Abbreviations

A1c	glycosylated (hemoglobin)
AAPCC	Adjusted average per capita cost
ACE-I	angiotensin converting enzyme inhibitor
ACEI	angiotensin-converting enzyme inhibitor
ACR	albumin/creatinine ratio
ADL	activities of daily living
ADR	annual data report
AF	atrial fibrillation
AFIB	atrial fibrillation
AFS	Annual Facility Survey (CMS 2744)
AJKD	American Journal of Kidney Disease
AKI	acute kidney injury
AKI-D	acute kidney injury with dialysis
AMI	acute myocardial infarction
ANZDATA	Australia & New Zealand ESRD database
ARB	angiotensin receptor blocker
AV	arteriovenous
BMI	body mass index
BUN	blood urea nitrogen
CABG	coronary artery bypass grafting
CAD	coronary artery disease
CAPD	continuous ambulatory peritoneal dialysis
CBC	complete blood count
CCPD	continuous cycler peritoneal dialysis
CDC	Centers for Disease Control and Prevention
CDM	Clinformatics DataMart
CDS	Comprehensive Dialysis Study
CES-D	Center for Epidemiologic Studies Depression Scale
CKD	chronic kidney disease
CKD-EPI	chronic kidney disease epidemiology calculation
CKO	cytokinin oxidase
CMS	Centers for Medicare & Medicaid Services
CMV	cytomegalovirus (antibody status)
COPD	chronic obstructive pulmonary disease
CORR	Canadian Organ Replacement Register
CPM	clinical performance measures
CPRA	calculated panel reactive bodies
CPT	current procedure and terminology
CrCl	creatinine clearance rate
CROWNWeb	Consolidated Renal Operations in a Web-based Network (CROWN) Data — data collection system for ESRD dialysis facilities mandated by CMS
CRT	cardiac resynchronization
CVA	cerebrovascular accident
CVD	cardiovascular disease
CVVHD	continuous venous-to-venous hemodialysis
CWF	common working file
DCD	donation after circulatory death
DCI	Dialysis Clinic Inc.
DFC	dialysis facility compare
DGF	delayed graft function
DHD	daily hemodialysis
DM	diabetes mellitus
DME	durable medical equipment
DMMS	Dialysis Morbidity and Mortality Study
DPO	darbepoetin alfa
DRG	diagnosis related group
DSA	Donation Service Area [or Disability Services Agency]
DUA	data use agreement
ECD	expanded criteria donor
EDB	Enrollment Database
eGFR	estimated glomerular filtration rate
EGHP	employer group health plan
EPO	erythropoietin
ESA	erythropoiesis stimulating agent
ESRD	end-stage renal disease
FSD	first service date
GFR	glomerular filtration rate
GLIMMIX	SAS procedure
GN	glomerulonephritis
HbA1c	glycosylated hemoglobin
HB	hospital-based (providers)
HCFA	Health Care Financing Administration (CMS before July 2001)
HCPCS	healthcare common procedure coding system
HD	hemodialysis

HDL	high density lipoprotein
HEDIS	Health Plan Employer Data Information Set
Hgb	hemoglobin
HF	heart failure
HHA	home health agency
HIC	health insurance claims
HIC/BIC	Health Insurance Claim/Beneficiary Identification Code
HIPAA	Health Insurance Portability and Accountability Act
HLA	Human Leukocyte antigen
HRSA	Health Resources and Services Administration
HS	hospice
HSA	Health Service Area
HTN	hypertension
ICD-9	International Classification of Diseases, 9th revision
ICD-9-CM	International Classification of Diseases, 9th revision, Clinical Modification
ICD	implantable cardioverter defibrillators
ICD/CRT-D	implantable cardioverter defibrillators/ cardiac resynchronization therapy with defibrillator devices
ICW	intracellular water
IHD	intermittent hemodialysis
IL2-RA	interleukin 2 receptor alpha
IP	inpatient
IPD	intermittent peritoneal dialysis
IRB	Institutional Review Board
ISHD	ischemic heart disease
IV	intravenous
KDIGO	Kidney Disease Improving Global Outcomes
KDOQI	Kidney Disease Outcomes Quality Initiative
LDL	low density lipoprotein
LDO	large dialysis organization
LIS	low income subsidy
MCBS	Medicare Current Beneficiary Survey
MDRD	Modification of Diet in Renal Disease
MI	myocardial infarction
MPP	Medicare as primary payer
MSP	Medicare as secondary payer
mTOR	mammalian (or mechanistic) target of rapamycin
NCHS	National Center for Health Statistics
NCQA	National Committee for Quality Assurance
NEJM	New England Journal of Medicine
NHANES	National Health and Nutrition
NHIS	National Health Interview Survey
NIDDK	National Institute of Diabetes and Digestive and Kidney Diseases
NKF	National Kidney Foundation
OMB	Office of Management and Budget
OOP	out-of-pocket
OP	outpatient
OPTN	Organ Procurement and Transplantation Network
PACE	programs of all-inclusive care for the elderly
PAD	peripheral arterial disease
PCI	percutaneous coronary interventions
PD	peritoneal dialysis
PDE	prescription drug event
PDP	prescription drug plan
PII	patient identifiable information
PMMIS	Program Medical Management and Information System
PPPM	per person per month
PPPY	per person per year
PPS	prospective payment system
PRA	panel reactive antibodies
pts	patients
PTLD	post-transplant lymphoproliferative disorder
PVD	peripheral vascular disease
QI	qualifying individuals
QMB	qualified Medicare beneficiaries
RBC	red blood cells
REBUS	Renal Beneficiary and Utilization System
REMIS	Renal Management Information System
rhGH	recombinant DNA human growth hormone
RRB	Railroad Retirement Board
SAF	standard analysis file
SAS	Statistical Analysis System
SCA/VA	Sudden cardiac arrest and ventricular arrhythmias
SCD	sudden cardiac death
SCD	standard criteria donor
SDO	small dialysis organizations
SHR	standardized hospitalization ratio
SMR	standardized mortality ratio
SNF	skilled nursing facility
SSA	Social Security Administration
SSI	Supplemental Security Income

SSRI	selective serotonin reuptake inhibitor
ST-segment	EKG segment that follows the QRS complex and merges into the T wave
STR	standardized transplantation rate
STrR	standardized transfusion ratio
TBW	total body weight
THMS	Truven Health Market Scan
TIA	transient ischemic attack
TrOOP	true out-of-pocket costs
Tx	transplant
TZD	thiazolidinedione
UNOS	United Network for Organ Sharing
URR	urea reduction ratio
USRDS	United States Renal Data System
VA	vascular access
VAT	vascular access type
WHO	World Health Organization

Glossary

Acute kidney injury (AKI) Also known as acute kidney failure or acute renal failure is a sudden decline in renal function triggered by any of a number of conditions such as shock, trauma, drug toxicity, acute glomerulonephritis, vasculitis, or obstruction to urine flow.

Acute myocardial infarction (AMI) An event causing death to a portion of the heart muscle due to lack of blood supply.

Adult polycystic kidney disease An inherited disease in which normal kidney tissue is replaced by multiple cysts.

Albumin/creatinine ratio (ACR) A screening test used to estimate the amount of albumin in a patients urine.

Anemia A condition marked by a reduced number of red cells in the bloodstream.

Angiography A radiographic procedure where a radio-opaque contrast material is injected into a blood vessel for the purpose of identifying its anatomy.

Angioplasty A procedure in which a balloon catheter is inserted into a blocked or narrowed vessel in order to reopen the vessel and allow normal blood flow.

Angiotensin converting enzyme (ACE) inhibitor An antihypertensive agent that inhibits the conversion of Angiotensin I to angiotensin II. Can delay progression of kidney disease in diabetics.

Angiotensin II receptor blocker (ARB) An antihypertensive agent that inhibits the actions of angiotensin II, a substance which causes constriction of blood vessels.

Arteriovenous fistula A type of vascular access used in hemodialysis patients, and created by the anastomosis of an artery and a vein.

Arteriovenous graft A type of vascular access used in hemodialysis patients and created via a connection between an artery and vein using either a native vessel (e.g. saphenous vein) or a synthetic material.

Beta blockers Antihypertensive medications that block B-adrenergic receptors, thus interfering with the actions of endogenous catecholamines (epinephrine and norepinephrine), slowing the heart rate and reducing the constriction of blood vessels.

Blood urea nitrogen (BUN) A by-product of the breakdown of amino acids and endogenous and ingested protein.

Body mass index (BMI) A measure of height to weight ratio: weight (kg)/height (m2).

C-reactive protein A protein produced by the liver in response to infection or inflammation; high levels are associated with an increased risk of heart disease and stroke.

Calcium channel blockers Antihypertensive agents that work by blocking the access of calcium to muscle cells in artery walls.

Cardiac arrest A sudden complete cessation of cardiac activity.

Cardiac resynchronization therapy defibrillator (CRT-D) An implantable device designed to arrest the fibrillation of heart muscle by applying an electric shock , thus depolarizing the heart cells and allowing normal rhythm to return.

Cardiomyopathy A general diagnostic term indicating a disease of the heart muscle.

Catastrophic coverage Health insurance to cover costs that exceed routine healthcare insurance benefits.

Coronary Artery Disease (CAD) A disease of the arteries of the heart, characterized by a thickening and narrowing and/or loss of elasticity of the arterial walls due to plaque deposition.

Dialysis catheter A vascular access used in hemodialysis patients, commonly implanted into the jugular or subclavian vein.

Centers for Disease Control & Prevention (CDC) The lead federal agency for protecting the health and safety of people at home and abroad; develops and applies programs designed to improve the health of the people of the United States.

Centers for Medicare and Medicaid Services (CMS) Formerly the Health Care Financing Administration (HCFA). Federal agency that administers the Medicare, Medicaid, and State Childrens' Health insurance programs.

Cerebrovascular accident (CVA) A general descriptor that encompasses such problems as stroke and cerebral hemorrhage.

Cerebrovascular disease A disease that causes narrowing or occlusion of the arteries supplying blood to the brain.

Chain provider A single business entity that at years end owns or operates 20 or more freestanding dialysis units. This definition applies to all chain affiliation references in the USRDS Annual Data Reports. An alternative definition from the Centers for Medicare and Medicaid Services can be found under "definitions" in the Health Care Provider/ Supplier Application Form, CMS 855.

Chronic kidney disease (CKD) A condition in which there is a progressive loss of kidney function which over time may lead to end-stage renal disease.

Chronic Kidney Disease Epidemiology Collaboration (CKD-EPI) A method used to estimate glomerular filtration rate using a single serum creatinine. Yields a lower CKD prevalence than the Modification of Diet in Renal Disease (MDRD) Study equation.

Chronic obstructive pulmonary disease (COPD) One of a number of classes of chronic progressive lung diseases .

Clinical Performance Measures (CPM) Project Formerly the Core Indicator Project. A project in which CMS and the ESRD networks cooperatively maintain a clinical database of key elements related to the quality of dialysis care. These elements are used as indicators in quality improvement initiatives.

Common Working File (CWF) System The Medicare inpatient/outpatient and physician/supplier benefit coordination and claims validation system. Under the CWF, CMS maintains both institutional and physician supplier claims-level data. CWF claims records are the data source for most claims and utilization files used by the USRDS.

Comprehensive Dialysis Study (CDS) A special data collection study that focuses on physical activity level, health-related quality of life, and work/ disability status reported by patients who have recently started maintenance dialysis.

Continuous ambulatory peritoneal dialysis (CAPD) A type of dialysis in which dialysate is continuously present in the abdominal cavity. Fluid is exchanged using gravity to fill and empty the cavity 4–5 times a day.

Continuous cycler-assisted peritoneal dialysis (CCPD) A type of dialysis in which the abdominal cavity is filled and emptied of dialysate using an automated cycler machine.

Coverage gap The interval after initial benefits are exhausted, but preceding catastrophic coverage.

Creatinine A waste product of protein metabolism found in the urine. Blood creatinine concentration is an indirect measure of kidney function. Abnormally high creatinine levels indicate kidney failure or renal insufficiency.

Creatinine clearance A measure of kidney function.

Creditable coverage Prescription drug coverage that is actuarially equivalent to the standard Part D benefit, as defined annually by CMS. Beneficiaries with creditable coverage may forgo participation in Medicare Part D without having to pay increased monthly premiums upon future enrollment. Examples of creditable coverage include the Federal Employee Health Benefits Program, TRICARE, VA Health Care Benefits, State Pharmacy Assistance Programs (SPAPs), and private insurance that is eligible for the retiree drug subsidy. Private insurance for the working aged may or may not be creditable.

Cystatin-C equation A method which uses the laboratory marker cystatin-C for estimating glomerular filtration rate (GFR).

Heart failure (HF) A condition caused by impaired pumping of the heart and consequent fluid accumulation in the lungs.

Darbepoetin alfa (DPO) One of a class of medications called erythropoietic proteins. Used to treat anemia in patient with serious kidney disease.

Death Notification Form (CMS-2746) A form submitted following the death of an ESRD patient, and containing basic patient demographic information in addition to information on the primary cause of death.

Employer group health plan (EGHP) A health plan of or contributed to by an employer, providing medical care directly or through other methods such as insurance or reimbursement to current or former employees, or to these employees and their families.

End-stage renal disease (ESRD) A condition in which a person's kidney function is inadequate to support life.

Erythropoiesis stimulating agent (ESA) Used to increase the production of red blood cells; includes erythropoietin (EPO) and darbepoetin alfa (DPO).

Erythropoietin (EPO) A hormone secreted chiefly by the adult kidney; acts on bone marrow to stimulate red cell production. Also produced in a formulated version to treat anemia.

ESRD Facility Survey Data for this survey are collected annually by CMS from all facilities certified to provide Medicare-covered renal dialysis and transplantation. The survey uses CMS form 2744, and encompasses the full calendar year. Geographic data are included to the level of facility ZIP code. Each record contains facility information and data on the number of patients served, dialysis treatments provided, and kidney transplants performed. The data include services to both Medicare and non-Medicare patients.

ESRD Networks Regional organizations, established by law in 1978, contracted by CMS to perform quality oversight activities to assure the appropriateness of services and protection for dialysis patients.

Expanded criteria donors (ECDs) Any kidney donor over the age of age 60 years, or donors between the ages of 50 and 59 years with two of the following criteria: death by CVA, history or hypertension or creatinine at time of recovery (terminal creatinine) ≥ 1.5 mg/dL.

Fills per person Each prescription drug purchase constitutes a fill. Fills per person are calculated from the quotient of cumulative fills in a population and the number of people in that population.

Glomerular filtration rate (eGFR) Rate in ml/min/1.73 m2 of the volume of plasma filtered by the kidney. Rates of filtration may be measured directly or estimated based on formulae that employ combinations of an individual's age, gender, and height, and on levels of serum creatinine, blood urea nitrogen, and serum albumin. GFR is traditionally considered the best overall index to determine renal function.

Glycosylated hemoglobin (HbA1c) test Used to help determine how well a patient's diabetes is being controlled, this test measures the percentage of hemoglobin-bound glucose in the bloodstream.

Health Maintenance Organization (HMO) An organization that provides or arranges managed care on a prepaid basis.

Health Service Area (HSA) A group of counties described by the authors of the CDC Atlas of United States Mortality as "an area that is relatively self-contained with respect to hospital care."

Healthy People 2020 A national agenda for health promotion and disease prevention, with objectives and goals aimed at improving the health of the American people (www.health.gov/healthypeople).

Hemodialysis The process of removing toxins from the blood by diffusion through a semi-permeable membrane.

Hemoglobin Oxygen-carrying protein in the erythrocyte (red blood cell).

Hepatitis An inflammation of the liver that may be caused by a viral infection, poisons, or the use of alcohol or other drugs. Forms include Hepatitis A, usually transmitted by contaminated food or water; Hepatitis B transmitted through blood and body fluids; and Hepatitis C, also transmitted through blood and body fluids.

Hospital-based facility A dialysis unit attached to or located in a hospital and licensed to provide outpatient dialysis services directly to ESRD patients.

Implantable cardioverter defibrillator (ICD) An implantable device designed to arrest the fibrillation of (heart muscle) by applying electric shock thus depolarizing the heart cells and allowing normal rhythm to return.

Incident ESRD patient A patient starting renal replacement therapy for ESRD. Excludes patients with acute renal failure, those with chronic renal failure who die before starting ESRD treatment, and those whose treatments are not reported to CMS.

Incident population The people in a population who are newly diagnosed with a disease in a given time period, typically a year.

Independent unit A unit licensed to provide outpatient and home maintenance dialysis, and not affiliated with a chain.

Initial coverage period The interval following the deductible phase, but preceding the coverage gap.

Ischemic heart disease (ISHD) A disease of the heart evidenced by a lowered oxygen supply to the heart tissue, caused by occlusion or narrowing of the arteries supplying the heart muscle.

Kidney Disease Outcomes Quality Initiative (KDOQI) Established in 1995 by the National Kidney Foundation to improve patient outcomes and survival by providing recommendations for optimal clinical practices in the areas of dialysis adequacy, vascular access, and anemia.

Kt/V A unitless number used to quantify clearance of small molecular weight substances (solutes) such as urea, where K = dialyzer clearance of urea, t = dialysis time and V = volume of distribution of urea, (approximately equal to the total body water). It reflects the degree of removal of these substances during dialysis treatment and is expressed by Kt/V per hemodialysis session or weekly Kt/V in the context of peritoneal dialysis.

Low income subsidy (LIS) For Medicare beneficiaries with limited income and/or assets, the costs of participation in Medicare Part D may be reduced by the LIS. Beneficiaries who are dually eligible for Medicare and Medicaid are automatically granted the LIS, while beneficiaries who are not dually eligible may apply for it. While the LIS may take eight different levels, with monthly premiums and copayments either eliminated or reduced, all dually eligible beneficiaries pay no monthly premiums.

Medical Evidence form (CMS-2728) A form which provides source data about ESRD patients, including information on demographics, primary cause of renal disease, comorbidity, biochemical data, dialysis treatment, transplant, dialysis training, employment status, initial insurance coverage, and first ESRD service date.

Medicare Advantage Part D plans (MA-PDs) Medicare Part D plans that are offered only to participants in Medicare Part C.

Medicare as Secondary Payer (MSP) patient A Medicare beneficiary with a health insurer other than Medicare (e.g. an Employer Group Health Plan) that has primary responsibility for payment of the beneficiary's medical bills.

Medicare Current Beneficiary Survey (MCBS) An ongoing national survey of aged, disabled, and institutionalized Medicare beneficiaries sponsored by the Centers for Medicare and Medicaid Services, and used to study the health status, health care use and expenditures, health insurance coverage, and socioeconomic and demographic characteristics of Medicare beneficiaries.

Microalbuminuria A condition in which small amounts of albumin are present in the urine; indicates early kidney damage.

Modality A method of treatment. Treatment for end-stage renal disease (ESRD) is comprised of three modalities: hemodialysis, peritoneal dialysis, and transplantation.

Modification of Diet in Renal Disease (MDRD) Study equation A method used to estimate glomerular filtration (GFR) in patients with impaired renal function using a single serum creatinine, age, sex and race.

National Health and Nutrition Examination Survey (NHANES) A survey conducted by the National Center for Health Statistics (NCHS) at the Centers for Disease Control and Prevention; using home interviews and health tests to collect information on health and diet in the United States.

National Institutes of Health (NIH) The federal focal point for medical research in the U.S. and one of eight health agencies of the Public Health Services, which are part of the Department of Health and Human Services.

Organ Procurement and Transplantation Network (OPTN) The unified transplant network established by the United States Congress under the National Organ Transplant Act (NOTA) of 1984. A private, non-profit organization administered by the United Network for Organ Sharing, under contract with the Health Resources and Services Administration of the U.S. Department of Health and Human Services.

Part D Medicare coverage A U.S. government program which subsidizes the costs of medications for Medicare beneficiaries.

Percutaneous coronary intervention (PCI) A therapeutic procedure to treat stenotic (narrowed) coronary arteries of the heart found in coronary heart disease. Commonly known as coronary angioplasty or simply angioplasty.

Period prevalent patient A patient receiving treatment for ESRD at some point during a period of time, usually six months or a year. Patients may die during the period or be point prevalent at the end of the period. Period prevalence is a useful measure for cost analysis, since it indicates total disease burden over the course of a year.

Peripheral vascular disease (PVD) A progressive disease that causes narrowing or occlusion of the arteries.

Peritoneal dialysis Dialysis in which fluid (dialysate) is introduced into the abdominal cavity and uremic toxins are removed by diffusion across the peritoneum.

Point prevalent patient A patient reported as receiving treatment for ESRD on a particular day of the calendar year (e.g. December 31).

Program Medical Management and Information System for ESRD, and Renal Beneficiary and Utilization System (PMMIS/REBUS) The major source of data for the USRDS. This CMS file incorporates data from the Medical Evidence form (CMS 2728), the Death Notification form (CMS 2746), the Medicare Enrollment Database, CMS paid claims records, and the OPTN transplant database.

Prevalent ESRD patient A patient on renal replacement therapy or with a functioning kidney transplant (regardless of the transplant date). This definition excludes patients with acute renal failure, those with chronic renal failure who die before receiving treatment for ESRD, and those whose ESRD treatments are not reported to CMS.

Prevalent population The people in a population who have a disease at a given point in time (point prevalence) or during a given time period (period prevalence).

Proteinuria The existence of protein in the urine; indicative of kidney damage.

Recombinant human growth hormone (rhGH) Also called somatropin; a substance identical in its amino acid sequence to human growth hormone, and used to treat growth hormone deficiency.

REMIS CMS's Renal Management Information System (REMIS), which has replaced the Renal Beneficiary and Utilization System (REBUS). It included an operational interface to the SIMS Central Repository until 2012 at which point CROWNWeb replaced the functionality of SIMS.

Renin Inhibitors A class of drugs used to lower blood pressure by blocking the renin-angiotensin system which regulates blood volume and systemic vascular resistance.

Retiree drug subsidy (RDS) A program designed to encourage employers to continue to provide prescription drug coverage to retirees eligible for Medicare Part D. Under the program, employers received a tax-free rebate equal to 28 percent of covered prescription drug costs incurred by its retirees. The program is relatively simple to administer, but may ultimately be more costly than providing employees a type of Part D plan known as an "employer group waiver plan." Following passage of the Patient Protection and Affordable Care Act, the tax-free status of the subsidy expired on December 31, 2012.

SIMS CMS's Standard Information Management System (SIMS), which became operational at the beginning of 2000 and was replaced by CROWNWeb in 2012. Supports CMS reporting requirements and the business processes of the ESRD networks; provides communication and data exchange links for the networks, CMS, and other parts of the renal community; supplies standard core data functionality for previous network data systems; and provides improved electronic communication capabilities, data standardization, and information management tools.

Standard Analysis Files (SAFs) CMS files containing final action Medicare inpatient/outpatient claims data: Inpatient, Outpatient, Home Health Agency, Hospice, Skilled Nursing Facility, Clinical Laboratory, Durable Medical Equipment, and 5 percent Sample Beneficiary.

Standardized hospitalization ratio (SHR) Used to compare hospitalization rates for a selected group of patients by computing the ratio of the group's observed hospitalization rate to the expected hospitalization rate for the national ESRD population.

Standardized mortality ratio (SMR) Used to compare patient mortality rates for a selected group of patients by computing the ratio of the group's observed mortality rate to the expected mortality rate for the national ESRD population.

Standardized transplantation ratio (STR) Used to compare transplant rates for a subgroup of patients to national transplant rates, by computing the ratio of the group's observed transplant rate to the expected transplant rate for the national ESRD population.

Statins Medications that lower cholesterol through inhibition of the HMG CoA enzyme.

Total days supply Each prescription drug is disbursed with sufficient quantity to administer for a set number of days, so long as instructions are followed. The total days supplied is equal to the cumulative number of days supplied through all fills of a particular medication in a population.

Transient ischemic attacks (TIA) A temporary loss of neurological function caused by a brief period of inadequate blood supply in a portion of the brain.

United Network for Organ Sharing (UNOS) A private, non-profit organization that holds the Organ Procurement and Transplantation Network contract to maintain the national organ transplant waiting lists and coordinates the matching and distribution of organs to patients awaiting transplant.

Urea reduction ratio (URR) A means of measuring dialysis efficiency by calculating the change in blood urea nitrogen (BUN) over the course of a dialysis treatment. URR = (pre-dialysis – post-dialysis BUN) / pre-dialysis BUN * 100.

Vintage Time that a patient has had ESRD.

Waiting list A list of patients awaiting an organ transplant; maintained by the Organ Procurement and Transplantation Network (OPTN).

Some definitions from U.S. National Library of Medicine's Medical Dictionary: http://www.nlm.nih.gov/medlineplus/mplusdictionary.html

United States Renal Data System (USRDS)
Agreement for Release of Data

Project Title _____

In this agreement, "Requester Organization" means _____

A. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), through the United States Renal Data System (USRDS) Coordinating Center, will provide the Requester data extracted from the USRDS research database (the "Data"), via download or on CDs, DVDs, or other media type, which constitutes a Limited Dataset within the meaning of the HIPAA privacy regulations.

B. The sole purpose of providing the Data is the conduct of legitimate and approved biomedical, cost-effectiveness, and/or other economic research by the Requester.

C. The Requester shall not use the Data to identify individual beneficiaries or individual providers on the files.

D. The Requester shall not combine or link the Data provided with any other collection or source of information that may contain information specific to individuals on the files, except where a waiver of authorization has been approved by the Requester's IRB/Privacy Board and NIDDK.

E. The Requester shall not use the Data for purposes that are not related to biomedical research, cost-effectiveness, economic and/or other epidemiological research. Purposes for which the Data may not be used include, but are not limited to,

- the identification and targeting of under- or over-served health service markets primarily for commercial benefit
- the obtaining of information about providers or facilities for commercial benefit
- insurance purposes such as redlining areas deemed to offer bad health insurance risks
- adverse selection (e.g., identifying patients with high risk diagnoses).

Any use of the Data for research not in the original proposal must be approved by the USRDS Project Officer (PO).

F. The Requester shall not publish or otherwise disclose the Data in the files to any person or organization unless the Data have been aggregated (that is, combined into groupings of Data such that the Data are no longer specific to any individuals within each grouping), and no cells (aggregates of Data) contain information on fewer than ten individuals or fewer than five providers or facilities. The Requester shall not publish or otherwise disclose Data that identify individual providers or facilities, or from which such identities could be inferred. However, the

Requester may release Data to a contractor for purposes of data processing or storage if (1) the Requester specified in the research plan submitted to the USRDS Project Officer that Data would be released to the particular contractor, or the Requester has obtained written authorization from the PO to release the Data to such contractor, and (2) the contractor has signed a data release agreement with the PO.

G. A copy of any aggregation of Data intended for publication shall be submitted to the PO for review for compliance with the confidentiality provisions of this agreement prior to submission for publication and, if not approved, shall not be published until compliance is achieved. The PO must respond within 30 days.
   The Approval Request Checklist may be found at:
   https://www.usrds.org/2017/appx/3_1_USRDS_Manuscript_Approval_Request_Checklist_17.pdf

H. Appropriate administrative, technical, procedural, and physical safeguards shall be established by the Requester to protect the confidentiality of the Data and to prevent unauthorized access to it. The safeguards shall provide a level of security outlined in OMB Circular No. A-130, Appendix III — Security of Federal Automated Information Resources, which sets forth guidelines for security plans for automated information systems in Federal agencies.

I. No copies or derivatives shall be made of the Data in these files except as necessary for the purpose authorized in this agreement. The Requester shall keep an accurate written account of all such copies and derivative files, which will be furnished upon request to the PO. The USRDS Data files covered in this data use agreement (DUA) may be retained by the Requester until the date specified by the PO in the approval letter, at which time Requester may request renewal of this data use agreement to extend the retention period to comply with legal or institutional recordkeeping requirements or to maintain the integrity of the research or research publications. If at any time during the data retention period the DUA between USRDS and CMS is canceled, the Requester will be contacted to destroy the files in their possession. At the completion of the activities in the research plan, the file(s) and any derivative files and copies shall be destroyed. At that time, the Requester will inform the USRDS and the PO in writing that the files have been destroyed.

J. For the purpose of inspecting security procedures and arrangements, authorized representatives of the NIDDK and/or of CMS will, upon request, be granted access to premises where the Data are kept.

K. The following USRDS Data file(s) is/are covered under this Agreement.

Standard Analysis Files (SAFs) requested:

☐ Core
☐ Transplant
☐ Hospital
☐ CKD 5% Cohort Core
☐ CKD 5% Cohort Hospital
☐ CROWNWeb Clinical Data
☐ Dialysis Morbidity and Mortality Study (DMMS)
☐ Comprehensive Dialysis Study (CDS)
☐ Clinical Performance Measures
☐ Case Mix Adequacy (CMA)
☐ Active-Adipose Study (AAS)

For the following SAFs, indicate the claim year(s) requested as well:

☐ Institutional Claims (pre-1989 through 2015 available) _____
☐ Physician/Supplier Claims (1991–2015 available) _____
☐ Part D (2006–2015 available) _____
☐ Pre-ESRD Institutional Claims (incident years 1995-2015) _____
☐ Pre-ESRD Physician/Supplier Claims (incident years 1995-2015) _____
☐ Pre-ESRD Part D (incident years 2008-2015) _____
☐ CKD 5% Institutional Claims (1992–2015 available) _____
☐ CKD 5% Physician/Supplier Claims (1992–2015 available) _____
☐ CKD 5% Part D (2006–2015 available) _____

Other:

☐ Provider Crosswalk
☐ Physician Crosswalk

_____
Requester Signature (for the Institutional Official for Data Assurance)

_____
Authorized Signatory (name, title & date)

_____
Requester Address

_____
Requester Telephone Number

Read and Acknowledged (for Primary Investigator and all co-investigators who will analyze data directly)

Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date

(attach additional signature pages as necessary)

USRDS Project Officer: Kevin C. Abbott, MD, NIDDK, NIH, Kevin.abbott@nih.gov

USRDS Project Officer Signature Date

Checklist:
DID YOU REMEMBER TO SEND:

☐ Signed copy of your institutional IRB approval memo

☐ Copy of your project proposal in recommended format at http://www.usrds.org/2017/appx/3/1_Outline_for_research_proposals_using_USRDS_data.pdf

☐ Copy of this Data Use Agreement signed by your institutional official, PI, and all active participants.

Please note that any MODIFICATIONS or AMMENDMENTS, regardless of whether they require additional files, require a new IRB approval memo (1 above), copy of the original project proposal (2 above) with additional analyses/extractions highlighted, and a new signed Data Use Agreement (3).

Please send ALL documents (including the research protocol) in PDF format (please save the research protocol as PDF within Microsoft Word when you have completed it). AND consolidate all files into a single PDF file (using the "PDF Portfolio" feature in Adobe) when sending to the NIDDK.

01/15/2018 revision

United States Renal Data System (USRDS)
Merged Dataset Agreement for Release of Data

Project Title _____

In this agreement, "Requester Organization" means _____

A. The National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK), through the United States Renal Data System (USRDS) Coordinating Center, will provide the Requester data extracted from the USRDS research database (the "Data"), via download or on CDs, DVDs, or other media type. Prior to receiving USRDS data, the Requester will provide USRDS with a list of personally identifiable information (PII) so USRDS can report which of the Requester's subjects are in the USRDS end-stage renal disease (ESRD) data.
B. The sole purpose of providing the Data is the conduct of legitimate and approved biomedical, cost-effectiveness, and/or other economic research by the Requester.
C. USRDS shall not use or disclose the Requester's data for any purpose other than to create the Data extracted from the USRDS database. In the event that the Requester's data is used or disclosed for any purpose other than that covered by this agreement, USRDS will notify the Requester immediately and agree to work with Requester to address the use or disclosure. The USRDS will destroy the Requester's dataset one year after the linkage is complete unless otherwise specified by the Requester in the research proposal.
D. The Requester shall not combine or link the Data provided with any other collection or source of information that may contain information specific to individuals on the files, except where a waiver of authorization has been approved by the Requester's IRB/Privacy Board and NIDDK.
E. The Requester shall not use the Data for purposes that are not related to biomedical research, cost-effectiveness, economic and/or other epidemiological research. Purposes for which the Data may not be used include, but are not limited to,
    - the identification and targeting of under- or over-served health service markets primarily for commercial benefit
    - the obtaining of information about providers or facilities for commercial benefit
    - insurance purposes such as redlining areas deemed to offer bad health insurance risks
    - adverse selection (e.g., identifying patients with high risk diagnoses)

    Any use of the Data for research not in the original proposal must be approved by the USRDS Project Officer (PO).
F. The Requester shall not publish or otherwise disclose the Data in the files to any person or organization unless the Data have been aggregated (that is, combined into groupings of Data

such that the Data are no longer specific to any individuals within each grouping), and no cells (aggregates of Data) contain information on fewer than ten individuals or fewer than five providers or facilities. The Requester shall not publish or otherwise disclose Data that identify individual providers or facilities, or from which such identities could be inferred. However, the Requester may release Data to a contractor for purposes of data processing or storage if (1) the Requester specified in the research plan submitted to the USRDS Project Officer that Data would be released to the particular contractor, or the Requester has obtained written authorization from the PO to release the Data to such contractor, and (2) the contractor has signed a data release agreement with the PO.

G. A copy of any aggregation of Data intended for publication shall be submitted to the PO for review for compliance with the confidentiality provisions of this agreement prior to submission for publication and, if not approved, shall not be published until compliance is achieved. The PO must respond within 30 days.

   The Approval Request Checklist may be found at:
   https://www.usrds.org/2017/appx/3_1_USRDS_Manuscript_Approval_Request_Checklist_17.pdf

H. Appropriate administrative, technical, procedural, and physical safeguards shall be established by the Requester to protect the confidentiality of the Data and to prevent unauthorized access to it. The safeguards shall provide a level of security outlined in OMB Circular No. A-130, Appendix III — Security of Federal Automated Information Resources, which sets forth guidelines for security plans for automated information systems in Federal agencies.

I. No copies or derivatives shall be made of the Data in these files except as necessary for the purpose authorized in this agreement. The Requester shall keep an accurate written account of all such copies and derivative files, which will be furnished upon request to the PO. The USRDS Data files covered in this data use agreement (DUA) may be retained by the Requester until the date specified by the PO in the approval letter, at which time Requester may request renewal of this data use agreement to extend the retention period to comply with legal or institutional recordkeeping requirements or to maintain the integrity of the research or research publications. If at any time during the data retention period the DUA between USRDS and CMS is canceled, the Requester will be contacted to destroy the files in their possession. At the completion of the activities in the research plan, the file(s) and any derivative files and copies shall be destroyed. At that time, the Requester will inform the USRDS and the PO in writing that the files have been destroyed.

J. For the purpose of inspecting security procedures and arrangements, authorized representatives of the NIDDK and/or of CMS will, upon request, be granted access to premises where the Data are kept.

K. The following USRDS Data file(s) is/are covered under this Agreement.

Standard Analysis Files (SAFs) requested:

☐ Core
☐ Transplant
☐ Hospital
☐ CKD 5% Cohort Core
☐ CKD 5% Cohort Hospital
☐ CROWNWeb Clinical Data
☐ Dialysis Morbidity and Mortality Study (DMMS)
☐ Comprehensive Dialysis Study (CDS)
☐ Clinical Performance Measures
☐ Case Mix Adequacy (CMA)
☐ Active-Adipose Study (AAS)

For the following SAFs, indicate the claim year(s) requested as well:

☐ Institutional Claims (pre-1989 through 2015 available) _____
☐ Physician/Supplier Claims (1991–2015 available) _____
☐ Part D (2006–2015 available) _____
☐ Pre-ESRD Institutional Claims (incident years 1995-2015) _____
☐ Pre-ESRD Physician/Supplier Claims (incident years 1995-2015) _____
☐ Pre-ESRD Part D (incident years 2008-2015) _____
☐ CKD 5% Institutional Claims (1992–2015 available) _____
☐ CKD 5% Physician/Supplier Claims (1992–2015 available) _____
☐ CKD 5% Part D (2006–2015available) _____

Other:

☐ Provider Crosswalk
☐ Physician Crosswalk

IMPORTANT! Specify:

☐Data ONLY on matched patients ***OR***

☐Complete SAFs, including matched and unmatched patients

_____
Requester Signature (for the Institutional Official for Data Assurance)

_____
Authorized Signatory (name, title & date)

_____
Requester Address

_____
Requester Telephone Number

Read and Acknowledged (for Primary Investigator and all co-investigators who will analyze data directly)

Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date
Investigator / Analyst signature	Name	Date

(attach additional signature pages as necessary)

USRDS Project Officer: Kevin C. Abbott, MD, NIDDK, NIH, Kevin.abbott@nih.gov

USRDS Project Officer Signature Date

Checklist:
DID YOU REMEMBER TO SEND:

☐ Signed copy of your institutional IRB approval memo

☐ Copy of your project proposal in recommended format at http://www.usrds.org/2017/appx/3/2_Outline_for_research_proposals_using_merged_USRDS_data.pdf

☐ Copy of this Data Use Agreement signed by your institutional official, PI, and all active participants.

Please note that any MODIFICATIONS or AMMENDMENTS, regardless of whether they require additional files, require a new IRB approval memo (1 above), copy of the original project proposal (2 above) with additional analyses/extractions highlighted, and a new signed Data Use Agreement (3).

Please send ALL documents (including the research protocol) in PDF format (please save the research protocol as PDF within Microsoft Word when you have completed it). AND consolidate all files into a single PDF file (using the "PDF Portfolio" feature in Adobe) when sending to the NIDDK.

01/15/2018 revision

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

Form Approved
OMB No. 0938-0046

END STAGE RENAL DISEASE MEDICAL EVIDENCE REPORT
MEDICARE ENTITLEMENT AND/OR PATIENT REGISTRATION

A. COMPLETE FOR ALL ESRD PATIENTS

Check one: ☐ Initial ☐ Re-entitlement ☐ Supplemental

1. Name *(Last, First, Middle Initial)*

2. Medicare Claim Number

3. Social Security Number

4. Date of Birth ____/____/____ MM DD YYYY

5. Patient Mailing Address *(Include City, State and Zip)*

6. Phone Number ( )

7. Sex ☐ Male ☐ Female

8. Ethnicity ☐ Not Hispanic or Latino ☐ Hispanic or Latino (Complete Item 9)

9. Country/Area of Origin or Ancestry

10. Race *(Check all that apply)*
☐ White
☐ Black or African American
☐ American Indian/Alaska Native
Print Name of Enrolled/Principal Tribe _____
☐ Asian
☐ Native Hawaiian or Other Pacific Islander*
*complete Item 9

11. Is patient applying for ESRD Medicare coverage?
☐ Yes ☐ No

12. Current Medical Coverage *(Check all that apply)*
☐ Medicaid ☐ Medicare ☐ Employer Group Health Insurance
☐ DVA ☐ Medicare Advantage ☐ Other ☐ None

13. Height
INCHES _____ OR
CENTIMETERS _____

14. Dry Weight
POUNDS _____ OR
KILOGRAMS _____

15. Primary Cause of Renal Failure *(Use code from back of form)*

16. Employment Status *(6 mos prior and current status)*

Prior	Current	
☐	☐	Unemployed
☐	☐	Employed Full Time
☐	☐	Employed Part Time
☐	☐	Homemaker
☐	☐	Retired due to Age/Preference
☐	☐	Retired (Disability)
☐	☐	Medical Leave of Absence
☐	☐	Student

17. Co-Morbid Conditions *(Check all that apply currently and/or during last 10 years)* *See instructions

a. ☐ Congestive heart failure
b. ☐ Atherosclerotic heart disease ASHD
c. ☐ Other cardiac disease
d. ☐ Cerebrovascular disease, CVA, TIA*
e. ☐ Peripheral vascular disease*
f. ☐ History of hypertension
g. ☐ Amputation
h. Diabetes, currently on insulin
i. ☐ Diabetes, on oral medications
j. ☐ Diabetes, without medications
k. ☐ Diabetic retinopathy
l. ☐ Chronic obstructive pulmonary disease
m. ☐ Tobacco use (current smoker)
n. ☐ Malignant neoplasm, Cancer
o. ☐ Toxic nephropathy
p. ☐ Alcohol dependence
q. ☐ Drug dependence*
r. ☐ Inability to ambulate
s. ☐ Inability to transfer
t. ☐ Needs assistance with daily activities
u. ☐ Institutionalized
☐ 1. Assisted Living
☐ 2. Nursing Home
☐ 3. Other Institution
v. ☐ Non-renal congenital abnormality
w. ☐ None

18. Prior to ESRD therapy:

a. Did patient receive exogenous erythropoetin or equivalent?	☐ Yes	☐ No	☐ Unknown	If Yes, answer:	☐ 6-12 months	☐ >12 months
b. Was patient under care of a nephrologist?	☐ Yes	☐ No	☐ Unknown	If Yes, answer:	☐ 6-12 months	☐ >12 months
c. Was patient under care of kidney dietitian?	☐ Yes	☐ No	☐ Unknown	If Yes, answer:	☐ 6-12 months	☐ >12 months
d. What access was used on first outpatient dialysis:	☐ AVF	☐ Graft	☐ Catheter	☐ Other		
If not AVF, then: Is maturing AVF present?	☐ Yes	☐ No				
Is maturing graft present?	☐ Yes	☐ No				

19. Laboratory Values Within **45** Days Prior to the Most Recent ESRD Episode. (Lipid Profile within 1 Year of Most Recent ESRD Episode).

LABORATORY TEST	VALUE	DATE	LABORATORY TEST	VALUE	DATE
a.1. Serum Albumin (g/dl)	___ . ___		d. HbA1c	___ ___ . ___%	
a.2. Serum Albumin Lower Limit	___ . ___		e. Lipid Profile TC	___ ___ ___	
a.3. Lab Method Used (BCG or BCP)			LDL	___ ___ ___	
b. Serum Creatinine (mg/dl)	___ ___ . ___		HDL	___ ___	
c. Hemoglobin (g/dl)	___ ___ . ___		TG	___ ___ ___ ___	

B. COMPLETE FOR ALL ESRD PATIENTS IN DIALYSIS TREATMENT

20. Name of Dialysis Facility

21. Medicare Provider Number *(for item 20)*

22. Primary Dialysis Setting
☐ Home ☐ Dialysis Facility/Center ☐ SNF/Long Term Care Facility

23. Primary Type of Dialysis
☐ Hemodialysis (Sessions per week____/hours per session____)
☐ CAPD ☐ CCPD ☐ Other

24. Date Regular Chronic Dialysis Began ____/____/____ MM DD YYYY

25. Date Patient Started Chronic Dialysis at Current Facility ____/____/____ MM DD YYYY

26. Has patient been informed of kidney transplant options?
☐ Yes ☐ No

27. If patient NOT informed of transplant options, please check all that apply:
☐ Medically unfit ☐ Patient declines information
☐ Unsuitable due to age ☐ Patient has not been assessed
☐ Psychologically unfit ☐ Other

C. COMPLETE FOR ALL KIDNEY TRANSPLANT PATIENTS

28. Date of Transplant	29. Name of Transplant Hospital	30. Medicare Provider Number for Item 29
____/____/____ MM DD YYYY		

Date patient was admitted as an inpatient to a hospital in preparation for, or anticipation of, a kidney transplant prior to the date of actual transplantation.

31. Enter Date	32. Name of Preparation Hospital	33. Medicare Provider number for Item 32
____/____/____ MM DD YYYY		

34. Current Status of Transplant *(if functioning, skip items 36 and 37)*	35. Type of Donor:
☐ Functioning ☐ Non-Functioning	☐ Deceased ☐ Living Related ☐ Living Unrelated
36. If Non-Functioning, Date of Return to Regular Dialysis ____/____/____ MM DD YYYY	37. Current Dialysis Treatment Site ☐ Home ☐ Dialysis Facility/Center ☐ SNF/Long Term Care Facility

D. COMPLETE FOR ALL ESRD SELF-DIALYSIS TRAINING PATIENTS (MEDICARE APPLICANTS ONLY)

38. Name of Training Provider	39. Medicare Provider Number of Training Provider (for Item 38)
40. Date Training Began ____/____/____ MM DD YYYY	41. Type of Training ☐ Hemodialysis a. ☐ Home b. ☐ In Center ☐ CAPD ☐ CCPD ☐ Other
42. This Patient is Expected to Complete *(or has completed)* Training and will Self-dialyze on a Regular Basis. ☐ Yes ☐ No	43. Date When Patient Completed, or is Expected to Complete, Training ____/____/____ MM DD YYYY

I certify that the above self-dialysis training information is correct and is based on consideration of all pertinent medical, psychological, and sociological factors as reflected in records kept by this training facility.

44. Printed Name and Signature of Physician personally familiar with the patient's training	45. UPIN of Physician in Item 44
a.) Printed Name b.) Signature c.) Date ____/____/____ MM DD YYYY	

E. PHYSICIAN IDENTIFICATION

46. Attending Physician *(Print)*	47. Physician's Phone No. ( )	48. UPIN of Physician in Item 46

PHYSICIAN ATTESTATION

I certify, under penalty of perjury, that the information on this form is correct to the best of my knowledge and belief. Based on diagnostic tests and laboratory findings, I further certify that this patient has reached the stage of renal impairment that appears irreversible and permanent and requires a regular course of dialysis or kidney transplant to maintain life. I understand that this information is intended for use in establishing the patient's entitlement to Medicare benefits and that any falsification, misrepresentation, or concealment of essential information may subject me to fine, imprisonment, civil penalty, or other civil sanctions under applicable Federal laws.

49. Attending Physician's Signature of Attestation *(Same as Item 46)*	50. Date ____/____/____ MM DD YYYY
51. Physician Recertification Signature	52. Date ____/____/____ MM DD YYYY
53. Remarks	

F. OBTAIN SIGNATURE FROM PATIENT

I hereby authorize any physician, hospital, agency, or other organization to disclose any medical records or other information about my medical condition to the Department of Health and Human Services for purposes of reviewing my application for Medicare entitlement under the Social Security Act and/or for scientific research.

54. Signature of Patient *(Signature by mark must be witnessed.)*	55. Date ____/____/____ MM DD YYYY

G. PRIVACY STATEMENT

The collection of this information is authorized by Section 226A of the Social Security Act. The information provided will be used to determine if an individual is entitled to Medicare under the End Stage Renal Disease provisions of the law. The information will be maintained in system No. 09-70-0520, "End Stage Renal Disease Program Management and Medical Information System (ESRD PMMIS)", published in the Federal Register, Vol. 67, No. 116, June 17, 2002, pages 41244-41250 or as updated and republished. Collection of your Social Security number is authorized by Executive Order 9397. Furnishing the information on this form is voluntary, but failure to do so may result in denial of Medicare benefits. Information from the ESRD PMMIS may be given to a congressional office in response to an inquiry from the congressional office made at the request of the individual; an individual or organization for research, demonstration, evaluation, or epidemiologic project related to the prevention of disease or disability, or the restoration or maintenance of health. Additional disclosures may be found in the *Federal Register* notice cited above. You should be aware that P.L.100-503, the Computer Matching and Privacy Protection Act of 1988, permits the government to verify information by way of computer matches.

FORM CMS-2728-U3 (06/04) EF(03/2005)

LIST OF PRIMARY CAUSES OF END STAGE RENAL DISEASE

Item 15. Primary Cause of Renal Failure should be completed by the attending physician from the list below. Enter the ICD-9-CM code to indicate the primary cause of end stage renal disease. If there are several probable causes of renal failure, choose one as primary. **Code effective as of September 2003**.

DIABETES

25040 Diabetes with renal manifestations Type 2
25041 Diabetes with renal manifestations Type 1

GLOMERULONEPHRITIS

5829 Glomerulonephritis (GN) (histologically not examined)
5821 Focal glomerulosclerosis, focal sclerosing GN
5831 Membranous nephropathy
58321 Membranoproliferative GN type 1, diffuse MPGN
58322 Dense deposit disease, MPGN type 2
58381 IgA nephropathy, Berger's disease (proven by immunofluorescence)
58382 IgM nephropathy (proven by immunofluorescence)
5834 With lesion of rapidly progressive GN
5800 Post infectious GN, SBE
5820 Other proliferative GN

SECONDARY GN/VASCULITIS

7100 Lupus erythematosus, (SLE nephritis)
2870 Henoch-Schonlein syndrome
7101 Scleroderma
28311 Hemolytic uremic syndrome
4460 Polyarteritis
4464 Wegener's granulomatosis
58392 Nephropathy due to heroin abuse and related drugs
44620 Other Vasculitis and its derivatives
44621 Goodpasture's syndrome
58391 Secondary GN, other

INTERSTITIAL NEPHRITIS/PYELONEPHRITIS

9659 Analgesic abuse
5830 Radiation nephritis
9849 Lead nephropathy
5909 Nephropathy caused by other agents
27410 Gouty nephropathy
5920 Nephrolithiasis
5996 Acquired obstructive uropathy
5900 Chronic pyelonephritis, reflux nephropathy
58389 Chronic interstitial nephritis
58089 Acute interstitial nephritis
5929 Urolithiasis
27549 Other disorders of calcium metabolism

HYPERTENSION/LARGE VESSEL DISEASE

40391 Unspecified with renal failure
4401 Renal artery stenosis
59381 Renal artery occlusion
59383 Cholesterol emboli, renal emboli

CYSTIC/HEREDITARY/CONGENITAL DISEASES

75313 Polycystic kidneys, adult type (dominant)
75314 Polycystic, infantile (recessive)
75316 Medullary cystic disease, including nephronophthisis
7595 Tuberous sclerosis
7598 Hereditary nephritis, Alport's syndrome
2700 Cystinosis
2718 Primary oxalosis
2727 Fabry's disease
7533 Congenital nephrotic syndrome
5839 Drash syndrome, mesangial sclerosis
75321 Congenital obstruction of ureterpelvic junction
75322 Congenital obstruction of uretrovesical junction
75329 Other Congenital obstructive uropathy
7530 Renal hypoplasia, dysplasia, oligonephronia
75671 Prune belly syndrome
75989 Other (congenital malformation syndromes)

NEOPLASMS/TUMORS

1890 Renal tumor (malignant)
1899 Urinary tract tumor (malignant)
2230 Renal tumor (benign)
2239 Urinary tract tumor (benign)
23951 Renal tumor (unspecified)
23952 Urinary tract tumor (unspecified)
20280 Lymphoma of kidneys
20300 Multiple myeloma
20308 Other immuno proliferative neoplasms (including light chain nephropathy)
2773 Amyloidosis
99680 Complications of transplanted organ unspecified
99681 Complications of transplanted kidney
99682 Complications of transplanted liver
99683 Complications of transplanted heart
99684 Complications of transplanted lung
99685 Complications of transplanted bone marrow
99686 Complications of transplanted pancreas
99687 Complications of transplanted intestine
99689 Complications of other specified transplanted organ

MISCELLANEOUS CONDITIONS

28260 Sickle cell disease/anemia
28269 Sickle cell trait and other sickle cell (HbS/Hb other)
64620 Post partum renal failure
042 AIDS nephropathy
8660 Traumatic or surgical loss of kidney(s)
5724 Hepatorenal syndrome
5836 Tubular necrosis (no recovery)
59389 Other renal disorders
7999 Etiology uncertain

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

Form Approved
OMB No. 0938-0448

ESRD DEATH NOTIFICATION

END STAGE RENAL DISEASE MEDICAL INFORMATION SYSTEM

1. Patient's Last Name	First	MI	2. Medicare Claim Number

3. Patient's Sex	4. Date of Birth	5. Social Security Number
a. ☐ Male b. ☐ Female	__ __ / __ __ / __ __ __ __ (Month / Day / Year)	

6. Patient's State of Residence	7. Place of Death	8. Date of Death
	a. ☐ Hospital c. ☐ Home e. ☐ Other b. ☐ Dialysis Unit d. ☐ Nursing Home	__ __ / __ __ / __ __ __ __ (Month / Day / Year)

9. Modality at Time of Death

a. ☐ Incenter Hemodialysis b. ☐ Home Hemodialysis c. ☐ CAPD d. ☐ CCPD e. ☐ Transplant f. ☐ Other

10. Provider Name and Address (Street)	11. Provider Number

Provider Address (City/State)

12. Causes of Death (enter codes from list on back of form)

a. Primary Cause _ _ _

b. Were there secondary causes?

☐ No

☐ Yes, specify: _ _ _ _ _ _ _ _ _ _ _ _

C. If cause is other (98) please specify:_____

13. Renal replacement therapy discontinued prior to death: ☐ Yes ☐ No

If yes, check one of the following:

a. ☐ Following HD and/or PD access failure
b. ☐ Following transplant failure
c. ☐ Following chronic failure to thrive
d. ☐ Following acute medical complication
e. ☐ Other
f. Date of last dialysis treatment __ __ / __ __ / __ __ __ __ (Month / Day / Year)

14. Was discontinuation of renal replacement therapy after patient/family request to stop dialysis?

☐ Yes ☐ No

☐ Unknown ☐ Not Applicable

15. If deceased ever received a transplant:

a. Date of most recent transplant __ __ / __ __ / __ __ __ __ (Month / Day / Year) ☐ Unknown

b. Type of transplant received
☐ Living Related ☐ Living Unrelated ☐ Deceased ☐ Unknown

c. Was graft functioning (patient not on dialysis) at time of death?
☐ Yes ☐ No ☐ Unknown

d. Did transplant patient resume chronic maintenance dialysis prior to death?
☐ Yes ☐ No ☐ Unknown

16. Was patient receiving Hospice care prior to death?

☐ Yes ☐ No

☐ Unknown

17. Name of Physician (Please print complete name)	18. Signature of Person Completing This Form	Date

This report is required by law (42, U.S.C. 426; 20 CFR 405, Section 2133). Individually identifiable patient information will not be disclosed except as provided for in the Privacy Act of 1974 (5 U.S.C. 5520; 45 CFR Part 5a).

Form CMS-2746-U2 (08/06) EF 08/2006

ESRD DEATH NOTIFICATION FORM
LIST OF CAUSES

CARDIAC
- 23 Myocardial infarction, acute
- 25 Pericarditis, incl. Cardiac tamponade
- 26 Atherosclerotic heart disease
- 27 Cardiomyopathy
- 28 Cardiac arrhythmia
- 29 Cardiac arrest, cause unknown
- 30 Valvular heart disease
- 31 Pulmonary edema due to exogenous fluid
- 32 Congestive Heart Failure

VASCULAR
- 35 Pulmonary embolus
- 36 Cerebrovascular accident including intracranial hemorrhage
- 37 Ischemic brain damage/Anoxic encephalopathy
- 38 Hemorrhage from transplant site
- 39 Hemorrhage from vascular access
- 40 Hemorrhage from dialysis circuit
- 41 Hemorrhage from ruptured vascular aneurysm
- 42 Hemorrhage from surgery (not 38, 39, or 41)
- 43 Other hemorrhage (not 38-42, 72)
- 44 Mesenteric infarction/ischemic bowel

INFECTION
- 33 Septicemia due to internal vascular access
- 34 Septicemia due to vascular access catheter
- 45 Peritoneal access infectious complication, bacterial
- 46 Peritoneal access infectious complication, fungal
- 47 Peritonitis (complication of peritoneal dialysis)
- 48 Central nervous system infection (brain abscess, meningitis, encephalitis, etc.)
- 51 Septicemia due to peripheral vascular disease, gangrene
- 52 Septicemia, other
- 61 Cardiac infection (endocarditis)
- 62 Pulmonary infection (pneumonia, influenza)
- 63 Abdominal infection (peritonitis (not comp of PD), perforated bowel, diverticular disease, gallbladder)
- 70 Genito-urinary infection (urinary tract infection, pyelonephritis, renal abscess)

LIVER DISEASE
- 64 Hepatitis B
- 71 Hepatitis C
- 65 Other viral hepatitis
- 66 Liver-drug toxicity
- 67 Cirrhosis
- 68 Polycystic liver disease
- 69 Liver failure, cause unknown or other

GASTRO-INTESTINAL
- 72 Gastro-intestinal hemorrhage
- 73 Pancreatitis
- 75 Perforation of peptic ulcer
- 76 Perforation of bowel (not 75)

METABOLIC
- 24 Hyperkalemia
- 77 Hypokalemia
- 78 Hypernatremia
- 79 Hyponatremia
- 100 Hypoglycemia
- 101 Hyperglycemia
- 102 Diabetic coma
- 95 Acidosis

ENDOCRINE
- 96 Adrenal insufficiency
- 97 Hypothyroidism
- 103 Hyperthyroidism

OTHER
- 80 Bone marrow depression
- 81 Cachexia/failure to thrive
- 82 Malignant disease, patient ever on Immunosuppressive therapy
- 83 Malignant disease (not 82)
- 84 Dementia, incl. dialysis dementia, Alzheimer's
- 85 Seizures
- 87 Chronic obstructive lung disease (COPD)
- 88 Complications of surgery
- 89 Air embolism
- 104 Withdrawal from dialysis/uremia
- 90 Accident related to treatment
- 91 Accident unrelated to treatment
- 92 Suicide
- 93 Drug overdose (street drugs)
- 94 Drug overdose (not 92 or 93)
- 98 Other cause of death
- 99 Unknown

Form CMS-2746-U2 (08/06) EF 08/2006

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

Form Approved
OMB No. 0938-0447

END STAGE RENAL DISEASE MEDICAL INFORMATION SYSTEM
ESRD FACILITY SURVEY (DIALYSIS UNITS ONLY)

FOR THE PERIOD

Facility Physical Address _____
(If different than mailing address) *Suite/Room* *Street* *City* *State/Zip Code*

Number of Dialysis Stations: _____ **Facility Telephone: (** **)** _____

Facility Ownership Type: ☐ **Profit** ☐ **Non-Profit**

Facility Local/National Affiliation/Chain Information _____
(i.e. Gambro, etc.)

Types of dialysis services offered:
☐ Incenter Hemodialysis ☐ Peritoneal Dialysis ☐ Home Hemodialysis Training

Does your facility offer a dialysis shift that starts at 5:00 p.m. or later?
☐ Yes ☐ No

DIALYSIS PATIENTS AND TREATMENTS

DIALYSIS PATIENTS

Patients Receiving Care Beginning of Survey Period		
Incenter	Home	Total Fields 01 thru 02
01	02	03

	Additions During Survey Period			
	Started for first time ever	Restarted	Transferred from other dialysis unit	Returned after transplantation
Incenter				
Home				
	04A 04B	05A 05B	06A 06B	07A 07B

Losses During Survey Period					
Deaths	Recovered kidney function	Received transplant	Transferred to other dialysis unit	Discontinued dialysis	Other (LTFU)
08A 08B	09A 09B	10A 10B	11A 11B	12A 12B	13A 13B

Patients Receiving Care at End of Survey Period											
Incenter Dialysis		Self-Dialysis Training				Total Incenter Dialysis	Home Dialysis				Total Home Dialysis
Hemo-Dialysis	Other	Hemo-Dialysis	CAPD	CCPD	Other	Fields 14 thru 19	Hemo-Dialysis	CAPD	CCPD	Other	Fields 21 thru 24
14	15	16	17	18	19	20	21	22	23	24	25

Total Patients
Fields 20 and 25
26

Patient Eligibility Status End of Survey Period		
Currently enrolled in Medicare	Medicare application pending	Non-Medicare
27	28	29

Hemodialysis Patients Dialyzing More Than 4 Times Per Week		
Setting	Day	Nocturnal
Incenter		
Home		
	30A 30B	31A 31B

Vocational Rehabilitation			
Patients aged 18 through 54	Patients receiving services from Voc Rehab	Patients Employed full-time or part-time	Patients attending school full-time or part-time
32	33	34	35

TREATMENT AND STAFFING

Incenter Dialysis Treatments (Include Training Treatments)	
Hemodialysis	Other
36	37

Staffing				
	Number of Staff		Number of Open Pos.	
Position	Full Time	Part Time	Full Time	Part Time
a. RNs				
b. LPN/LVNs				
c. PCTs				
d. APNs				
e. Dietitians				
f. Social Workers				
	38	39	40	41

COMPLETED BY (Name)	DATE	TITLE	TELEPHONE NO.

REMARKS REGARDING INFORMATION PROVIDED ON THIS SURVEY SHOULD BE ENTERED ON THE LAST PAGE OF THE SURVEY

This report is required by law (42 USC 426; 42 CFR 405.2133). Individually identifiable patient information will not be disclosed except as provided for in the Privacy Act of 1974 (5 USC 5520; 45 CFR, Part 5a).

Form CMS-2744A (02/04)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

Form Approved
OMB No. 0938-0447

END STAGE RENAL DISEASE MEDICAL INFORMATION SYSTEM
ESRD FACILITY SURVEY (TRANSPLANT CENTERS ONLY)

FOR THE PERIOD

KIDNEY TRANSPLANTS PERFORMED

PATIENTS TRANSPLANTED AND DONOR TYPE

TO BE COMPLETED BY KIDNEY TRANSPLANT CENTERS ONLY

Patients who received transplant at this facility	Eligibility Status of Patients Transplanted at this Facility During the Survey Period			
	Currently enrolled in Medicare	Medicare applica-tion pending	Non-Medicare	
			U.S. Res.	Other
42	43	44	45	46

Transplant Procedures Performed at This Facility			
Living Related Donor	Living Unrelated Donor	Deceased Donor	Total Fields 47 thru 49
47	48	49	50

Patients Awaiting Transplant	
Dialysis	Nondialysis
51	52

REMARKS/COMMENTS

COMPLETED BY (Name)	DATE	TITLE	TELEPHONE NO.

This report is required by law (42 USC 426; 42 CFR 405.2133). Individually identifiable patient information will not be disclosed except as provided for in the Privacy Act of 1974 (5 USC 5520; 45 CFR, Part 5a).

Form CMS-2744B (02/04)

DEPARTMENT OF HEALTH AND HUMAN SERVICES
CENTERS FOR MEDICARE & MEDICAID SERVICES

Form Approved
OMB No. 0938-0046

END STAGE RENAL DISEASE MEDICAL EVIDENCE REPORT
MEDICARE ENTITLEMENT AND/OR PATIENT REGISTRATION

A. COMPLETE FOR ALL ESRD PATIENTS *Check one:* ☐ Initial ☐ Re-entitlement ☐ Supplemental

1. Name *(Last, First, Middle Initial)*

2. Medicare Claim Number | 3. Social Security Number | 4. Date of Birth *(mm/dd/yyyy)*

5. Patient Mailing Address *(Include City, State and Zip)* | 6. Phone Number *(including area code)*

7. Sex ☐ Male ☐ Female

8. Ethnicity ☐ Not Hispanic or Latino ☐ Hispanic or Latino (Complete Item 9)

9. Country/Area of Origin or Ancestry

10. Race *(Check all that apply)*
☐ White
☐ Black or African American
☐ American Indian/Alaska Native
Print Name of Enrolled/Principal Tribe
☐ Asian
☐ Native Hawaiian or Other Pacific Islander*
*complete Item 9

11. Is patient applying for ESRD Medicare coverage? ☐ Yes ☐ No

12. Current Medical Coverage *(Check all that apply)*
☐ Medicaid ☐ Medicare ☐ Employer Group Health Insurance
☐ DVA ☐ Medicare Advantage ☐ Other ☐ None

13. Height INCHES ____ OR CENTIMETERS ____

14. Dry Weight POUNDS ____ OR KILOGRAMS ____

15. Primary Cause of Renal Failure *(Use ICD-10-CM Code)*

16. Employment Status *(6 mos prior and current status)*

Prior	Current	
☐	☐	Unemployed
☐	☐	Employed Full Time
☐	☐	Employed Part Time
☐	☐	Homemaker
☐	☐	Retired due to Age/Preference
☐	☐	Retired (Disability)
☐	☐	Medical Leave of Absence
☐	☐	Student

17. Co-Morbid Conditions *(Check all that apply currently and/or during last 10 years)* *See instructions

a. ☐ Congestive heart failure
b. ☐ Atherosclerotic heart disease ASHD
c. ☐ Other cardiac disease
d. ☐ Cerebrovascular disease, CVA, TIA*
e. ☐ Peripheral vascular disease*
f. ☐ History of hypertension
g. ☐ Amputation
h. ☐ Diabetes, currently on insulin
i. ☐ Diabetes, on oral medications
j. ☐ Diabetes, without medications
k. ☐ Diabetic retinopathy
l. ☐ Chronic obstructive pulmonary disease
m. ☐ Tobacco use (current smoker)
n. ☐ Malignant neoplasm, Cancer
o. ☐ Toxic nephropathy
p. ☐ Alcohol dependence
q. ☐ Drug dependence*
r. ☐ Inability to ambulate
s. ☐ Inability to transfer
t. ☐ Needs assistance with daily activities
u. ☐ Institutionalized
☐ 1. Assisted Living
☐ 2. Nursing Home
☐ 3. Other Institution
v. ☐ Non-renal congenital abnormality
w. ☐ None

18. Prior to ESRD therapy:

a. Did patient receive exogenous erythropoetin or equivalent? ☐ Yes ☐ No ☐ Unknown If Yes, answer: ☐ <6 months ☐ 6-12 months ☐ >12 months
b. Was patient under care of a nephrologist? ☐ Yes ☐ No ☐ Unknown If Yes, answer: ☐ <6 months ☐ 6-12 months ☐ >12 months
c. Was patient under care of kidney dietitian? ☐ Yes ☐ No ☐ Unknown If Yes, answer: ☐ <6 months ☐ 6-12 months ☐ >12 months
d. What access was used on first outpatient dialysis: ☐ AVF ☐ Graft ☐ Catheter ☐ Other
If not AVF, then: Is maturing AVF present? ☐ Yes ☐ No
Is maturing graft present? ☐ Yes ☐ No

19. Laboratory Values Within 45 Days Prior to the Most Recent ESRD Episode. (Lipid Profile within 1 Year of Most Recent ESRD Episode).

LABORATORY TEST	VALUE	DATE	LABORATORY TEST	VALUE	DATE
a.1. Serum Albumin (g/dl)			d. HbA1c	%	
a.2. Serum Albumin Lower Limit			e. Lipid Profile TC		
a.3. Lab Method Used (BCG or BCP)			LDL		
b. Serum Creatinine (mg/dl)			HDL		
c. Hemoglobin (g/dl)			TG		

B. COMPLETE FOR ALL ESRD PATIENTS IN DIALYSIS TREATMENT

20. Name of Dialysis Facility | 21. Medicare Provider Number *(for item 20)*

22. Primary Dialysis Setting ☐ Home ☐ Dialysis Facility/Center ☐ SNF/Long Term Care Facility

23. Primary Type of Dialysis ☐ Hemodialysis (Sessions per week____/hours per session____) ☐ CAPD ☐ CCPD ☐ Other

24. Date Regular Chronic Dialysis Began *(mm/dd/yyyy)* | 25. Date Patient Started Chronic Dialysis at Current Facility *(mm/dd/yyyy)*

26. Has patient been informed of kidney transplant options? ☐ Yes ☐ No

27. If patient NOT informed of transplant options, please check all that apply:
☐ Medically unfit
☐ Patient has not been assessed
☐ Patient declines information
☐ Psychologically unfit
☐ Unsuitable due to age
☐ Other

C. COMPLETE FOR ALL KIDNEY TRANSPLANT PATIENTS

28. Date of Transplant *(mm/dd/yyyy)*	29. Name of Transplant Hospital	30. Medicare Provider Number for Item 29

Date patient was admitted as an inpatient to a hospital in preparation for, or anticipation of, a kidney transplant prior to the date of actual transplantation.

31. Enter Date *(mm/dd/yyyy)*	32. Name of Preparation Hospital	33. Medicare Provider number for Item 32

34. Current Status of Transplant *(if functioning, skip items 36 and 37)*	35. Type of Donor:
☐ Functioning ☐ Non-Functioning	☐ Deceased ☐ Living Related ☐ Living Unrelated
36. If Non-Functioning, Date of Return to Regular Dialysis *(mm/dd/yyyy)*	37. Current Dialysis Treatment Site
	☐ Home ☐ Dialysis Facility/Center ☐ SNF/Long Term Care Facility

D. COMPLETE FOR ALL ESRD SELF-DIALYSIS TRAINING PATIENTS (MEDICARE APPLICANTS ONLY)

38. Name of Training Provider	39. Medicare Provider Number of Training Provider (for Item 38)
40. Date Training Began *(mm/dd/yyyy)*	41. Type of Training
	☐ Hemodialysis a. ☐ Home b. ☐ In Center ☐ CAPD ☐ CCPD ☐ Other
42. This Patient is Expected to Complete *(or has completed)* Training and will Self-dialyze on a Regular Basis. ☐ Yes ☐ No	43. Date When Patient Completed, or is Expected to Complete, Training *(mm/dd/yyyy)*

I certify that the above self-dialysis training information is correct and is based on consideration of all pertinent medical, psychological, and sociological factors as reflected in records kept by this training facility.

44. Printed Name and Signature of Physician personally familiar with the patient's training			45. UPIN of Physician in Item 44
a.) Printed Name	b.) Signature	c.) Date *(mm/dd/yyyy)*	

E. PHYSICIAN IDENTIFICATION

46. Attending Physician *(Print)*	47. Physician's Phone No. *(include Area Code)*	48. UPIN of Physician in Item 46

PHYSICIAN ATTESTATION

I certify, under penalty of perjury, that the information on this form is correct to the best of my knowledge and belief. Based on diagnostic tests and laboratory findings, I further certify that this patient has reached the stage of renal impairment that appears irreversible and permanent and requires a regular course of dialysis or kidney transplant to maintain life. I understand that this information is intended for use in establishing the patient's entitlement to Medicare benefits and that any falsification, misrepresentation, or concealment of essential information may subject me to fine, imprisonment, civil penalty, or other civil sanctions under applicable Federal laws.

49. Attending Physician's Signature of Attestation *(Same as Item 46)*	50. Date *(mm/dd/yyyy)*
51. Physician Recertification Signature	52. Date *(mm/dd/yyyy)*

53. Remarks

F. OBTAIN SIGNATURE FROM PATIENT

I hereby authorize any physician, hospital, agency, or other organization to disclose any medical records or other information about my medical condition to the Department of Health and Human Services for purposes of reviewing my application for Medicare entitlement under the Social Security Act and/or for scientific research.

54. Signature of Patient *(Signature by mark must be witnessed.)*	55. Date *(mm/dd/yyyy)*

G. PRIVACY STATEMENT

The collection of this information is authorized by Section 226A of the Social Security Act. The information provided will be used to determine if an individual is entitled to Medicare under the End Stage Renal Disease provisions of the law. The information will be maintained in system No. 09-70-0520, "End Stage Renal Disease Program Management and Medical Information System (ESRD PMMIS)", published in the Federal Register, Vol. 67, No. 116, June 17, 2002, pages 41244-41250 or as updated and republished. Collection of your Social Security number is authorized by Executive Order 9397. Furnishing the information on this form is voluntary, but failure to do so may result in denial of Medicare benefits. Information from the ESRD PMMIS may be given to a congressional office in response to an inquiry from the congressional office made at the request of the individual; an individual or organization for research, demonstration, evaluation, or epidemiologic project related to the prevention of disease or disability, or the restoration or maintenance of health. Additional disclosures may be found in the *Federal Register* notice cited above. You should be aware that P.L.100-503, the Computer Matching and Privacy Protection Act of 1988, permits the government to verify information by way of computer matches.

INSTRUCTIONS FOR COMPLETION OF END STAGE RENAL DISEASE MEDICAL EVIDENCE REPORT MEDICARE ENTITLEMENT AND/OR PATIENT REGISTRATION

For whom should this form be completed:

This form SHOULD NOT be completed for those patients who are in acute renal failure. Acute renal failure is a condition in which kidney function can be expected to recover after a short period of dialysis, i.e., several weeks or months.

This form MUST BE completed within 45 days for ALL patients beginning any of the following:

Check the appropriate block that identifies the reason for submission of this form.

Initial

For all patients who initially receive a kidney transplant instead of a course of dialysis. For patients for whom a regular course of dialysis has been prescribed by a physician because they have reached that stage of renal impairment that a kidney transplant or regular course of dialysis is necessary to maintain life. The first date of a regular course of dialysis is the date this prescription is implemented whether as an inpatient of a hospital, an outpatient in a dialysis center or facility, or a home patient.

The form should be completed for all patients in this category even if the patient dies within this time period.

Re-entitlement

For beneficiaries who have already been entitled to ESRD Medicare benefits and those benefits were terminated because their coverage stopped 3 years post-transplant but now are again applying for Medicare ESRD benefits because they returned to dialysis or received another kidney transplant.

For beneficiaries who stopped dialysis for more than 12 months, have had their Medicare ESRD benefits terminated and now returned to dialysis or received a kidney transplant. These patients will be reapplying for Medicare ESRD benefits.

Supplemental

Patient has received a transplant or trained for self-care dialysis within the first 3 months of the first date of dialysis and initial form was submitted.

All items except as follows: To be completed by the attending physician, head nurse, or social worker involved in this patient's treatment of renal disease.

Items 15, 17-18, 26-27, 49-50: To be completed by the attending physician.
Item 44: To be signed by the attending physician or the physician familiar with the patient's self-care dialysis training.
Items 54 and 55: To be signed and dated by the patient.

1. Enter the patient's legal name (Last, first, middle initial). Name should appear exactly the same as it appears on patient's social security or Medicare card.
2. If the patient is covered by Medicare, enter his/her Medicare claim number as it appears on his/her Medicare card.
3. Enter the patient's own social security number. This number can be verified from his/her social security card.
4. Enter patient's date of birth (2-digit Month, Day, and 4-digit Year). Example 07/25/1950.
5. Enter the patient's mailing address (number and street or post office box number, city, state, and ZIP code.)
6. Enter the patient's home area code and telephone number.
7. Check the appropriate block to identify sex.
8. Check the appropriate block to identify ethnicity. Definitions of the ethnicity categories for Federal statistics are as follows:

   Not Hispanic or Latino—A person of culture or origin not described below, regardless of race.

   Hispanic or Latino—A person of Cuban, Puerto Rican, or Mexican culture or origin regardless of race. Please complete Item 9 and provide the country, area of origin, or ancestry to which the patient claims to belong.
9. Country/Area of origin or ancestry—Complete if information is available or if directed to do so in question 8.
10. Check the appropriate block(s) to identify race. Definitions of the racial categories for Federal statistics are as follows:

    White—A person having origins in any of the original white peoples of Europe, the Middle East or North Africa.

    Black or African American—A person having origins in any of the black racial groups of Africa. This includes native-born Black Americans, Africans, Haitians and residents of non-Spanish speaking Caribbean Islands of African descent.

    American Indian/Alaska Native—A person having origins in any of the original peoples of North America and South America (including Central America) and who maintains Tribal affiliation or community attachment. Print the name of the enrolled or principal tribe to which the patient claims to be a member.

    Asian—A person having origins in any of the original peoples of the Far East, Southeast Asia or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand and Vietnam.

    Native Hawaiian or Other Pacific Islander—A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. Please complete Item 9 and provide the country, area of origin, or ancestry to which the patient claims to belong.

DISTRIBUTION OF COPIES:

- Forward one copy of this form to the Social Security office servicing the claim.
- Forward one copy of this form to the ESRD Network Organization.
- Retain one copy of this form in the patient's medical records file.

11. Check the appropriate yes or no block to indicate if patient is applying for ESRD Medicare. Note: Even though a person may already be entitled to general Medicare coverage, he/she should reapply for ESRD Medicare coverage.

12. Check all the blocks that apply to this patient's current medical insurance status.

Medicaid—Patient is currently receiving State Medicaid benefits.

Medicare—Patient is currently entitled to Federal Medicare benefits.

Employer Group Health Insurance—Patient receives medical benefits through an employee health plan that covers employees, former employees, or the families of employees o former employees.

DVA—Patient is receiving medical care from a Department of Veterans Affairs facility.

Medicare Advantage—Patient is receiving medical benefits under a Medicare Advantage organization.

Other Medical Insurance—Patient is receiving medical benefits under a health insurance plan that is not Medicare, Medicaid, Department of Veterans Affairs, HMO/M+C organization, nor an employer group health insurance plan. Examples of other medical insurance are Railroad Retirement and CHAMPUS beneficiaries.

None—Patient has no medical insurance plan.

13. Enter the patient's most recent recorded height in inches OR centimeters at time form is being completed. If entering height in centimeters, round to the nearest centimeter. Estimate or use last known height for those unable to be measured. (Example of inches - 62. DO NOT PUT 5'2") NOTE: For amputee patients, enter height prior to amputation.

14. Enter the patient's most recent recorded dry weight in pounds OR kilograms at time form is being completed. If entering weight in kilograms, round to the nearest kilogram.

NOTE: For amputee patients, enter actual dry weight.

15. To be completed by the attending physician. Enter the ICD10-CM Code to indicate the primary cause of end stage renal disease.

16. Check the first box to indicate employment status 6 months prior to renal failure and the second box to indicate current employment status. Check only one box for each time period. If patient is under 6 years of age, leave blank.

17. To be completed by the attending physician. Check all co-morbid conditions that apply.

*Cerebrovascular Disease includes history of stroke/cerebrovascular accident (CVA) and transient ischemic attack (TIA).

*Peripheral Vascular Disease includes absent foot pulses, prior typical claudication, amputations for vascular disease, gangrene and aortic aneurysm.

*Drug dependence means dependent on illicit drugs.

18. Prior to ESRD therapy, check the appropriate box to indicate whether the patient received exogenous erythropoietin (EPO) or equivalent, was under the care of a nephrologist and/or was under the care of a kidney dietitian. Provide vascular access information as to the type of access used (Arterio-Venous Fistula (AVF), graft, catheter (including port device) or other type of access) when the patient first received outpatient dialysis. If an AVF access was not used, was a maturing AVF or graft present?

NOTE: For those patients re-entering the Medicare program after benefits were terminated, Items 19a thru 19c should contain initial laboratory values within 45 days prior to the most recent ESRD episode. Lipid profiles and HbA1c should be within 1 year of the most recent ESRD episode. Some tests may not be required for patients under 21 years of age.

19a1. Enter the serum albumin value (g/dl) and date test was taken. This value and date must be within 45 days prior to first dialysis treatment or kidney transplant.

19a2. Enter the lower limit of the normal range for serum albumin from the laboratory which performed the serum albumin test entered in 19a1.

19a3. Enter the serum albumin lab method used (BCG or BCP).

19b. Enter the serum creatinine value (mg/dl) and date test was taken. THIS FIELD MUST BE COMPLETED. Value must be within 45 days prior to first dialysis treatment or kidney transplant.

19c. Enter the hemoglobin value (g/dl) and date test was taken. This value and date must be within 45 days prior to the first dialysis treatment or kidney transplant.

19d. Enter the HbA1c value and the date the test was taken. The date must be within 1 year prior to the first dialysis treatment or kidney transplant.

19e. Enter the Lipid Profile values and date test was taken. These values: TC–Total Cholesterol; LDL–LDL Cholesterol; HDL–HDL Cholesterol; TG–Triglycerides, and date must be within 1 year prior to the first dialysis treatment or kidney transplant.

20. Enter the name of the dialysis facility where patient is currently receiving care and who is completing this form for patient.

21. Enter the 6-digit Medicare identification code of the dialysis facility in item 20.

22. If the person is receiving a regular course of dialysis treatment, check the appropriate anticipated long-term treatment setting at the time this form is being completed.

23. If the patient is, or was, on regular dialysis, check the anticipated long-term primary type of dialysis: Hemodialysis, (enter the number of sessions prescribed per week and the hours that were prescribed for each session), CAPD (Continuous Ambulatory Peritoneal Dialysis) and CCPD (Continuous Cycling Peritoneal Dialysis), or Other. Check only one block. NOTE: Other has been placed on this form to be used only to report IPD (Intermittent Peritoneal Dialysis) and any new method of dialysis that may be developed prior to the renewal of this form by Office of Management and Budget.

24. Enter the date (month, day, year) that a "regular course of chronic dialysis" began. The beginning of the course of dialysis is counted from the beginning of regularly scheduled dialysis necessary for the treatment of end stage renal disease (ESRD) regardless of the dialysis setting. The date of the first dialysis treatment after the physician has determined that this patient has ESRD and has written a prescription for a "regular course of dialysis" is the "Date Regular Chronic Dialysis Began" regardless of whether this prescription was implemented in a hospital/ inpatient, outpatient, or home setting and regardless of any acute treatments received prior to the implementation of the prescription.

NOTE: For these purposes, end stage renal disease means irreversible damage to a person's kidneys so severely affecting his/her ability to remove or adjust blood wastes that in order to maintain life he or she must have either a course of dialysis or a kidney transplant to maintain life.

If re-entering the Medicare program, enter beginning date of the current ESRD episode. Note in Remarks, Item 53, that patient is restarting dialysis.

25. Enter date patient started chronic dialysis at current facility of dialysis services. In cases where patient transferred to current dialysis facility, this date will be after the date in Item 24.

26. Enter whether the patient has been informed of their options for receiving a kidney transplant.

27. If the patient has not been informed of their options (answered "no" to Item 26), then enter all reasons why a

kidney transplant was not an option for this patient at this time.

28. Enter the date(s) of the patient's kidney transplant(s). If reentering the Medicare program, enter current transplant date.
29. Enter the name of the hospital where the patient received a kidney transplant on the date in Item 28.
30. Enter the 6-digit Medicare identification code of the hospital in Item 29 where the patient received a kidney transplant on the date entered in Item 28.
31. Enter date patient was admitted as an inpatient to a hospital in preparation for, or anticipation of, a kidney transplant prior to the date of the actual transplantation. This includes hospitalization for transplant workup in order to place the patient on a transplant waiting list.
32. Enter the name of the hospital where patient was admitted as an inpatient in preparation for, or anticipation of, a kidney transplant prior to the date of the actual transplantation.
33. Enter the 6-digit Medicare identification number for hospital in Item 32.
34. Check the appropriate functioning or non-functioning block.
35. Enter the type of kidney transplant organ donor, Deceased, Living Related or Living Unrelated, that was provided to the patient.
36. If transplant is nonfunctioning, enter date patient returned to a regular course of dialysis. If patient did not stop dialysis post-transplant, enter transplant date.
37. If applicable, check where patient is receiving dialysis treatment following transplant rejection. A nursing home or skilled nursing facility is considered as home setting

Self-dialysis Training Patients (Medicare Applicants Only)

Normally, Medicare entitlement begins with the third month after the month a patient begins a regular course of dialysis treatment. This 3-month qualifying period may be waived if a patient begins a self-dialysis training program in a Medicare approved training facility and is expected to self-dialyze after the completion of the training program. Please complete items 38-43 if the patient has entered into a self-dialysis training program. Items 38-43 must be completed if the patient is applying for a Medicare waiver of the 3-month qualifying period for dialysis benefits based on participation in a self-care dialysis training program.

38. Enter the name of the provider furnishing self-care dialysis training.
39. Enter the 6-digit Medicare identification number for the training provider in Item 38.
40. Enter the date self-dialysis training began.
41. Check the appropriate block which describes the type of self-care dialysis training the patient began. If the patient trained for hemodialysis, enter whether the training was to perform dialysis in the home setting or in the facility (in center). If the patient trained for IPD (Intermittent Peritoneal Dialysis), report as Other.
42. Check the appropriate block as to whether or not the physician certifies that the patient is expected to complete the training successfully and self-dialyze on a regular basis.
43. Enter date patient completed or is expected to complete self-dialysis training.
44. Enter printed name and signature of the attending physician or the physician familiar with the patient's self-care dialysis training.
45. Enter the Unique Physician Identification Number (UPIN) of physician in Item 44. (See Item 48 for explanation of UPIN.)
46. Enter the name of the physician who is supervising the patient's renal treatment at the time this form is completed.
47. Enter the area code and telephone number of the physician who is supervising the patient's renal treatment at the time this form is completed.
48. Enter the physician's UPIN assigned by CMS.

    A system of physician identifiers is mandated by Section 9202 of the Consolidated Omnibus Budget Reconciliation Act of 1985. It requires a unique identifier for each physician who provides services for which Medicare payment is made. An identifier is assigned to each physician regardless of his or her practice configuration. The UPIN is established in a national Registry of Medicare Physician Identification and Eligibility Records (MPIER). Transamerica Occidental Life Insurance Company is the Registry Carrier that establishes and maintains the national registry of physicians receiving Part Medicare payment. Its address is: UPIN Registry, Transamerica Occidental Life, P.O. Box 2575, Los Angeles, CA 90051-0575.
49. To be signed by the physician supervising the patient's kidney treatment. Signature of physician identified in Item 46. A stamped signature is unacceptable.
50. Enter date physician signed this form.
51. To be signed by the physician who is currently following the patient. If the patient had decided initially not to file an application for Medicare, the physician will be re-certifying that the patient is end stage renal, based on the same medical evidence, by signing the copy of the CMS-2728 that was originally submitted and returned to the provider. If you do not have a copy of the original CMS-2728 on file, complete a new form.
52. The date physician re-certified and signed the form.
53. This remarks section may be used for any necessary comments by either the physician, patient, ESRD Network or social security field office.
54. The patient's signature authorizing the release of information to the Department of Health and Human Services must be secured here. If the patient is unable to sign the form, it should be signed by a relative, a person assuming responsibility for the patient or by a survivor.
55. The date patient signed form.

USRDS
UNITED STATES RENAL DATA SYSTEM

United States Renal Data System (USRDS)
International Data Collection Form

This form is designed to solicit information on the population of End-Stage Renal Disease (ESRD) patients in your country who are receiving renal replacement therapy (RRT). The information you provide will be returned to you along with comparable information from other countries participating in this voluntary effort.

If data are not available for all years, please include data for the most recent year(s). If you cannot provide data in the age and sex categories listed, please provide the total numbers. The format has been created to more clearly separate incident and prevalent population counts from transplant counts.

A) Population: the total general population of your country for the years that ESRD data will be provided.

B.1) Incidence: the count of patients who start any form of renal replacement therapy during the year. These are first-time patients only; patients who start dialysis after a failed transplant, for example, should not be included.

B.2) The subset of total incident patients whose failure is due to diabetic nephropathy. Subtracting B2 from B1 should give the total number of incident patients for all non-diabetic nephropathy causes.

C) Prevalence: the point prevalent count of patients at the end of the calendar year (December 31).

C.1) All patients on some form of ESRD treatment: dialysis and kidney transplantation.

C.2) Patients with a functioning kidney transplant as of December 31 for the indicated year.

C.3) All dialysis patients. C.2. and C.3. should sum to C.1. unless there are lost-to-follow-up patients. If there are lost-to-follow-up patients, please note this fact and whether these patients are captured in C.2.

C.4) All patients treated with in-center hemodialysis as of December 31 of the indicated year.

C.5) All patients treated with CAPD, APD, or IPD as of December 31 of the indicated year.

C.6) All patients treated with home hemodialysis as of December 31.

D) Kidney transplant activity: This is meant to be a count of transplants, not transplanted patients. If a patient receives multiple transplants during the year, all should be counted. If you report only transplanted patients, please provide these numbers and note that they refer to patients. **D.1** (deceased donor [cadaveric] transplants), **D.2** (living donor transplants), and **D.3** (unknown donor type) should sum to the total number of transplants.

A) Total General Population of the Country/Region

Population: the total general population of your country for the years indicated, or most recent available.

		Number by Sex		Number of People by Age Category						
Country/Region*	**Year**	**Female**	**Male**	**0-19**	**20-44**	**45-64**	**65-74**	**≥75**	**Unknown**	**Total**
	2011									
	2012									
	2013									
	2014									
	2015									

B.1) Incidence of ESRD Renal Replacement Therapy

Incidence: the count of patients who start any form of renal replacement therapy during the year. These are first-time patients only; patients who start dialysis after a failed transplant, for example, should not be included.

		Number by Sex		Number of People by Age Category						
Country/Region*	**Year**	**Female**	**Male**	**0-19**	**20-44**	**45-64**	**65-74**	**≥75**	**Unknown**	**Total**
	2011									
	2012									
	2013									
	2014									
	2015									

B.2) Incidence of ESRD Renal Replacement Therapy Due to Diabetes

Indicate the subset of incident patients who started any form of renal replacement therapy during the year and their ESRD was due to diabetic nephropathy. Subtracting B.2 from B.1 should equal the total number of incident patients for all non-diabetic nephropathy causes.

		Number by Sex		Number of People by Age Category						
Country/Region*	**Year**	**Female**	**Male**	**0-19**	**20-44**	**45-64**	**65-74**	**≥75**	**Unknown**	**Total**
	2011									
	2012									
	2013									
	2014									
	2015									

C.1) Prevalence: Total Number of ESRD Patients Receiving Renal Replacement Therapy (All Treatment Categories) at the End of the Year (December 31)

Please include all patients receiving either dialysis or living with a kidney transplant for ESRD treatment at end of year.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

C.2) Prevalence: Total Number of ESRD Patients with a Functioning Kidney Transplant at the End of the Year (December 31)

Please include all patients living with a functioning kidney transplant at end of the year for treatment of ESRD.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

C.3) Prevalence: Total Number of ESRD Patients on Dialysis at End of the Year (December 31)

Please list all patients receiving dialysis at end of year for ESRD therapy. C.2 and C.3 should sum to C.1 unless there are lost-to-follow-up patients. If there are lost-to-follow-up patients, please note this fact and whether these patients are captured in C.2.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

C.4) Prevalence: Total Number of ESRD Patients on In-Center Hemodialysis at the End of the Year (December 31)

Please include all patients treated with in-center hemodialysis for ESRD therapy at the end of each year.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

C.5) Prevalence: Total Number of ESRD Patients on CAPD, APD, or IPD at the End of the Year (December 31)

Please include all patients treated with continuous ambulatory peritoneal dialysis, automated peritoneal dialysis, or intermittent peritoneal dialysis for ESRD therapy at the end of each year.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

C.6) Prevalence: Total Number of ESRD Patients on Home Hemodialysis at the End of the Year (December 31)

Please indicate all patients treated with home hemodialysis at the end of each year.

		Number by Sex		Number of People by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

D.1) Transplant: Total Number of Deceased Donor (Cadaveric) Kidney Transplants during the Year

Please indicate the total number of deceased donor (cadaveric) kidney transplantations performed during the year.

		Number by Sex		Number of Transplants by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

D.2) Transplant: Total Number of Living Donor Kidney Transplants during the Year

Please indicate the total number of living donor kidney transplantations performed during the year.

		Number by Sex		Number of Transplants by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

D.3) Transplant: Total Number of Kidney Transplants during the Year with Unknown Donor Type

Indicate the total number of kidney transplantations performed during the year in which it was unknown whether the transplant was a deceased (cadaveric) or living donor kidney transplant.

		Number by Sex		Number of Transplants by Age Category						
Country/Region*	Year	Female	Male	0-19	20-44	45-64	65-74	≥75	Unknown	Total
	2011									
	2012									
	2013									
	2014									
	2015									

***Please note if data is representative of the whole country or individual regions**