

Supplementary Online Content

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eTable 1. Current Procedural Terminology codes used to identify hemodialysis access procedures

eTable 2. *International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM)* diagnosis codes for chronic kidney disease and end-stage renal disease

eTable 3. Region definitions by state.

This supplementary material has been provided by the authors to give readers additional information about their work.

eTable 1. Current Procedural Terminology codes used to identify hemodialysis access procedures

CPT code	Description
AVG	
36830	Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); nonautogenous graft (eg, biological collagen, thermoplastic graft)
AVF	
36818	Arteriovenous anastomosis, open; by upper arm cephalic vein transposition
36819	Arteriovenous anastomosis, open; by upper arm basilic vein transposition
36820	Arteriovenous anastomosis, open; by forearm vein transposition
36821	Arteriovenous anastomosis, open; direct, any site (eg, Cimino type) (separate procedure)
36825	Creation of arteriovenous fistula by other than direct arteriovenous anastomosis (separate procedure); autogenous graft

eTable 2. International Classification of Diseases, Tenth Revision, Clinical Modification (ICD-10-CM) diagnosis codes for chronic kidney disease and end-stage renal disease

ICD-10-CM code	Description
E11.22	Type 2 diabetes mellitus with diabetic chronic kidney disease
N18.3	Chronic kidney disease, stage 3 (moderate)
N18.4	Chronic kidney disease, stage 4 (severe)
N18.5	Chronic kidney disease, stage 5
N18.6	End stage renal disease
N18.9	Chronic kidney disease, unspecified
N19	Unspecified kidney failure
I12.0	Hypertensive chronic kidney disease with stage 5 chronic kidney disease or end stage renal disease
I12.9	Hypertensive chronic kidney disease, unspecified, with chronic kidney disease stage I through stage IV, or unspecified
Z99.2	End stage renal disease on renal dialysis

eTable 3. Region definitions by state.

Region	Included States
Northeast	Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, New Jersey, New York, Pennsylvania
Midwest	Illinois, Indiana, Michigan, Ohio, Wisconsin, Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
South	Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, South Carolina, Virginia, West Virginia, Alabama, Kentucky, Mississippi, Tennessee, Arkansas, Louisiana, Oklahoma, Texas
West	Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming, Alaska, California, Hawaii, Oregon, Washington
Other ^a	Guam, Northern Mariana Islands, Puerto Rico, Virgin Islands

^aU.S. territories that are not part of any census region.