Dear State Surveyor:

This report is designed to provide a comparative summary of treatment patterns and patient outcomes for End Stage Renal Disease (ESRD) patients in this state, as compared to all patients in the United States. The statistics reported here include dialysis patients treated during 2019-2022 in the chronic dialysis facilities in this state and are based primarily on Medicare claims and data collected for CMS. Selected statistics from this profile are summarized below and state-to-state comparisons of key statistics are provided in the *Maps and Tables of Key Statistics by State*.

ESRD CORE Pre-Survey Data Tool

For each facility with CCN xxxxxx in your state, key data elements from the DFR reviewed in the Core Survey Pre-survey Preparation task are reported in the QDFR_FY24_SEP_UPDATE_xxxxxx.pdf available on the secure Dialysis Reports website (www.DialysisData.org).

Selected highlights for this State are provided on the first few pages. For a complete description of the methods and data reported here please see the *Guide to the State Profiles for FY 2024*. 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 state, the following changes have been incorporated into the State Profile for FY 2024:

- The Standardized Transfusion Ratio (STrR) reported in Table 7 now includes an adjustment for COVID-19.
- Prevalent and incident patient summaries for nursing home patients were added to Table 15.
- The emergency department (ED) measure-Standardized Hospitalization Ratio (SHR) reported in Table 4 was replaced with the following two NQF endorsed measures:
  - Standardized Emergency Department Encounter Ratio (SEDR)
  - Standardized Ratio of Emergency Department Encounters Occurring within 30 Days of Hospital Discharge (ED30)

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.

State Highlights

Patient Characteristics: On December 31st, 2022, 11.5% of patients in this state were treated in a nursing home during the year, compared to 12.7% nationally. See **Table 1** for detailed summaries of all patients treated during 2019-2022 in this state.

Form CMS-2728 collected data from 2,078 incident patients in this state in 2022. **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 2022, the average age of patients in this state at incidence was 63 years, compared to the national average of 64 years. Asian patients made up 10% of the patients in this state compared to 6% nationally. Among the incident patients in this state in 2022, 89.5% were informed of their transplant options, compared to 92.5% nationally. Also in 2022, 16.6% of incident patients in this state were not under the care of a nephrologist prior to ESRD therapy, compared to 15.6% nationally.

Mortality: There were 1,609 deaths among the patients treated in this state during 2022, while 1,628 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 (2019-2022) national reference value of 1.0. Of the deaths in this state in 2022, 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 2019-2022 in this state.

First Year Mortality: There were 401 deaths among the incident patients treated in this state during 2021, while 401 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 1.00, which is 0% higher than expected. Of the deaths among incident patients in this state in 2021, 26% were preceded by withdrawal from dialysis, compared to the national average of 23%. See **Table 3** of this profile for more detailed first year mortality statistics during 2019-2021 in this state.

Hospitalization: The Standardized Hospitalization Ratio (SHR) of observed to expected hospital admissions for patients in this state during 2022 is 0.90, indicating that these patients had 10% fewer admissions than expected based on characteristics of patients treated in this state. The Standardized Readmission Ratio (SRR) of observed to expected hospital readmissions in this state during 2022 is 0.99, indicating that these patients had 1% fewer readmissions than expected. See **Table 4** of this profile for additional hospitalization statistics during 2019-2022 in this state.

Transplantation: 311 patients under age 75 in this state during 2022 received their first transplant, while 307 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 state is 0.97, which is 3% lower than expected. See **Table 5** of this profile for additional transplantation statistics during 2019-2022 in this state.

Kidney Transplant Waitlist for Prevalent Patients: The 2022 age-adjusted percent waitlisted in this state is 14.7%, which is 1.7% lower than the national adjusted percentage. See **Table 5** of this profile for additional transplant waitlist statistics during 2019-2022 in this state.

Kidney Transplant Waitlist for Incident Patients: The 2021 Standardized Waitlist Ratio (SWR) in this state is 0.98, which is 2% fewer patients waitlisted or living donor transplants than expected in this state. See **Table 5** of this profile for additional transplant waitlist statistics during 2019-2021 in this state.

Influenza Vaccination: On December 31, 2022, 71% of all patients treated in this state were vaccinated against influenza between August 1 and December 31, 2022, compared to 74% 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 2019-2022 in this state.

Anemia Management: In 2022, 23.1% of eligible hemodialysis patient-months in this state had a hemoglobin value below 10 g/dL, compared to 23.4% nationally. In 2022, 20.9% of eligible peritoneal dialysis patient-months had a hemoglobin value below 10 g/dL, compared to 22.9% nationally. See **Table 7** of this profile for additional anemia management statistics in this state during 2019-2022.

Dialysis Adequacy: Of the eligible hemodialysis patient-months in this state in 2022, 96% had a Kt/V >=1.2, compared to 96% nationally. Of the eligible peritoneal dialysis patient-months in this state in 2022, 92% had a Kt/V >=1.7, compared to 91% nationally. See **Table 8** of this profile for more information on dialysis during 2019-2022 in this state.

Mineral Metabolism: In 2022, 15% of eligible patient-months in this state had a serum phosphorus value >7.0 mg/dL, compared to 16% nationally. Also in 2022, 1.2% of eligible patient-months in this state had a calcium uncorrected value >10.2 mg/dL, compared to 1.1% nationally. See **Table 9** of this profile for more mineral metabolism summaries in this state during 2019-2022.

Vascular Access: In 2022, 13% of the incident hemodialysis patients in this state had an arteriovenous (AV) fistula in use, compared to 12% in the nation. This state's 2022 Standardized Fistula Rate (SFR) for prevalent patients is 59%, which is 0% higher than the national SFR. Of the prevalent patients receiving hemodialysis treatment in this state, the long-term catheter rate was 17%, compared to 17% nationally. See **Table 10** of this profile for additional information about vascular access in this state during 2019-2022.

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) in 2021 and 2022 Q1-Q4. National averages for 2022 Q4 are reported for comparison.

TABLE C1. COVID among Medicare Dialysis Patients, 2021-2022 [*1]

	Measure Name	2021	This State 2022 Q1: Jan-Mar	Q2: Apr-Jun	Q3: Jul-Sep	Q4: Oct-Dec	United States 2022 Q4: Oct-Dec
1	Medicare dialysis patients treated during the quarter (n)	9,681	7,675	7,576	7,527	7,439	412,781
2	Patients ever infected with COVID [prior to or during current quarter] (n)	1,847	1,762	1,760	1,949	2,036	112,941
	Patients ever infected with COVID (% of 1)	17.6	22.4	23.0	25.7	27.1	27.4
3	Patients initially infected with COVID in current quarter (n)	1,018	505	205	324	246	13,737
	Patients initially infected with COVID in current quarter (% of 1)	9.7	6.9	2.9	4.2	3.2	3.3
	Deaths among Medicare patients						
4	Deaths (n)	1,581	419	332	339	366	20,504
5	Deaths among patients ever infected with COVID (n)	446	166	100	118	132	7,379
	Deaths among patients ever infected with COVID (% of 4)	24.4	37.8	28.3	34.4	37.3	36.0
	Hospitalizations [*2] among Medicare patients						
6	Hospitalizations (n)	5,657	2,241	2,155	2,137	2,157	119,988
7	Hospitalizations among patients ever infected with COVID (n)	1,389	787	645	733	772	42,931
	Hospitalizations among patients ever infected with COVID (% of 6)	22.3	33.9	29.4	34.4	35.0	35.8

TABLE C2. COVID among Medicare Dialysis Patients Treated in Nursing Home (NH) Facilities, 2021-2022 [*1]

	Measure Name	2021	This State 2022 Q1: Jan-Mar	Q2: Apr-Jun	Q3: Jul-Sep	Q4: Oct-Dec	United States 2022 Q4: Oct-Dec
1	Medicare NH dialysis patients treated during the quarter (n)	1,654	785	787	770	763	42,440
2	Patients ever infected with COVID [prior to or during current quarter] (n)	544	345	314	330	343	19,120
	Patients ever infected with COVID (% of 1)	30.8	42.7	38.2	43.4	43.2	45.1
3	Patients initially infected with COVID in current quarter (n)	268	114	38	60	59	3,304
	Patients initially infected with COVID in current quarter (% of 1)	15.1	15.4	5.0	8.9	7.1	7.8
	Deaths among Medicare NH patients						
4	Deaths (n)	503	105	97	95	102	5,692
5	Deaths among patients ever infected with COVID (n)	177	51	37	42	46	2,586
	Deaths among patients ever infected with COVID (% of 4)	31.7	47.6	38.2	44.5	46.7	45.4
	Hospitalizations [*2] among Medicare NH patients						
6	Hospitalizations (n)	1,425	487	480	469	466	25,972
7	Hospitalizations among patients ever infected with COVID (n)	466	211	178	194	207	11,520
	Hospitalizations among patients ever infected with COVID COVID (% of 6)	30.7	40.6	33.8	41.7	42.0	44.4

[*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 quarter. 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 31st of each Year [*1] , 2019-2022

	Measure Name	This State				United States
		2019	2020	2021	2022	2022
1a	Patients treated on 12/31 of year (n)	8,747	8,578	8,308	8,070	451,941
1b	Average age (years)	62.3	62.4	62.6	62.7	63.0
1c	Age (% of 1a; sums to 100%)					
	< 18	0.2	0.2	0.2	0.2	0.2
	18-64	52.4	52.1	51.2	50.6	49.8
	65+	47.4	47.7	48.6	49.2	50.0
1d	Female (% of 1a)	42.5	42.4	42.3	42.1	42.1
1e	Race (% of 1a; sums to 100%) [*2]					
	African American	27.8	28.1	28.3	28.3	34.8
	Asian/Pacific Islander	10.6	10.7	10.9	11.0	6.9
	Native American	3.3	3.3	3.3	3.5	1.4
	White	57.9	57.5	57.1	56.7	56.6
	Other/Unknown/Missing	0.4	0.4	0.4	0.5	0.3
1f	Ethnicity (% of 1a; sums to 100%)					
	Hispanic	12.2	12.4	12.7	13.1	20.3
	Non-Hispanic	87.7	87.4	87.1	86.8	79.6
	Unknown	0.2	0.1	0.1	0.1	0.1
1g	Cause of ESRD (% of 1a; sums to 100%)					
	Diabetes	47.9	47.6	47.1	46.4	45.0
	Hypertension	27.4	27.2	27.2	27.4	31.1
	Glomerulonephritis	11.0	10.9	10.5	10.2	9.1
	Other/Unknown	13.4	13.9	14.8	15.5	14.2
	Missing	0.4	0.4	0.4	0.6	0.5
1h	Average duration of ESRD (years)	4.9	4.9	4.9	4.9	5.0
1i	Years since start of ESRD (% of 1a; sums to 100%)					
	<1	16.6	16.2	17.1	16.9	16.7
	1-2	17.2	17.7	17.3	18.2	18.2
	2-3	14.0	13.8	14.1	13.7	13.4
	3-6	26.2	26.0	25.4	25.4	25.3
	6+	26.0	26.3	26.1	25.7	26.4
1j	Nursing facility patients [*3] (% of 1a)	14.3	11.4	11.7	11.5	12.7
1k	Modality (% of 1a; sums to 100%) [*4]					
	In-center hemodialysis	86.3	85.0	84.3	83.9	83.7
	Home hemodialysis	2.2	2.7	3.1	3.4	3.3
	Continuous ambulatory peritoneal dialysis	1.6	1.6	1.4	1.5	1.3
	Continuous cycling peritoneal dialysis	9.6	10.2	10.7	11.0	11.5
	Other modality	0.3	0.4	0.5	0.2	0.2

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 [*1] , 2019-2022 (Form CMS-2728)

Measure Name	This State				United States
	2019	2020	2021	2022	2022
Patient Characteristics					
2a Total number of patients with forms (n)	2,212	2,143	2,210	2,078	116,385
2b Age (average years [0-95]) [*2]	63.2	63.0	63.3	63.3	63.9
2c Female (% of 2a)	41.8	41.7	41.7	41.8	41.6
2d Race [*3] (% of 2a; sums to 100%)					
African American	22.1	23.5	23.5	23.8	28.9
Asian/Pacific Islander	10.4	10.3	10.6	10.5	6.2
Native American	2.8	3.0	3.0	3.7	2.0
White	64.5	62.9	62.5	61.5	62.4
Other/Unknown/Missing	0.2	0.4	0.4	0.6	0.5
2e Hispanic (% of 2a)	10.9	11.2	11.7	11.9	17.8
2f Primary cause of ESRD (% of 2a; sums to 100%)					
Diabetes	50.4	49.6	47.9	47.3	45.0
Hypertension	25.8	25.8	26.6	27.2	31.2
Glomerulonephritis	7.3	7.1	6.9	7.2	5.9
Other/Missing	16.5	17.5	18.6	18.3	17.9
2g Medical Coverage [*4] (% of 2a; sums to 100%)					
Employer group only	12.8	12.8	11.8	11.9	11.4
Medicare only	31.1	33.7	42.6	44.3	46.9
Medicaid only	14.5	16.0	16.2	14.8	13.5
Medicare and Medicaid only	11.5	10.2	7.1	7.4	7.5
Medicare and Other	18.0	15.0	9.8	10.0	8.7
Other/Unknown	7.8	8.3	9.5	8.7	8.6
None	4.2	4.0	3.0	2.9	3.4
2h Body Mass Index [*5] (Median; Weight/Height^2)					
Male	28.4	28.4	28.4	28.1	27.8
Female	29.2	29.5	29.3	29.0	28.7
2i Employment [*6] (% of 2a)					
Six months prior to ESRD treatment	37.7	36.9	35.3	38.3	37.5
At first ESRD treatment	27.7	27.1	26.4	29.2	27.7
2j Primary Modality (% of 2a; sums to 100%)					
Hemodialysis	88.1	87.2	87.1	85.9	85.4
CAPD/CCPD	11.9	12.8	12.9	14.1	14.6
Other/Unknown/Missing	0.0	0.0	0.0	0.0	0.0
2k Number of incident hemodialysis patients (n)	1,944	1,856	1,913	1,776	99,429
2l Access used at first outpatient dialysis (% of 2k; sums to 100%)					
Arteriovenous fistula	17.0	15.4	13.5	13.8	12.6
Arteriovenous graft	2.8	2.5	2.6	3.0	2.9
Catheter	79.8	81.8	83.6	82.9	84.2
Other/Unknown/Missing	0.3	0.3	0.3	0.3	0.3
2m Arteriovenous fistulae placed (% of 2k) [*7]	29.6	26.5	24.8	23.8	22.1

(continued)

TABLE 2 (continued): Characteristics of New Dialysis Patients [*1], 2019-2022 (Form CMS-2728)

	Measure Name	This State				United States
		2019	2020	2021	2022	2022
	Average Lab Values Prior to Dialysis[*2]					
2n	Hemoglobin (g/dL [5-20])	9.4	9.4	9.3	9.3	9.3
2o	Serum Albumin (g/dL [0.8-6.0])	3.3	3.3	3.4	3.4	3.4
2p	Serum Creatinine (mg/dL [0-33])	6.5	6.6	6.6	6.6	6.5
2q	GFR (ml/min [0-30])	10.5	10.4	10.4	10.4	10.7
	Care Prior to ESRD Therapy					
2r	Received ESA prior to ESRD (% of 2a)	17.3	16.9	17.0	17.4	16.3
2s	Pre-ESRD nephrologist care (% of 2a; sums to 100%)					
	No	18.0	18.2	18.0	16.6	15.6
	Yes, <6 months	15.2	16.0	16.8	17.9	18.8
	Yes, 6-12 months	19.9	19.2	19.2	18.6	19.0
	Yes, >12 months	35.5	34.6	33.1	33.7	29.9
	Unknown	11.5	11.9	12.8	13.2	16.8
2t	Informed of transplant options (% of 2a)	80.4	81.0	88.4	89.5	92.5
2u	Patients not informed of transplant options (n)	354	343	200	156	8,720
2v	Reason not informed (% of 2u; may not sum to 100%) [*8]					
	Medically unfit	13.8	14.3	37.4	40.7	41.0
	Unsuitable due to age	13.8	10.7	0.0	0.0	0.0
	Psychologically unfit	1.2	0.9	0.0	0.0	0.0
	Patient declined information	1.1	1.0	7.2	10.0	11.3
	Patient has not been assessed	67.4	63.2	49.8	54.1	55.7
	Comorbid Conditions					
2w	Pre-existing Comorbidity (% yes of 2a)					
	Congestive heart failure	29.6	28.4	28.0	26.7	25.9
	Atherosclerotic heart disease [*9]	13.7	13.3	12.9	12.2	10.9
	Other cardiac disorder [*9]	21.3	20.3	20.8	20.3	20.4
	CVD, CVA, TIA	8.9	8.8	8.3	8.5	8.2
	Peripheral vascular disease	10.2	9.9	9.3	8.1	7.3
	History of hypertension	87.8	87.7	87.5	86.3	87.0
	Diabetes [*9]	64.8	64.6	64.2	63.9	63.5
	Diabetes on insulin	44.0	42.7	42.3	40.5	40.9
	COPD	9.3	8.9	8.4	8.0	7.8
	Current smoker	7.8	7.5	7.3	7.2	6.5
	Cancer	7.5	6.9	6.8	6.7	6.8
	Alcohol dependence	1.9	2.0	1.9	1.9	1.7
	Drug dependence	1.7	1.6	1.6	1.7	1.6
	Inability to ambulate	6.3	6.1	5.8	5.8	6.0
	Inability to transfer	3.0	3.0	2.8	2.9	3.2
2x	Average number of comorbid conditions	3.2	3.1	3.1	3.0	3.0

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 recieved 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 (2019-2022)^ & New Dialysis Patients (2019-2021)[*1]^

	Measure Name	This State				United States
		2019	**2020^**	**2021**	**2022**	
	All Dialysis Patients					**2022**
3a	Patients (n=number)	12,090	12,006	11,993	11,727	722,973
3b	Patient years (PY) at risk (n)	8,652	5,799	8,478	8,191	469,758
3c	Deaths (n)	1,480	1,187	1,745	1,609	95,877
3d	Expected deaths (n)	1,516	1,189	1,850	1,628	93,718
3e	Withdrawal from dialysis prior to death (% of 3c)	31.4	26.5	24.5	26.7	21.8
3f	Deaths due to infections (% of 3c)	11.5	11.6	10.8	10.2	9.5
3g	Deaths due to cardiac causes (% of 3c)	45.8	43.3	41.2	41.5	43.4
3h	Deaths due to liver disease (% of 3c)	1.9	1.5	1.3	1.2	1.2
3i	Dialysis unrelated deaths [*2] (n; excluded from SMR)	10	7	9	10	588
3j	Standardized Mortality Ratio (SMR; 3c /3d)	0.96	0.98	0.92	0.99	1.02
3k	P-value [*3]	.	.	0.146	.	n/a
	New Dialysis Patients	**2019^**	**2020^**	**2021**		**2021^**
3l	Patients (n=number)	2,212	2,143	2,210		123,746
3m	Patient years (PY) at risk (n)	1,565	1,195	1,225		68,604
3n	Deaths (n)	312	342	401		22,481
3o	Expected deaths (n)	310	342	401		22,439
3p	Withdrawal from dialysis prior to death (% of 3n)	33.3	26.2	26.2		23.0
3q	Deaths due to infections (% of 3n)	9.6	10.3	10.2		9.2
3r	Deaths due to cardiac causes (% of 3n)	41.0	36.7	38.3		39.7
3s	Deaths due to liver disease (% of 3n)	2.7	2.4	2.2		2.2
3t	Standardized Mortality Ratio (SMR; 3n /3o)	1.00	0.96	1.00		1.00
3u	P-value [*3]	.	.	.		n/a

n/a = not applicable.
[^] Data from March through June 2020 are excluded from all calculations due to data exceptions.
[*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], 2019-2022 [^]

	Measure Name	This State				United States
		2019	2020 [^]	2021	2022	2022
	Medicare Dialysis Patients					
4a	Medicare dialysis patients (n)	10,077	9,923	9,890	9,609	587,907
4b	Patient years (PY) at risk (n)	7,013	4,712	6,857	6,584	375,156
	Days Hospitalized Statistics					
4c	Total days hospitalized (n)	77,377	53,504	76,269	75,628	4,570,871
4d	Expected days hospitalized (n)	80,606	55,736	79,667	78,744	4,519,800
4e	Standardized Hospitalization Ratio for Days (4c/4d)	0.90	0.90	0.90	0.89	1.01
4f	P-value [*2]	0.090	0.072	0.094	0.074	n/a
	Admission Statistics [*3]					
4g	Total admissions (n)	10,755	6,715	9,327	8,833	516,052
4h	Expected total admissions (n)	10,837	6,799	9,461	8,997	516,092
4i	Standardized Hospitalization Ratio for Admissions (4g/4h)	0.94	0.93	0.92	0.90	0.99
4j	P-value [*2]	0.102	0.157	0.065	0.108	n/a
4k	Patients with septicemia (% of 4a)	11.8	12.5	11.6	11.8	12.1
4l	One day admissions (% of 4g)	9.6	9.2	9.0	8.5	8.2
4m	Average length of stay (days per admission)	7.1	7.6	7.8	8.1	8.4
4n	Admissions that originate in the ED (% of 4g)	79.6	80.6	81.9	83.1	86.1
	Standardized Emergency Department Encounter Ratio (SEDR)					
4o	Emergency department (ED) events (n)	8,587	4,965	5,762	4,971	286,318
4p	Expected number of emergency department events (n)	8,644	5,003	5,835	5,068	288,887
4q	SEDR (4o/4p)	1.05	1.08	1.08	1.06	0.99
4r	P-value [*2]	0.117	0.116	0.109	0.083	n/a
	Standardized Ratio of ED Encounters Occurring within 30 Days of Hospital Discharge (ED30)					
4s	Index discharges (n)	7,033	3,693	4,972	4,306	241,109
4t	Total ED visits within 30 days of hospital discharge (n)	1,186	578	760	637	35,665
4u	Expected total ED visits within 30 days of hospital discharge (n)	1,152	530	712	601	33,641
4v	ED30 Ratio (4t/4u)	1.14	1.31	1.19	1.19	1.06
4w	P-value for ED30 Ratio [*2]	0.107	0.147	0.096	0.097	n/a
	Readmission Statistics (SRR)					
4x	Index discharges (n)	9,616	5,334	8,616	8,306	465,156
4y	Total readmissions (n)	2,547	1,432	2,256	2,162	121,063
4z	Expected total readmissions (n)	2,455	1,372	2,178	2,074	116,172
4aa	SRR (4y/4z)	1.00	1.03	1.00	0.99	1.04

n/a = not applicable.

[^] Data from March through June 2020 are excluded from all calculations due to data exceptions. Readmission Statistics are further limited to index discharges between January 1-30, 2020 and between July-December, 2020.

[*1] The ED statistics (SEDR, ED30) include 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; 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.

[*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 (2019-2022^) & New Dialysis Patients (2019-2021^) under Age 75[*1]

	Measure Name	This State				United States
		2019	2020^	2021	2022	
	Transplantation: All Transplants					**2022**
5a	Eligible patients (n)	9,543	9,461	9,429	9,146	565,345
5b	Transplants (n)	327	224	345	346	19,542
	Transplantation: First Transplants					
5c	Eligible patients (n)	8,885	8,816	8,802	8,534	524,756
5d	Patient years (PY) at risk (n)	6,390	4,255	6,249	5,972	342,603
5e	Actual 1st transplants [*2] (n)	290	200	307	311	17,553
5f	Expected 1st transplants (n)	286	199	303	307	17,614
5g	Standardized Transplantation Ratio (STR; 5e/5f)	1.00	0.95	0.97	0.97	0.99
5h	P-value [*3]	.	.	.	.	n/a
	Waitlist: All Dialysis Patients					
5i	Eligible patients (n)	9,389	9,166	9,303	8,969	502,289
5j	Patient-months at risk (n) [*4]	79,937	53,588	78,606	75,053	4,202,944
5k	Patient-months on the waitlist (% of 5j) [*4]	16.1	15.5	15.3	15.1	17.0
5l	Patient-months on the waitlist by subgroup (%) [*4 *5]					
	Age < 40	25.4	24.7	24.0	23.7	26.1
	Age 40-74	15.1	14.5	14.4	14.2	16.0
	Male	17.1	16.5	16.3	16.1	18.1
	Female	14.8	14.1	13.9	13.6	15.3
	African American	16.1	15.4	15.5	15.8	16.1
	Asian/Pacific Islander	23.3	22.6	22.4	22.1	25.0
	Native American	13.0	15.6	13.9	12.5	10.4
	White, Hispanic	17.6	17.5	17.2	16.6	17.8
	White, Non-Hispanic	16.1	15.8	15.8	15.2	16.3
	Other/Unknown race	20.3	18.9	16.1	14.0	16.9
	Diabetes	12.8	12.4	12.2	12.3	14.1
	Non-diabetes	19.2	18.3	18.1	17.5	19.3
	Previous kidney transplant	29.0	27.6	26.9	26.8	29.4
	No previous kidney transplant	15.1	14.6	14.4	14.2	16.0
	<2 years since start of ESRD	13.1	13.0	12.7	12.6	13.1
	2-4 years since start of ESRD	20.3	19.4	19.4	19.4	22.1
	5+ years since start of ESRD	15.4	14.6	14.4	14.1	16.8
5m	Age-adjusted percentage of patient-months waitlisted	15.8	15.2	15.1	14.7	16.4
	Waitlist: New Dialysis Patients	**2019^**	**2020^**	**2021**		**2021^**
5n	Eligible Patients (n)	1,428	1,397	1,438		80,548
5o	Patient-years (PY) at risk (n)	1,015	1,106	1,284		71,910
5p	First waitlist events (n) [*6]	103	112	122		6,838
5q	Expected 1st waitlist events (n) [*6]	99	108	130		7,293
5r	Standardized Waitlist Ratio (SWR; 5p/5q) [*6]	1.03	1.07	0.98		0.93
5s	P-value [*3]	.	0.132	.		n/a

n/a = not applicable.
[^] Data from March through June 2020 are excluded from all calculations due to data exceptions.
[*1] See *Guide Section VIII (Transplantation) and Section IX (Waitlist)*.
[*2] Among first transplants that occurred after the start of dialysis from 2019-2022, 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 wailtilsted 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 All Dialysis Patients [1] , Flu Seasons during August 2019-December 2022 ^

	Measure Name	This State				United States
		2019 ^	2020	2021	2022	2022
6a	Eligible patients on 12/31 (n)	9,281	9,079	8,815	8,622	482,807
6b	Patients excluded due to medical contraindication (n)	82	93	98	224	12,564
	Full Flu Season (Aug. 1-Mar. 31 of following year)					**2021**
6c	Patients vaccinated (% of 6a)	85.6	86.0	83.2		83.1
6d	P-value [2] (for 6c compared to U.S. value) [3]	0.032	0.047	0.050		n/a
6e	Reason for no vaccination (% of 6a)					
	Declined vaccination	5.9	6.5	7.9		8.7
	Other reason or vaccine data not available	8.6	7.5	8.9		8.2
	Half Flu Season (Aug. 1-Dec. 31)					**2022**
6f	Patients vaccinated (% of 6a)	83.4	84.5	81.0	71.4	73.7
6g	P-value [2] (for 6f compared to U.S. value) [4]	0.053	0.040	0.037	0.045	n/a
6f	Patients vaccinated by subgroup (%) [5]					
	Medicare	83.9	85.1	81.9	72.3	74.9
	Medicare Advantage	86.4	86.7	84.2	73.3	76.0
	Medicare as primary insurer	84.0	85.0	81.5	71.9	74.3
	Medicare as secondary insurer	84.1	86.5	82.4	71.6	72.0
	Non-Medicare	79.1	80.1	74.4	64.7	66.3
	Dual Medicare/Medicaid eligible	82.8	83.6	79.9	71.5	73.8
	Age < 18	80.7	75.4	73.6	50.0	47.7
	Age 18-39	79.3	78.1	71.1	63.4	64.3
	Age 40-64	82.4	83.5	79.2	69.5	71.8
	Age 65-74	84.8	85.5	82.9	72.9	75.7
	Age 75+	84.9	87.3	85.4	75.3	77.4
	Male	83.3	84.5	80.6	70.8	73.2
	Female	83.6	84.5	81.5	71.9	74.1
	African American	83.0	82.6	79.7	71.8	70.7
	Asian/Pacific Islander	86.5	89.1	84.7	77.0	75.8
	Native American	85.4	85.7	79.7	66.4	72.6
	White	85.3	87.7	83.0	72.7	75.2
	Other/unknown race	70.1	68.3	68.5	56.1	58.1
	Hispanic	83.5	86.9	81.7	75.2	77.6
	< 1 year since start of ESRD	78.4	79.8	74.4	61.9	63.1
	1-2 years since start of ESRD	84.0	85.2	81.8	71.3	73.5
	3+ years since start of ESRD	85.1	86.0	83.3	75.4	78.1

n/a = not applicable
[^] Data from January through March 2020 are excluded from all calculations due to data exceptions.
[*1] All Dialysis Patients are those treated on December 31; see Guide, Section VIII.
[*2] A p-value greater than or equal to 0.05 indicates that the difference between percent of patients vaccinated at the state 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): 86% (2019), 87% (2020), 83% (2021).
[*4] Compared to the U.S. value for that year and time period (08/01-12/31): 85% (2019), 86% (2020), 82% (2021), 74% (2022).
[*5] A missing value indicates that there were no eligible patients in the subgroup.

TABLE 7: Anemia Management Summaries for Adult Dialysis Patients [*1] , 2019-2022[^]

	Measure Name	This State				United States
		2019	2020[^]	2021	2022	2022
	Hemoglobin and ESA for Adult Hemodialysis (HD) Patients					
7a	Eligible HD patients (n)	9,520	8,393	9,304	9,001	495,985
7b	Eligible HD patient-months (n) [*2]	89,198	44,138	85,713	82,338	4,610,901
7c	Average hemoglobin [*3] (g/dL) (average of 7b)	10.8	10.8	10.7	10.7	10.7
7d	Hemoglobin categories (% of 7b; sums to 100%)					
	<10 g/dL	22.1	21.7	22.3	23.1	23.4
	10-<11 g/dL	34.4	33.4	33.5	33.3	34.1
	11-12 g/dL	28.3	28.4	27.8	27.5	28.2
	>12 g/dL	12.4	13.4	12.5	12.1	11.8
	Missing/Out of range	2.8	3.0	3.8	4.0	2.6
7e	ESA prescribed (% of 7b)	73.6	73.1	73.2	73.2	75.9
	Hemoglobin and ESA for Adult Peritoneal Dialysis (PD) Patients					
7f	Eligible PD patients (n)	1,322	1,193	1,469	1,464	80,814
7g	Eligible PD patient-months (n) [*2]	10,660	5,782	11,702	11,644	652,066
7h	Average hemoglobin [*3] (g/dL) (average of 7g)	10.9	11.0	11.0	11.0	10.9
7i	Hemoglobin categories (% of 7g; sums to 100%)					
	<10 g/dL	22.1	21.0	20.6	20.9	22.9
	10-<11 g/dL	28.7	27.5	27.2	27.2	28.1
	11-12 g/dL	25.7	26.2	26.0	25.9	26.0
	>12 g/dL	18.7	19.9	20.6	20.6	19.1
	Missing/Out of range	4.9	5.4	5.5	5.5	3.8
7j	ESA prescribed (% of 7g)	54.9	53.6	52.5	51.9	53.9
	Standardized Transfusion Ratio (STrR)	**2019**	**2020[^]**	**2021**	**2022**	**2022**
7k	Adult Medicare patients (n)	6,542	6,184	5,326	4,613	276,801
7l	Patient years (PY) at risk (n)	4,136	2,699	3,202	2,734	154,931
7m	Total transfusions (n)	1,282	903	1,084	868	51,554
7n	Expected total transfusions (n)	1,319	929	1,120	908	51,599
7o	Standardized Transfusion Ratio [*4]	0.94	0.92	0.93	0.90	0.99
7p	P-value [*5]	0.134	0.115	0.127	0.132	n/a

n/a = not applicable.

[^] Data from January through June 2020 are excluded from hemoglobin and ESA summaries and data from March through June 2020 are excluded from STrR calculations due to data exceptions.

[*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 that 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] , 2019-2022[^]

	Measure Name	This State				United States
		2019	2020[^]	2021	2022	2022
	Adult Hemodialysis (HD) Adequacy					
8a	Eligible HD patients (n)	9,520	8,393	9,304	9,001	495,985
8b	Eligible HD patient-months (n) [*2]	89,198	44,138	85,713	82,338	4,610,901
8c	Average serum albumin (g/dL) (average of 8b)	4.1	3.8	3.9	3.9	3.9
8d	Serum albumin categories (% of 8b; sums to 100%)					
	< 3.0 g/dL	2.6	2.5	2.3	2.0	1.9
	3.0-<3.5 g/dL	10.7	10.4	9.5	8.6	8.2
	3.5-<4.0 g/dL	43.3	43.0	39.4	38.9	37.7
	>=4.0 g/dL	40.9	41.5	45.5	46.8	48.3
	Missing	2.6	2.6	3.2	3.7	3.8
8e	Ultrafiltration rate average [*3] (ml/kg/hr) (average of 8b)	7.6	7.7	7.7	7.7	7.7
8f	Ultrafiltration rate categories (% of 8b; sums to 100%)					
	<=13 (ml/kg/hr)	84.8	86.2	86.8	86.3	86.3
	>13 (ml/kg/hr)	7.8	7.8	7.5	7.6	7.7
	Out of Range (>=20 ml/kg/hr)	2.6	2.4	2.3	2.4	2.3
	Missing	4.8	3.5	3.4	3.7	3.6
8g	Eligible HD Kt/V patients (n) [*4]	9,184	7,927	8,822	8,524	469,863
8h	Eligible HD Kt/V patient-months (n) [*2 *4]	85,249	41,308	79,984	76,687	4,294,486
8i	Average Kt/V (average of 8h) [*3 *4]	1.6	1.6	1.6	1.6	1.6
8j	Kt/V categories (% of 8h; sums to 100%) [*4]					
	<1.2	1.7	1.7	1.8	1.9	1.9
	1.2-<1.8	71.0	70.9	71.3	71.7	72.3
	>=1.8	26.0	26.1	25.2	24.5	23.9
	Missing/Out of range	1.3	1.3	1.6	1.8	1.9
	Adult Peritoneal Dialysis (PD) Adequacy					
8k	Eligible PD patients (n)	1,322	1,193	1,469	1,464	80,814
8l	Eligible PD patient-months (n) [*2]	10,660	5,782	11,702	11,644	652,066
8m	Average Weekly Kt/V (average of 8l) [*3 *4]	2.2	2.2	2.2	2.2	2.2
8n	Weekly Kt/V categories (% of 8l; sums to 100%) [*4]					
	<1.7	5.2	5.1	4.8	5.2	5.3
	1.7-<2.5	68.1	68.8	68.1	68.5	67.8
	>=2.5	23.3	22.9	23.7	23.4	23.5
	Missing/Out of range	3.4	3.2	3.4	3.0	3.4
8o	Average serum albumin (g/dL) (average of 8l)	3.6	3.6	3.7	3.7	3.7
8p	Serum Albumin Categories (% of 8l; sums to 100%)					
	< 3.0 g/dL	7.7	7.6	6.8	6.1	5.6
	3.0-<3.5 g/dL	25.2	24.8	22.5	21.2	20.8
	3.5-<4.0 g/dL	42.9	42.6	41.4	42.5	42.8
	>=4.0 g/dL	21.0	21.2	25.5	26.4	27.0
	Missing	3.2	3.9	3.9	3.8	3.8

(continued)

TABLE 8 (continued): Dialysis Adequacy Summaries for All Dialysis Patients [*1] , 2019-2022[^]

	Measure Name	This State				United States
		2019	2020[^]	2021	2022	2022
	Pediatric Kt/V [*4]					
8q	Eligible Pediatric HD patients (n)	16	13	14	14	662
8r	Eligible Pediatric HD patient-months (n) [*2]	112	57	90	97	4,637
8s	Average Kt/V (average of 8r) [*3]	1.7	1.7	1.7	1.8	1.7
8t	Kt/V categories (% of 8r; sums to 100%)					
	<1.2	2.6	2.8	1.8	2.5	3.0
	1.2-<1.8	59.1	60.9	59.0	51.1	57.5
	>= 1.8	34.0	31.2	35.2	39.4	30.7
	Missing/Out of Range	4.3	5.1	4.0	7.0	8.7
8u	Eligible Pediatric PD Patients (n)	20	17	19	17	805
8v	Eligible Pediatric PD patient-months (n) [*2]	151	80	140	132	6,189
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	13.5	12.6	12.6	13.6	14.3
	1.7-<2.5	44.0	52.1	49.8	45.9	44.1
	>=2.5	25.8	25.5	30.1	26.6	30.4
	Missing/Out of Range	16.8	9.8	7.5	13.9	11.1

 n/a = not applicable.

[^] Includes data reported from July - December 2020 only due to data limitations.

[*1] See *Guide, Section XII*. Unless otherwise noted, all summaries are based on data reported in EQRS 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 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], **2019-2022** [^]

	Measure Name	This State				United States
		2019	2020 [^]	2021	2022	2022
9a	Eligible adult patients (n) [*2]	10,582	9,468	10,484	10,182	560,578
9b	Eligible adult patient-months (n) [*2][*3]	100,081	50,042	97,668	94,233	5,277,038
9c	Average Phosphorus [*4](mg/dL) (average [*5])	5.4	5.5	5.5	5.5	5.5
9d	Phosphorus categories (% of 9b [*5]; sums to 100%)					
	<3.5 mg/dL	7.5	7.3	6.8	7.5	7.6
	3.5-4.5 mg/dL	23.1	22.5	21.8	22.4	22.8
	4.6-5.5 mg/dL	29.1	28.5	28.1	27.3	28.3
	5.6-7.0 mg/dL	22.3	22.6	22.8	22.5	22.2
	>7.0 mg/dL	14.3	15.1	15.8	15.5	15.6
	Out of Range (<0.01 mg/dL or >20 mg/dL)	0.0	0.0	0.0	0.0	0.0
	Missing	3.6	4.0	4.6	4.8	3.4
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	19.1	20.1	18.5	18.6	18.6
	8.4-10.2 mg/dL	77.0	75.8	76.8	76.5	77.2
	>10.2 mg/dL	1.3	1.2	1.3	1.2	1.1
	Out of Range (<0.01 mg/dL or >20 mg/dL)	0.0	0.0	0.0	0.0	0.0
	Missing	2.5	2.9	3.5	3.6	3.0
9g	Average uncorrected calcium > 10.2 mg/dL (%) [*4][*6]	1.9	2.3	2.7	2.5	2.0

n/a = not applicable.
[^] Includes data reported from July - December 2020 only due to data limitations.
[*1] See *Guide, Section XIII.* Summaries are based on data reported in EQRS 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 phosphours 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. 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-Releated Infection Summaries for all Medicare Patients [*1], **2019-2022**[^]

	Measure Name	This State				United States
		2019	2020[^]	2021	2022	2022
	Vascular Access					
10a	Prevalent adult hemodialysis (HD) patients [*2]	10,041	8,783	9,801	9,465	521,434
10b	Prevalent adult hemodialysis patient months [*2][*3]	93,096	45,826	89,366	85,794	4,804,453
10c	Vascular access type in use (% of 10b; sums to 100%)					
	Arteriovenous fistula	64.1	62.3	61.1	59.8	58.9
	Arteriovenous graft	16.3	15.9	15.7	15.5	16.6
	Catheter	17.9	19.9	20.7	22.2	22.1
	Other/Missing	1.7	1.8	2.5	2.5	2.3
10d	Standardized Fistula Rate (SFR) [*4]	63.5	62.3	60.2	58.8	58.6
10e	Long-Term Catheter Rate [*5]	13.0	15.1	16.0	17.4	17.2
	Vascular Access at First Treatment					
10f	Incident adult hemodialysis patients (n)	1,900	1,001	1,942	1,820	101,918
10g	Vascular access type in use (% of 10f; sums to 100%)					
	Arteriovenous fistula	16.8	14.1	13.2	12.9	11.9
	Arteriovenous graft	3.2	2.9	2.9	3.0	3.2
	Catheter	77.9	80.9	82.3	79.9	80.8
	Other/Missing	2.2	2.1	1.6	4.2	4.2
10h	Arteriovenous fistulae in placed [*6] (% of 10f)	17.8	14.9	14.2	13.7	12.4
	Infection: Peritoneal dialysis (PD)	**2019**	**2020**[^]	**2021**	**2022**	**2022**
10i	Eligible PD patients (n)	938	930	878	769	43,057
10j	Eligible PD patient-months [*3]	6,795	4,747	6,227	5,525	309,386
10k	PD catheter infection rate per 100 PD patient-months [*7]	2.5	2.6	2.6	2.6	2.5
10l	P-value [*8] of 10k (compared to U.S. value [*9])	0.129	0.137	0.144	0.152	n/a

n/a = not applicable

[^] Data from January through June 2020 are excluded from vascular access summaries and data from March through June 2020 are excluded from infection summaries due to data exceptions.

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

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

[*7] ICD-10 PD catheter infection code for PD patients is T8571XA.

[*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: 2.47 (2019), 2.54 (2020), 2.60 (2021), and 2.47 (2022).

TABLE 11: Comorbidities Reported on Inpatient Medicare Claims for Medicare Dialysis Patients Treated as of December 31st of Each Year [*1] , 2019-2022

	Measure Name	This State				United States
		2019	2020	2021	2022	2022
11a	Medicare dialysis patients on 12/31(n)	7,254	7,042	6,756	6,516	371,713
11b	Comorbidity (% yes of 11a)					
	Infections					
	AIDS/HIV positive	0.6	0.6	0.6	0.6	0.8
	Intravascular/implanted device-related [*2]	4.6	4.4	4.6	4.5	5.0
	Hepatitis B	0.4	0.4	0.4	0.4	0.5
	Hepatitis other	1.9	1.7	1.5	1.4	1.6
	Metastatic	1.4	1.4	1.4	1.5	1.6
	Pneumonia	4.9	3.3	3.0	3.3	3.6
	Tuberculosis	0.1	0.2	0.2	0.2	0.2
	Other	18.8	18.1	17.2	17.6	19.0
	Cardiovascular					
	Cardiac arrest	0.8	0.9	0.9	0.8	1.0
	Cardiac dysrhythmia	18.1	17.9	18.2	18.4	19.7
	Cerebrovascular disease	6.6	6.4	6.4	6.4	7.7
	Congestive heart failure	29.0	28.6	28.6	29.3	31.7
	Ischemic heart disease	25.7	24.8	24.6	24.6	26.9
	Myocardial infarction	6.7	7.1	7.4	7.6	8.1
	Peripheral vascular disease [*3]	15.5	15.4	15.4	15.3	17.4
	Other					
	Alcohol dependence	1.3	1.4	1.4	1.4	1.4
	Anemia	2.3	2.4	2.8	3.0	3.3
	Cancer	3.3	3.0	3.2	3.3	3.6
	Chronic obstructive pulmonary disease	15.3	14.1	13.8	14.2	14.7
	Diabetes	35.8	35.1	35.0	35.0	37.4
	Drug dependence	1.3	1.3	1.2	1.3	1.2
	Gastrointestinal tract bleeding	2.5	2.6	2.8	2.8	3.1
	Hyperparathyroidism	19.2	18.9	19.1	19.9	21.1
11c	Average number of comorbid conditions	2.2	2.1	2.1	2.1	2.3

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], 2019-2022[^]

Measure Name	This State				United States
	2019	2020[^]	2021	2022	2022
Patient Characteristics					
12.1a Patients treated on 12/31 (n)	1,321	1,038	1,045	1,023	57,305
12.1c Age (% of 12.1a; sums to 100%)					
< 18	0.0	0.0	0.0	0.0	0.0
18-64	33.4	35.3	34.0	32.9	31.7
65+	66.6	64.7	66.0	67.1	68.3
12.1d Female (% of 12.1a)	48.5	48.4	47.8	47.7	48.2
12.1e Race (% of 12.1a; sums to 100%) [*3]					
African American	26.9	28.2	28.2	28.3	36.3
Asian/Pacific Islander	7.5	5.7	5.9	5.9	4.2
Native American	2.9	3.1	3.2	3.1	1.2
White	62.5	62.8	62.5	61.9	58.1
Other/Unknown/Missing	0.2	0.2	0.1	0.8	0.2
12.1f Ethnicity (% of 12.1a; sums to 100%)					
Hispanic	9.7	9.4	10.0	9.7	13.5
Non-Hispanic	90.3	90.5	89.9	90.2	86.4
Unknown	0.1	0.1	0.1	0.1	0.1
12.1g Cause of ESRD (% of 12.1a; sums to 100%)					
Diabetes	57.6	57.5	57.5	55.7	53.2
Hypertension	25.0	23.7	24.5	25.2	28.8
Glomerulonephritis	5.7	5.5	5.1	4.8	4.4
Other	11.4	13.0	12.4	13.8	12.8
Unknown/Missing	0.3	0.3	0.4	0.6	0.9
12.1i Years since start of ESRD (% of 12.1a; sums to 100%)					
< 1	20.8	20.2	22.6	22.3	21.3
1-2	15.8	15.8	14.6	15.6	16.0
2-3	13.0	12.8	12.6	11.8	11.7
3-6	26.4	25.9	25.6	25.3	25.1
6+	24.0	25.2	24.5	25.0	25.9
12.1k Modality (% of 12.1a; sums to 100%)					
In-center hemodialysis	95.8	94.9	94.0	94.3	92.4
Home hemodialysis	1.2	1.9	2.5	3.4	5.2
Continuous ambulatory peritoneal dialysis	0.3	0.2	0.2	0.1	0.2
Continuous cycling peritoneal dialysis	2.0	2.1	2.4	1.8	1.9
Other modality [*4]	0.6	0.9	0.9	0.3	0.3

(continued)

TABLE 12 (continued): Selected Summaries for Nursing Home (NH) Patients [*1], 2019-2022[^]

| | Measure Name | This State | | | | United States |
		2019	2020[^]	2021	2022	2022
	Characteristics of New Dialysis Patients					
12.2a	Total number of patients with forms (n)	511	395	426	386	21,639
12.2g	Medical coverage (% of 12.2a; sums to 100%)					
	Employer group only	2.8	3.4	2.1	2.3	2.0
	Medicare (alone or combined w/ other insurance)	83.8	81.2	82.7	85.9	85.0
	Medicaid only	8.7	8.6	9.8	7.6	8.0
	Other/Unknown/None	4.7	6.7	5.3	4.2	5.0
12.2k	Number of incident hemodialysis patients (n)	521	403	434	396	22,148
12.2l	Access used at first outpatient dialysis (% of 12.2k; sums to 100%)					
	Arteriovenous fistula	8.9	7.2	6.2	8.0	6.0
	Arteriovenous graft	2.3	2.1	1.6	1.9	2.1
	Catheter	86.5	88.6	90.3	87.8	89.3
	Other/Unknown/Missing	2.4	2.1	1.9	2.3	2.5
12.2m	Arteriovenous fistulae placed (% of 12.2k)	21.9	18.2	15.8	17.1	13.8
12.2s	Pre-ESRD nephrologist care (% of 12.2a; sums to 100%)					
	No	18.6	19.3	19.2	18.7	17.2
	Yes, < 6 months	17.5	18.8	20.4	20.4	21.4
	Yes, 6-12 months	18.4	18.3	17.0	16.3	15.9
	Yes, > 12 months	30.6	27.2	25.4	26.1	21.0
	Unknown	15.0	16.4	18.0	18.5	24.5
12.2t	Informed of transplant options (% of 12.2a)	72.4	76.1	83.1	84.7	87.5
	Mortality summary for all NH dialysis patients [*5]					
12.3a	Patients (n=number)	2,294	1,938	1,947	1,930	130,905
12.3b	Patient years (PY) at risk (n)	1,423.2	785.2	1,177.1	1,146.3	67,618.5
12.3c	Deaths (n)	563	381	518	489	30,470
12.3d	Expected deaths (n)	475.3	320.3	459.7	412.1	24,323.1
12.3c/12.3b	Rate (deaths per 100 PYs at risk)	37.0	47.5	41.4	44.8	45.1
12.3j	SMR (deaths/expected deaths)	1.11	1.15	1.03	1.40	1.25
12.3e	Withdrawal from dialysis prior to death (% of 12.3c)	40.0	32.9	31.7	32.7	25.7
	Hospitalization summary for NH Medicare dialysis patients					
12.4a	Medicare dialysis patients (n)	2,115	1,778	1,786	1,770	119,411
12.4b	Patient years (PY) at risk (n)	1,281.7	710.7	1,063.5	1,037.3	60,811.3
12.4g	Total admissions (n)	4,029	2,152	3,081	2,912	175,447
12.4h	Expected total admissions (n)	2,659.5	1,496.1	2,000.3	1,968.0	114,782.1
12.4g/12.4b	Rate (admissions per 100 PYs at risk)	297.5	287.5	271.7	272.3	288.5
12.4i	SHR (admissions/expected admissions)	1.48	1.45	1.54	1.59	1.53
	Diagnoses associated with hospitalization (% of 12.4a)					
	Septicemia	23.6	25.0	22.1	22.3	22.4
	Acute myocardial infarction	11.1	12.0	11.8	12.1	10.9
	Congestive heart failure	46.5	46.9	46.3	47.6	44.6
	Cardiac dysrhythmia	33.9	34.6	35.8	35.0	31.9
	Cardiac arrest	3.1	3.9	4.4	3.4	3.9

(continued)

TABLE 12 (continued): Selected Summaries for Nursing Home (NH) Patients[1]**, 2019-2022**[^]

	Measure Name	This State				United States
		2019	2020[^]	2021	2022	2022
	Comorbidities reported on Medicare claims					
12.11a	Medicare dialysis patients on 12/31 (n)	1,216	951	950	930	54,847
12.11b	Comorbidity (% yes of 12.11a)					
	Infections					
	AIDS/HIV positive	0.8	0.8	1.3	0.9	1.1
	Intravascular/implanted device-related [6]	8.8	7.5	7.4	8.7	9.0
	Hepatitis B	0.7	0.7	1.0	0.6	0.9
	Hepatitis other	3.1	3.0	2.8	2.9	3.3
	Metastatic	4.7	5.4	4.3	4.5	4.4
	Pneumonia	11.0	8.8	9.0	8.7	10.2
	Tuberculosis	0.1	0.3	0.3	0.3	0.3
	Other	41.5	42.2	40.9	39.2	41.9
	Cardiovascular					
	Cardiac arrest	1.9	2.1	2.6	2.1	2.6
	Cardiac dysrhythmia	36.7	37.4	38.4	37.6	40.8
	Cerebrovascular disease	16.3	16.8	19.0	17.9	20.1
	Congestive heart failure	53.3	54.5	53.9	54.9	58.2
	Ischemic heart disease	47.0	46.0	46.2	44.7	48.6
	Myocardial infarction	13.5	14.1	16.9	14.4	15.6
	Peripheral vascular disease [6]	34.7	34.7	35.1	34.0	37.3
	Anemia [7]					
12.7a	Eligible adult HD patients (n)	1,860	1,279	1,567	1,538	84,643
12.7b	Eligible adult HD patient-months (n) [2]	15,495	6,146	12,655	12,296	688,583
12.7d	Hemoglobin (HD) < 10 g/dL (% of 12.7b)	29.1	28.3	29.6	29.3	30.5
12.7e	ESA prescribed (% of 12.7b)	78.1	78.6	77.4	78.1	79.2
12.7f	Eligible adult PD patients (n)	89	44	79	76	4,209
12.7g	Eligible adult PD patient-months (n) [2]	538	160	452	425	23,800
12.7i	Hemoglobin (PD) < 10 g/dL (% of 7g)	29.7	26.2	25.8	27.1	28.5
12.7j	ESA prescribed (% of 7g)	59.3	53.3	55.0	54.4	55.7
	Dialysis Adequacy [7] [8]					
12.8a	Eligible adult HD Kt/V patients (n)	1,809	1,226	1,510	1,481	81,533
12.8b	Eligible adult HD Kt/V patient-months (n) [2]	14,967	5,851	12,028	11,681	654,109
12.8j	Kt/V (HD) < 1.2 (% of 12.8b)	2.2	2.3	2.6	2.3	2.7
12.8k	Eligible adult PD Kt/V patients (n)	89	29	79	76	4,209
12.8l	Eligible adult PD Kt/V patient-months (n) [2]	538	68	452	425	23,800
12.8n	Kt/V (PD) < 1.7 (% of 12.8l)	8.9	9.5	9.0	8.6	8.9
	Vascular Access [7] [9]					
12.10a	Prevalent adult hemodialysis patients (n)	1,983	1,333	1,662	1,623	89,284
12.10b	Prevalent adult hemodialysis patient months (n) [2]	16,217	6,325	13,198	12,780	715,705
12.10c	Arteriovenous fistula in use (% of 12.10b)	53.9	50.2	49.5	47.4	47.4
12.10e	Long-Term Catheter Rate (LTCR)	18.3	22.7	21.9	22.7	23.4

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

[^] For exclusions due to data exceptions, please refer to corresponding parent table.

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

[*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).

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

[*6] Intravascular/implanted device-related category includes bloodstream and other infections related to intravascular access and other implanted devices, not limited to dialysis access.

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

[*8] Summaries are supplemented with Medicare claims if missing in EQRS. 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.

[*9] 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.