio of ED Encounters Occurring					
	within 30 Days of Hospital Discharge (ED30)					
4s	Index discharges (n)	19,488	26,186	22,476	19,946	199,462
4t	Total ED visits within 30 days of hospital discharge (n)	3,043	3,988	3,311	2,877	28,770
4u	Expected total ED visits within 30 days of hospital discharge (n)	2,764	3,729	3,067	2,610	26,097
4v	ED30 Ratio (4t/4u) *A	1.14	1.10	1.11	1.13	1.10
	Standardized Readmission Ratio $(SRR)^{*2}$					
4x	Index discharges (n)	29,542	47,871	46,267	46,058	460,580
4y	Total readmissions (n)	7,937	12,542	12,026	12,184	121,838
4z	Expected total readmissions (n)	7,590	12,121	11,562	11,696	116,959
4aa	SRR $(4y/4z)^{*A}$	1.02	1.01	1.01	1.01	1.04

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See *Guide, Section VII* for detailed information regarding the summaries included in Table 4. SEDR and ED30 statistics include only patients with Medicare as primary insurer and exclude patients with Medicare Advantage plans. All other summaries include patients with Medicare as primary insurer or with a Medicare Advantage plan.

^[*2] SHRs and SEDR are not shown if there are less than five patient years at risk. SRR and ED30 ratios are not shown if fewer than 11 index discharges in the year.

^[*3] Rows 4g-4j exclude index COVID hospitalizations, while rows 4l-4n include all admissions. Row 4k includes diagnoses in any position on a hospital inpatient claim.

TABLE 5: Transplantation and Waitlist Summary for All Dialysis Patients (2020-2023) $^{^{^{^{^{^{^{^{1}}}}}}}}$ & New Dialysis Patients (2020-2022) $^{^{^{^{^{^{^{1}}}}}}}$ under Age 75 $^{^{*^{1}}}$

			This I	Region		1
	Measure Name	2020 ^	2021	2022	2023	United States
	Transplantation: All Transplants					2023
5a	Eligible patients (n)	54,554	54,721	53,489	52,474	579,438
5b	Transplants (n)	1,276	1,957	1,979	2,064	20,811
	Transplantation: First Transplants					
5c	Eligible patients (n)	50,934	51,166	49,993	49,021	538,578
5d	Patient years (PY) at risk (n)	24,690	36,442	35,194	34,571	354,513
5e	Actual 1st transplants (n)	1,141	1,746	1,781	1,839	18,526
5f	Expected 1st transplants (n)	1,128	1,713	1,749	1,813	18,586
5g	Standardized Transplantation Ratio (STR; 5e/5f)	1.13	1.12	1.12	1.11	0.99
5h	P-value *B	< 0.01	0.026	0.060	0.065	n/a
	Dialysis Patients on the Waitlist					
5i	Eligible patients (n)	52,885	54,010	52,588	51,320	513,201
5j	Patient-months at risk (n) *3	310,525	458,270	442,115	434,640	4,346,396
5k	Patient-months on the waitlist (% of 5j) *3	18.1	17.8	17.7	17.2	16.5
51	Patient-months on the waitlist by subgroup (%) *C, *2					
	Age < 40	27.9	27.4	26.9	26.4	25.1
	Age 40-74	17.0	16.7	16.7	16.2	15.5
	Male	19.2	18,9	18.8	18.3	17.7
	Female	16.5	16.3	16.1	15.7	14.9
	African American	18.1	18.0	18.0	17.2	15.7
	Asian/Pacific Islander	26.0	25.6	25.6	24.6	24.3
	Native American	14.4	14.7	14.4	13.9	11.6
	White, Hispanic	17.5	16.8	16.1	15.6	16.5
	White, Non-Hispanic	17.7	17.5	17.5	17.3	16.2
	Other/Unknown race	16.0	16.8	16.6	16.6	15.6
	Diabetes	14.6	14.4	14.6	14.4	14.0
	Non-diabetes	21.2	20.8	20.4	19.6	18.6
	Previous kidney transplant	30.7	30.6	29.9	28.3	28.0
	No previous kidney transplant	17.1	16.8	16.7	16.3	15.7
	<2 years since start of ESRD	14.6	14.5	15.0	14.9	13.3
	2-4 years since start of ESRD	22.5	22.3	22.3	21.7	21.3
	5+ years since start of ESRD	17.7	17.3	16.6	15.7	15.8
5m	Age-adjusted percentage of patient-months waitlisted	17.9	17.8	17.6	17.1	16.0
5n	Patient-months on the waitlist in active status (% of 5j) *C	11.2	10.6	10.0	9.7	9.7
5o	Age-adjusted % of patient-months waitlisted in active status	11.0	10.5	9.8	9.6	9.4
	New Dialysis Patients: Standardized Waitlist Ratio	2020^	2021	2022		2022
	$(SWR)^{*3}$					
5p	Eligible Patients (n)	8,191	8,528	8,132		81,315
5q	Patient-years at risk (n)	6,485	7,599	7,295		72,949
5r	First waitlist events (n) *3	649	731	726		7,258
5s	Expected 1st waitlist events (n) *3	603	735	770		7,697
5t	SWR (5r/5s)*A,*3	1.26	1.16	1.06		0.94
5u	P-value for SWR *B	0.090	0.033	0.043		n/a

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide Section VIII for detailed information regarding the transplant and waitlist summaries included in Table 5. Eligible patient-months (5j) include patients assigned to the facility on the last day of each month.

^[*2] The waitlist percentage for each subgroup is calculated as a rate of wailtilsted patient-months to patient-months at risk in each subgroup. A missing value indicates that there were no eligible patients in the subgroup.

^[*3] An event is defined as a waitlisting or living-donor transplant. SWR is not shown if a facility has less than 2 expected waitlisted events or less than 11 eligible patients.

TABLE 6: Influenza Vaccination Summary All Dialysis Patients *1, Flu Seasons during August 2020-December 2023

			This Region					
	Measure Name	2020	2021	2022	2023	2023		
5a	Eligible patients on 12/31 (n)	51,845	50,689	49,756	49,379	493,793		
бb	Patients excluded due to medical contraindication (n)	523	555	1,221	863	8,631		
	Full Flu Season (Aug. 1-Mar. 31 of following year)					2022		
бc	Patients vaccinated (% of 6a)	87.6	84.3	82.1		81.7		
6d	P-value *2 (for 6c compared to U.S. value *3)	< 0.01	< 0.01	0.067		n/a		
6e	Reason for no vaccination (% of 6a)							
	Declined vaccination	6.7	8.2	8.0		8.3		
	Other reason or vaccine data not available	5.7	7.5	9.9		10.0		
	Half Flu Season (Aug. 1-Dec. 31)					2023		
6f	Patients vaccinated (% of 6a)	87.1	83.2	81.1	78.5	77.7		
6g	P-value *2 (for 6f compared to U.S. value *4)	< 0.01	< 0.01	0.037	< 0.01	n/a		
6h	Patients vaccinated by subgroup (%) *5							
	Medicare	87.9	84.3	82.2	79.9	79.0		
	Medicare Advantage	88.6	85.3	83.3	81.0	80.0		
	Medicare as primary insurer	87.6	83.7	81.4	78.9	78.1		
	Non-Medicare	82.3	76.9	75.1	71.9	71.6		
	Dual Medicare/Medicaid eligible	86.2	82.2	80.3	78.2	77.4		
	Age < 18	83.8	73.1	63.9	60.1	59.8		
	Age 18-39	80.5	73.3	71.6	68.5	67.0		
	Age 40-64	85.7	81.1	78.9	75.5	74.8		
	Age 65-74	88.5	85.5	83.3	80.9	80.4		
	Age 75+	90.4	87.7	85.7	84.3	83.5		
	Male	87.0	82.9	80.5	77.7	76.9		
	Female	87.2	83.5	81.7	79.4	78.6		
	African American	82.2	78.1	76.9	72.9	73.3		
	Asian/Pacific Islander	91.1	87.0	85.4	83.7	82.9		
	Native American	87.8	82.2	77.7	77.1	78.4		
	White	89.0	85.1	82.6	80.2	79.5		
	Other/unknown race	55.5	54.8	52.5	67.2	68.5		
	Hispanic	89.4	85.7	84.2	82.3	81.6		
	< 1 year since start of ESRD	81.8	76.3	72.9	71.2	69.9		
	1-2 years since start of ESRD	87.8	83.7	81.3	77.7	76.7		
	3+ years since start of ESRD	88.8	85.8	84.4	82.1	81.5		

^[*1] See Guide, $Section\ X$ for detailed information regarding the summaries included in Table 6. All Dialysis Patients are those treated on December 31 st of the reporting year.

^[*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 (08/01-03/31): 87% (2020), 83% (2021), 82% (2022).

^[*4] Compared to the U.S. value for that year and time period (08/01-12/31): 86% (2020), 82% (2021), 81% (2022), 78% (2023).

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

TABLE 7: Anemia Management Summaries for Adult Dialysis Patients *1 , 2020-2023 ^

			This Region					
	Measure Name	2020 ^	2021	2022	2023	2023		
	Hemoglobin and ESA for Adult Hemodialysis (HD) Patients							
7a	Eligible HD patients (n)	47,704	52,873	51,497	50,844	503,111		
7b	Eligible HD patient-months (n) *C	252,135	491,494	476,085	471,576	4,715,756		
7c	Average hemoglobin (g/dL) (average of 7b)	10.8	10.8	10.7	10.8	10.7		
7d	Hemoglobin categories (% of 7b; sums to 100%)							
	<10 g/dL	21.8	22.7	23.1	22.8	23.0		
	10-<11 g/dL	33.5	34.0	33.7	32.6	32.9		
	11-12 g/dL	29.3	28.4	28.3	29.5	29.4		
	>12 g/dL	13.8	12.7	12.3	13.0	12.5		
	Missing/Out of range	1.6	2.2	2.6	2.0	2.2		
7e	ESA prescribed (% of 7b)	74.8	75.5	75.5	76.2	76.2		
	Hemoglobin and ESA for Adult Peritoneal Dialysis (PD) Patients							
7f	Eligible PD patients (n)	6,773	8,335	8,348	8,426	83,413		
7g	Eligible PD patient-months (n) *C	32,917	66,777	66,859	67,733	677,331		
7h	Average hemoglobin (g/dL) (average of 7g)	11.0	11.0	10.9	11.0	11.0		
7i	Hemoglobin categories (% of 7g; sums to 100%)							
	<10 g/dL	22.1	21.8	22.5	22.0	22.6		
	10-<11 g/dL	28.2	27.9	27.7	27.1	27.5		
	11-12 g/dL	26.7	26.4	26.1	26.7	26.5		
	>12 g/dL	20.3	20.5	19.9	21.1	20.2		
	Missing/Out of range	2.8	3.4	3.8	3.0	3.2		
7j	ESA prescribed (% of 7g)	54.8	53.8	53.2	53.5	54.4		
	Standardized Transfusion Ratio (STrR)	2020^	2021	2022	2023	2023		
7k	Adult Medicare patients (n)	33,511	28,363	24,385	21,548	230,428		
71	Patient years at risk (n)	14,602	17,021	14,419	12,288	124,317		
7m	Total transfusions (n)	4,846	5,741	4,568	3,851	40,831		
7n	Expected total transfusions (n)	4,988	5,938	4,788	4,029	40,884		
7o	STrR(7m/7n) *A, *1	0.92	0.93	0.92	0.91	0.99		
7р	P-value*B	0.159	0.118	0.090	< 0.01	n/a		

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See *Guide, Section XI* for detailed information regarding the summaries included in Table 7. Transfusion summaries include adult Medicare dialysis patients only and not shown if there are fewer than 10 patient-years at risk (70).

TABLE 8: Dialysis Adequacy Summaries for All Dialysis Patients *1 , 2020-2023 $^{^{\wedge}}$

				United States		
	Measure Name	2020 ^	2021	2022	2023	2023
	Adult Hemodialysis (HD) Adequacy					
8a	Eligible HD patients (n)	47,704	52,873	51,497	50,844	503,111
8b	Eligible HD patient-months (n) *C	252,135	491,494	476,085	471,576	4,715,756
8c	Average serum albumin (g/dL) (average of 8b)	3.9	3.9	3.9	3.9	3.9
8d	Serum albumin categories (% of 8b; sums to 100%)					
	< 3.0 g/dL	2.4	2.2	1.9	1.8	1.7
	3.0-<3.5 g/dL	9.8	8.8	8.2	8.1	7.9
	3.5-<4.0 g/dL	41.4	37.3	37.4	40.0	39.6
	>=4.0 g/dL	43.8	48.6	48.7	47.2	47.6
	Missing	2.6	3.1	3.8	2.9	3.1
8e	Ultrafiltration rate average (ml/kg/hr) (average of 8b)	7.6	7.6	7.6	7.6	7.7
8f	Ultrafiltration rate categories (% of 8b; sums to 100%)					
	<=13 (ml/kg/hr)	86.6	87.1	86.2	86.6	86.3
	>13 (ml/kg/hr)	7.8	7.6	7.7	7.6	7.8
	Out of Range (>=20 ml/kg/hr)	2.4	2.3	2.5	2.6	2.4
	Missing	3.2	3.0	3.7	3.2	3.5
8g	Eligible HD Kt/V patients (n) *2	45,078	50,164	48,806	47,974	474,859
3h	Eligible HD Kt/V patient-months (n) *C, *2	236,034	458,765	443,739	437,846	4,378,458
8i	Average Kt/V (average of 8h)*2	1.6	1.6	1.6	1.6	1.6
8j	Kt/V categories (% of 8h; sums to 100%) *2					
	<1.2	1.5	1.6	1.9	1.5	1.5
	1.2-<1.8	69.9	70.5	71.5	69.9	69.9
	>=1.8	27.4	26.3	24.7	27.2	27.0
	Missing/Out of range	1.2	1.6	1.9	1.4	1.6
	Adult Peritoneal Dialysis (PD) Adequacy	•				
8k	Eligible PD patients (n)	6,773	8,335	8,348	8,426	83,413
81	Eligible PD patient-months (n) *C	32,917	66,777	66,859	67,733	677,331
3m	Average Weekly Kt/V (average of 81)*2	2.2	2.2	2.2	2.2	2.2
8n	Weekly Kt/V categories (% of 81; sums to 100%)*2					
	<1.7	4.7	5.0	5.3	5.0	5.0
	1.7-<2.5	69.1	68.3	67.9	67.6	67.5
	>=2.5	23.4	23.7	23.5	24.3	24.1
	Missing/Out of range	2.8	3.0	3.3	3.1	3.4
Во	Average serum albumin (g/dL) (average of 8l)	3.6	3.7	3.7	3.7	3.7
8p	Serum Albumin Categories (% of 81; sums to 100%)					
	< 3.0 g/dL	7.2	6.2	5.6	5.1	4.9
	3.0-<3.5 g/dL	23.9	21.3	20.4	20.2	20.2
	3.5-<4.0 g/dL	42.9	41.4	42.7	44.5	44.4
	>=4.0 g/dL	22.9	27.8	27.7	27.0	27.2
	Missing	3.0	3.4	3.7	3.1	3.3

(continued)

TABLE 8 (continued): Dialysis Adequacy Summaries for All Dialysis Patients *1, 2020-2023^

				United State		
	Measure Name	2020 ^	2021	2022	2023	2023
	Pediatric Kt/V *2					
8q	Eligible Pediatric HD patients (n)	58	73	77	78	778
8r	Eligible Pediatric HD patient-months (n) *C	252	480	530	532	5,315
8s	Average Kt/V (average of 8r)	1.7	1.8	1.8	1.7	1.7
8t	Kt/V categories (% of 8r; sums to 100%)					
	<1.2	3.5	2.4	2.8	2.6	3.0
	1.2-<1.8	59.2	56.6	52.1	58.6	58.6
	>= 1.8	32.1	33.0	34.6	29.6	28.5
	Missing/Out of Range	5.2	8.0	10.5	9.2	10.0
8u	Eligible Pediatric PD Patients (n)	82	97	94	92	920
8v	Eligible Pediatric PD patient-months (n) *C	383	711	707	700	7,001
8w	Average Weekly Kt/V (average of 8v)	2.4	2.4	2.4	2.4	2.4
8x	Weekly Kt/V categories (% of 8v; sums to 100%)					
	<1.7	12.7	11.5	12.2	12.1	12.9
	1.7-<2.5	46.0	49.0	46.7	47.6	46.5
	>=2.5	31.2	31.7	30.7	32.1	31.0
	Missing/Out of Range	10.1	7.8	10.4	8.2	9.7

^{[^, *}A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide, Section XII for detailed information regarding the summaries included in Table 8.

^[*2] Kt/V summaries are supplemented with Medicare claims if missing in EQRS. 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 period is selected for PD Kt/V. PD Kt/V values for 2020 were calculated for quarter 4 only due to data exceptions. As a result, there are fewer eligible PD patients than what is reported (8u-v) for Kt/V summaries since the 3-month lookback window includes data covered by CMS' COVID-19 ECE policy.

TABLE 9: Mineral Metabolism Summaries for All Adult Dialysis Patients *1, 2020-2023 ^

	This Region					United State
	Measure Name	2020 ^	2021	2022	2023	2023
9a	Eligible adult patients (n)	53,796	59,547	58,205	57,626	569,949
9b	Eligible adult patient-months (n) *C	285,738	559,710	544,374	540,661	5,406,606
9c	Average Phosphorus (mg/dL) *2	5.5	5.5	5.5	5.5	5.5
9d	Phosphorus categories (% of 9b; sums to 100%) *2					
	<3.5 mg/dL	7.3	6.8	7.4	7.3	7.4
	3.5-4.5 mg/dL	22.8	22.1	22.6	22.3	22.3
	4.6-5.5 mg/dL	29.5	29.1	28.2	27.4	27.4
	5.6-7.0 mg/dL	22.5	22.8	22.5	23.9	23.7
	>7.0 mg/dL	15.4	16.1	15.9	16.3	16.3
	Out of Range (<0.01 mg/dL or >20 mg/dL)	0.0	0.0	0.0	0.0	0.0
	Missing	2.5	3.1	3.5	2.7	2.9
9e	Average Calcium Uncorrected (mg/dL)	8.9	8.9	8.9	8.8	8.8
9f	Calcium Uncorrected categories (% of 9b; sums to 100%)					
	<8.4 mg/dL	20.2	18.7	19.0	20.4	20.3
	8.4-10.2 mg/dL	76.4	77.4	76.8	76.1	76.1
	>10.2 mg/dL	1.2	1.2	1.1	1.0	1.0
	Out of Range (<0.01 mg/dL or >20 mg/dL)	0.0	0.0	0.0	0.0	0.0
	Missing	2.2	2.7	3.1	2.5	2.7
9g	Average uncorrected calcium > 10.2 mg/dL (%) *3	1.7	2.0	2.1	1.8	1.9

 $^{[^{\}land}, *A - *C]$ See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide, Section XIII for detailed information regarding the summaries included in Table 9.

^[*2] 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.

^[*3] Hypercalcemia is averaged from uncorrected serum or plasma calcium values over a rolling 3-month period. Eligible patients included in the hypercalcemia summary differs slightly from what is reported in 9b since patients must be 18 as of the first day of the 3-month period.

TABLE 10: Vascular Access Information for all Adult Dialysis Patients and Access-Related Infection Summaries for all Medicare Patients *1, 2020-2023 ^

			This Region				
	Measure Name	2020 ^	2021	2022	2023	2023	
	Vascular Access *2						
10a	Prevalent adult hemodialysis (HD) patients (n)	49,963	55,732	54,211	53,277	527,191	
10b	Prevalent adult hemodialysis patient months (n) *C	261,919	512,607	496,162	488,553	4,885,526	
10c	Vascular access type in use (% of 10b; sums to 100%)						
	Arteriovenous fistula	63.4	62.0	60.6	59.8	58.7	
	Arteriovenous graft	15.9	15.6	15.2	15.2	16.3	
	Catheter	19.3	20.1	21.8	23.2	23.0	
	Other/Missing	1.4	2.2	2.4	1.9	2.0	
10d	Standardized Fistula Rate (SFR)*3	63.9	62.2	60.7	60.1	58.3	
10e	Long-Term Catheter Rate *4	14.3	15.4	17.0	17.9	17.9	
	Vascular Access at First Treatment						
10f	Incident adult hemodialysis patients (n)	5,721	11,080	10,526	10,446	104,458	
10g	Vascular access type in use (% of 10f; sums to 100%)			7			
	Arteriovenous fistula	14.1	13.6	13.5	13.3	12.5	
	Arteriovenous graft	2.9	2.8	3.0	3.0	3.3	
	Catheter	80.7	82.2	81.9	79.7	80.2	
	Other/Missing	2,2	1.4	1.6	4.0	4.0	
10h	Arteriovenous fistulae in placed (% of 10f) *5	14.8	14.3	14.2	14.1	13.1	
	Infection: Peritoneal dialysis (PD)	2020^	2021	2022	2023	2023	
10i	Eligible PD patients (n)	5,030	4,782	4,301	3,989	39,886	
10j	Eligible PD patient-months (n) *C	25,723	33,725	30,329	27,442	274,420	
10k	PD catheter infection rate per 100 PD patient-months	2.5	2.6	2.5	2.4	2.5	
101	P-value *6 of 10k (compared to U.S. value *7)	0.203	0.109	0.146	0.186	n/a	

n/a = not applicable

[^, *A - *C] See **Appendix: Table Footnotes** on page 21.

^[*1] See Guide, Section XIV for detailed information regarding the summaries included in Table 10.

^[*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] 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.

^[*4] 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. Long-term catheter rate (10e) values in 2020 were calculated for quarter 4 only due to data limitations.

^[*5] Includes all patients with fistulae, regardless of whether or not they received their hemodialysis treatments using their fistulae.

^[*6] 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.

^[*7] Compared to U.S. value for that year: 2.56 (2020), 2.60 (2021), 2.46 (2022), and 2.45 (2023).

TABLE 11: Comorbidities Reported on Inpatient Medicare Claims for Medicare Dialysis Patients Treated as of December 31 $^{\rm st}$ of Each Year *1 , 2020-2023

			This Region					
	Measure Name	2020	2021	2022	2023	2023		
l 1a	Medicare dialysis patients on 12/31(n)	39,140	37,797	36,599	35,820	364,529		
11b	Comorbidity (% yes of 11a)							
	Infections							
	AIDS/HIV positive	0.7	0.7	0.7	0.7	0.8		
	Intravascular/implanted device-related *2	4.4	4.7	4.7	4.7	4.9		
	Hepatitis B	0.4	0.4	0.4	0.4	0.5		
	Hepatitis other	1.9	1.7	1.7	1.5	1.5		
	Metastatic	1.4	1.5	1.6	1.6	1.6		
	Pneumonia	3.4	3.2	3.5	3.7	3.8		
	Tuberculosis	0.3	0.3	0.3	0.3	0.3		
	Other	18.3	18.0	18.5	18.7	19.1		
	Cardiovascular							
	Cardiac arrest	0.9	1.0	0.9	0.9	1.0		
	Cardiac dysrhythmia	18.5	19.3	19.5	20.0	19.9		
	Cerebrovascular disease	6.8	7.1	7.2	7.5	7.9		
	Congestive heart failure	29.3	30.3	31.2	31.8	32.2		
	Ischemic heart disease	25.7	26.2	26.4	26.5	26.9		
	Myocardial infarction	7.0	7.6	7.9	8.2	8.6		
	Peripheral vascular disease *3	16.3	17.0	16.9	17.3	17.8		
	Other							
	Alcohol dependence	1.4	1.5	1.5	1.6	1.5		
	Anemia	2.6	3.1	3.3	3.3	3.3		
	Cancer	3.2	3.5	3.6	3.7	3.8		
	Chronic obstructive pulmonary disease	14.5	14.5	14.8	15.1	14.9		
	Diabetes	35.4	36.2	36.5	36.8	37.6		
	Drug dependence	1.4	1.4	1.4	1.5	1.3		
	Gastrointestinal tract bleeding	2.8	3.0	3.0	3.0	3.2		
	Hyperparathyroidism	19.2	20.1	21.1	21.9	21.8		
11c	Average number of comorbid conditions	2.2	2.2	2.3	2.3	2.3		

^[*1] See Guide, Section XV for detailed information regarding the summaries included in Table 11. Based on patients with Medicare as primary insurer on 12/31 each year

^[*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, 2020-2023 ^

			This I	United States		
	Measure Name	2020 ^	2021	2022	2023	2023
	Patient Characteristics					
12.1a	Patients treated on 12/31 (n)	5,902	5,980	5,910	6,043	60,499
12.1c	Age (% of 12.1a; sums to 100%)					
	18-64	34.4	33.5	32.4	31.9	32.5
	65+	65.6	66.5	67.6	68.0	67.4
12.1d	Female (% of 12.1a)	47.4	47.6	48.2	47.3	47.5
12.1e	Race (% of 12.1a; sums to 100%)					
	African American	29.0	29.7	30.1	30.4	36.7
	Asian/Pacific Islander	3.8	4.0	4.3	4.4	4.3
	Native American	1.9	2.0	2.0	2.4	1.7
	White	65.1	64.1	63.4	62.6	57.0
	Other/Unknown/Missing	0.2	0.2	0.2	0.3	0.2
12.1f	Ethnicity (% of 12.1a; sums to 100%)					
	Hispanic	13.0	13.4	13.6	13.7	14.6
	Non-Hispanic	87.0	86.6	86.3	86.2	85.3
	Unknown	0.1	0.0	0.0	0.1	0.1
12.1g	Cause of ESRD (% of 12.1a; sums to 100%)			•		
	Diabetes	56.9	56.3	54.8	53.8	52.7
	Hypertension	24.5	24.5	25.3	25.4	28.5
	Glomerulonephritis	5.2	5.2	5.0	5.1	4.4
	Other	13.1	13.6	14.6	15.2	13.8
	Unknown/Missing	0.3	0.3	0.4	0.6	0.7
12.1i	Years since start of ESRD (% of 12.1a; sums to 100%)					
	<1	20.4	22.5	21.1	21.6	21.5
	1-2	16.3	14.7	16.3	15.4	15.5
	2-3	12.5	12.6	11.9	12.9	12.7
	3-6	25.6	25.5	25.4	24.8	24.6
	6+	25.3	24.7	25.3	25.4	25.6
12.1k	Modality (% of 12.1a; sums to 100%)					
	In-center hemodialysis	94.3	93.5	92.9	91.7	90.7
	Home hemodialysis	2.4	2.9	3.9	5.1	6.3
	Continuous ambulatory peritoneal dialysis	0.3	0.3	0.2	0.2	0.2
	Continuous cycling peritoneal dialysis	2.2	2.4	2.2	2.2	2.1
	Other modality	0.9	0.9	0.8	0.7	0.7

(continued)

TABLE 12 (continued): Selected Summaries for Nursing Home (NH) Patients *1 , 2020-2023 $^{^{\wedge}}$

	Measure Name	,		United States		
		2020 ^	2021	2022	2023	2023
	Characteristics of New Dialysis Patients					
12.2a	Total number of patients with forms (n)	2,288	2,501	2,332	2,338	23,376
12.2g	Medical coverage (% of 12.2a; sums to 100%)	2,200	2,001	2,002	2,550	25,576
12.25	Employer group only	3.4	3.0	2.5	2.4	2.3
	Medicare (alone or combined w/ other insurance)	79.8	79.6	82.4	83.0	83.0
	Medicaid only	10.4	10.5	9.6	10.0	9.9
	Other/Unknown/None	6.5	6.9	5.4	4.7	4.8
12.2k	Number of incident hemodialysis patients (n)	2,334	2,550	2,386	2,400	23,997
12.21	Access used at first outpatient dialysis (% of 12.2k; sums to 100%)	_,	_,_,	_,	_,	
	Arteriovenous fistula	7.7	6.7	7.3	7.6	6.3
	Arteriovenous graft	2.1	1.7	2.1	2.1	2.3
	Catheter	88.0	89.4	87.9	87.6	88.6
	Other/Unknown/Missing	2.2	2.2	2.6	2.7	2.8
12.2m	Arteriovenous fistulae placed (% of 12.2k)	18.1	16.5	16.3	16.6	14.5
12.2s	Pre-ESRD nephrologist care (% of 12.2a; sums to 100%)					
	No	18.4	18.3	17.1	16.2	16.4
	Yes, < 6 months	19.5	20.0	20.7	21.4	21.9
	Yes, 6-12 months	18.0	16.8	15.8	16.5	16.2
	Yes, > 12 months	24.9	23.6	23.9	23.3	19.9
	Unknown	19.3	21.4	22.6	22.6	25.5
12.2t	Informed of transplant options (% of 12.2a)	77.1	84.1	86.6	86.9	88.1
	Mortality summary for all NH dialysis patients					
12.3a	Patients (n)	10,915	11,047	11,007	11,192	136,455
12.3b	Patient years (PY) at risk (n)	4,443.9	6,689.3	6,564.2	6,709.1	70,772.2
12.3c	Deaths (n)	2,121	2,881	2,721	2,704	30,250
12.3d	Expected deaths (n)	1,792.0	2,593.4	2,334.4	2,150.2	22,705.7
	b Death Rate (per 100 PYs at risk)	47.5	42.8	41.4	40.0	42.7
12.3j	Standardized Mortality Ratio (12.3c/12.3d)	1.15	1.09	1.14	1.22	1.33
12.3e	Withdrawal from dialysis prior to death (% of 12.3c)	33.3	30.7	32.0	32.2	26.3
	Hospitalization summary for NH Medicare dialysis patients					
12.4a	Medicare dialysis patients (n)	9,833	9,950	9,899	10,030	121,369
12.4b	Patient years (PY) at risk (n)	3,949.6	5,934.2	5,825.3	5,875.4	61,519.5
12.4g	Total admissions (n)	11,965	17,134	16,263	17,218	185,577
12.4h	Expected total admissions (n)	8,175.7	11,119.3	10,789.8	11,392.1	120,713.8
2.4g/12.4	b Hospitalization Rate (per 100 PYs at risk)	292.3	279.6	267.3	282.6	301.7
12.4i	Standardized Hospitalization Ratio (12.4g/12.4h)	1.41	1.49	1.45	1.46	1.54
	Diagnoses associated with hospitalization (% of 12.4a)					
	Septicemia	26.5	24.2	24.0	24.1	22.3
	Acute myocardial infarction	12.1	12.2	12.2	12.4	11.4
	Congestive heart failure	48.5	47.4	48.4	48.4	44.8
	Cardiac dysrhythmia	36.0	35.5	34.9	34.9	31.7
	Cardiac arrest	4.3	4.3	3.9	3.8	3.8

(continued)

TABLE 12 (continued): Selected Summaries for Nursing Home (NH) Patients *1, 2020-2023 ^

				United State		
	Measure Name	2020 ^	2021	2022	2023	2023
	Comorbidities reported on Medicare claims					
2.11a	Medicare dialysis patients on 12/31 (n)	5,303	5,339	5,265	5,347	56,273
2.11b	Comorbidity (% yes of 12.11a)					
	Infections					
	AIDS/HIV positive	0.9	0.9	0.9	0.9	1.0
	Intravascular/implanted device-related	7.6	7.9	7.9	8.3	8.9
	Hepatitis B	0.8	0.7	0.7	0.7	0.9
	Hepatitis other	3.7	3.3	3.2	3.0	3.1
	Metastatic	4.0	4.0	4.3	4.3	4.5
	Pneumonia	9.4	9.0	9.4	9.9	10.5
	Tuberculosis	0.4	0.3	0.3	0.4	0.3
	Other	40.7	39.7	39.7	40.0	41.7
	Cardiovascular					
	Cardiac arrest	2.2	2.4	2.3	2.4	2.6
	Cardiac dysrhythmia	38.1	39.9	39.7	40.1	40.3
	Cerebrovascular disease	17.4	18.2	18.6	18.9	20.1
	Congestive heart failure	54.5	55.4	56.7	57.0	58.0
	Ischemic heart disease	47.6	47.9	47.0	46.9	48.1
	Myocardial infarction	13.6	14.5	14.7	15.2	16.3
	Peripheral vascular disease	35.5	36.5	35.9	36.1	37.6
	Anemia					
12.7b	Eligible adult HD patient-months (n) *C	34,817	71,832	70,254	71,878	718,784
12.7d	Hemoglobin (HD) < 10 g/dL (% of 12.7b)	29.0	30.3	29.9	29.7	30.3
12.7e	ESA prescribed (% of 12.7b)	79.6	79.5	79.4	80.3	80.0
12.7f	Eligible adult PD patients (n)	253	459	446	460	4,557
12.7g	Eligible adult PD patient-months (n) *C	940	2,663	2,531	2,650	26,501
12.7i	Hemoglobin (PD) $< 10 \text{ g/dL } (\% \text{ of } 7\text{g})$	28.4	27.3	28.0	28.3	28.3
12.7j	ESA prescribed (% of 7g)	56.9	55.4	56.0	56.2	56.2
	Dialysis Adequacy *2					
12.8b	Eligible adult HD Kt/V patient-months (n) *C	33,168	68,311	66,809	68,424	684,240
12.8j	Kt/V (HD) < 1.2 (% of 12.8b)	2.2	2.2	2.6	2.1	2.3
12.8k	Eligible adult PD Kt/V patients (n)	171	459	446	460	4,557
12.81	Eligible adult PD Kt/V patient-months (n) *C	406	2,663	2,531	2,650	26,501
12.8n	Kt/V (PD) < 1.7 (% of 12.81)	8.9	8.7	8.3	9.0	8.9
	Vascular Access *3					
12.10b	Prevalent adult hemodialysis patient months (n) *C	35,937	75,091	73,178	72,823	728,229
12.10c	Arteriovenous fistula in use (% of 12.10b)	51.7	51.4	50.1	50.2	48.1
12.10e	Long-Term Catheter Rate (LTCR)	21.7	20.9	22.4	22.6	23.3

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 for detailed information regarding the summaries included in Table 12.

^[*2] Kt/V summaries are supplemented with Medicare claims if missing in EQRS. 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. PD Kt/V summaries select the most recent value collected within 4 months of the reporting month.

^[*3] 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. Other or missing access types are counted as catheter in use in the numerator. LTCR includes patients using a catheter continuously for three months or longer.

Appendix: Table Footnotes

This appendix provides information that applies to multiple tables.

[^] CMS Extraordinary Circumstances Exceptions: Mortality (Table 3), Hospitalization (Table 4), Transplantation (Table 5), Waitlist (Table 5), Transfusion (Table 6), and PD infection (Table 10) summaries exclude data from March through June 2020 from all calculations. Readmission statistics (Table 4) are further limited to index discharges between January 1-30, 2020 and July-December 2020. Anemia Management (Table 7), Dialysis Adequacy (Table 8), Mineral Metabolism (Table 9), and Vascular Access (Table 10) summaries exclude data from January through June 2020 from all calculations.

[*A] This value is the ratio of observed events to expected events.

[*B] 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.

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

