CIGNA MEDICAL COVERAGE POLICY

The following Coverage Policy applies to all plans administered by CIGNA Companies including plans administered by Great-West Healthcare, which is now a part of CIGNA.

Subject **Pancreas-Kidney Transplantation and Pancreas Transplantation Alone**

Effective Date..... 9/15/2010
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INSTRUCTIONS FOR USE

*Coverage Policies are intended to provide guidance in interpreting certain **standard** CIGNA HealthCare benefit plans as well as benefit plans formerly administered by Great-West Healthcare. Please note, the terms of a participant's particular benefit plan document [Group Service Agreement (GSA), Evidence of Coverage, Certificate of Coverage, Summary Plan Description (SPD) or similar plan document] may differ significantly from the standard benefit plans upon which these Coverage Policies are based. For example, a participant's benefit plan document may contain a specific exclusion related to a topic addressed in a Coverage Policy. In the event of a conflict, a participant's benefit plan document **always supercedes** the information in the Coverage Policies. In the absence of a controlling federal or state coverage mandate, benefits are ultimately determined by the terms of the applicable benefit plan document. Coverage determinations in each specific instance require consideration of 1) the terms of the applicable group benefit plan document in effect on the date of service; 2) any applicable laws/regulations; 3) any relevant collateral source materials including Coverage Policies and; 4) the specific facts of the particular situation. Coverage Policies relate exclusively to the administration of health benefit plans. Coverage Policies are not recommendations for treatment and should never be used as treatment guidelines. Proprietary information of CIGNA. Copyright ©2010 CIGNA*

Coverage Policy

CIGNA covers simultaneous pancreas-kidney transplantation (SPK) as medically necessary when BOTH of the following criteria are met:

- type 1 diabetes mellitus -
- impending or established end-stage renal disease (ESRD), as evidenced by EITHER of the following:
  - glomerular filtration rate (GFR) < 23 mL/min/1.73m^2
  - GFR ≥ 23 but < 29 mL/min/1.73m^2 with evidence of uremia, including ANY of the following:
    - anemia of chronic disease
    - nausea, vomiting or anorexia
    - pericarditis or uremic serositis
    - uremic encephalopathy
    - metabolic acidosis (HCO3 < 15 meq/l)
    - persistent hyperkalemia (K + > 6.0 meq/l)
    - pulmonary edema or congestive heart failure refractory to diuretics
    - incapacitating peripheral edema refractory to diuretics
    - peripheral or autonomic neuropathy
    - uncontrollable hypertension
    - requiring dialysis or meeting criteria for dialysis

- pediatric only: growth failure as compared to children of same age and gender (weight is < 3rd to 5th percentile, height is > 2 standard deviations below mean; or weight crosses of two major percentiles downward, utilizing 90th, 75th, 50th, 10th and 5th)

CIGNA covers pancreas-after-kidney transplantation (PAK) as medically necessary for type I diabetes mellitus.

CIGNA covers pancreas transplantation alone (PTA) as medically necessary when type I diabetes mellitus, despite maximal medical management and adherence to treatment recommendations, is poorly controlled as manifested by the presence of BOTH of the following:

- history of frequent, acute and severe metabolic complications (e.g., hypoglycemia, hyperglycemia, ketoacidosis) of such severity that requires medical attention
- failure of insulin-based management to prevent acute complications

CIGNA does not cover pancreas or pancreas-kidney transplantation for an individual with ANY of the following contraindications to transplant surgery because it is considered not medically necessary (this list may not be all-inclusive):

- malignancy that is expected to significantly limit future survival
- persistent, recurrent or unsuccessfully treated major or systemic infection
- systemic illness or comorbidity that would be expected to substantially negatively impact the successful completion and/or outcome of transplant surgery
- a pattern of demonstrated noncompliance which would place a transplanted organ at serious risk of failure
- human immunodeficiency virus (HIV) disease unless ALL of the following are noted:
  - CD4 count greater than 200 cells/mm^3
  - HIV-1 ribonucleic acid (RNA) undetectable
  - stable anti-retroviral therapy for more than three months
  - absence of serious complications associated with HIV disease (e.g., opportunistic infection, including aspergillus, tuberculosis, coccidioidomycosis, or resistant fungal infections; or Kaposi's sarcoma or other neoplasm)

CIGNA does not cover EITHER of the following because each is considered experimental, investigational or unproven (This list may not be all inclusive):

- living donor pancreas transplantation (i.e., partial pancreas transplantation, segmental pancreas transplantation)
- bioartificial pancreas device

General Background

The pancreas is a gland with both exocrine and endocrine function. The exocrine function is essential for protein and fat digestion. The endocrine function involves the production of insulin, glucagons, and somatostatin with subsequent release of these hormones into the blood stream. Insulin acts to decrease blood sugar levels, glucagon acts to increase the blood sugar and somatostatin interacts with growth hormone, insulin and glucagons. Lack of insulin production results in diabetes mellitus.

The standard treatment for control of blood sugar levels in type I DM (i.e., insulin-dependent diabetes mellitus [IDDM]) is through the use of exogenous insulin. Nonetheless, exogenous insulin administration does not entirely restore normal glucose metabolism.

The only method of treatment that will restore normal glucose metabolism in individuals who are insulin-dependent is beta-cell replacement by organ (pancreas) or by cell (islets). Replacement by organ (pancreas transplant) may be performed simultaneously with kidney transplants (i.e., simultaneous pancreas kidney [SPK])

or after a kidney transplant (i.e., pancreas after kidney [PAK]) in individuals who are uremic, or alone in individuals who are nonuremic (i.e., pancreas transplant alone [PTA]). The donated kidney can be from a living donor or a cadaveric donor. The donated pancreas is usually a whole pancreas from a cadaver, but can be a segment of the pancreas from a living donor. Islet cells can also be transplanted, although the procedure usually requires the pancreas from two cadaveric donors in order to collect a sufficient number of cells.

Pancreas transplant eliminates the need for exogenous insulin, daily glucose monitoring and many dietary restrictions imposed by diabetes. Additional benefits of pancreas transplantation include the elimination of life-threatening risks of hypoglycemic unawareness and prevention and reversal of diabetic nephropathy (Bloom, et al., 2005).

Living Donor Pancreas

Both the American Diabetes Association and the United Network for Organ Sharing (UNOS) recognize and provide information regarding living donor pancreas transplantation. Living donor pancreas transplant has been performed in a few centers, including those outside the United States; however it is not considered widespread in clinical practice. In many cases, the living pancreas donor is a relative of the recipient. In the United States living donor pancreas transplantation has been largely studied at one center, the University of Minnesota. Barr et al. (2006) reported that at the University of Minnesota there were 130 live donor pancreas transplants between 1977 and 2005; 20 PTA and PAK live donor grafts were functioning between 10 and 20 years following transplant; 3 living donor SPK were functioning greater than 10 years. More limited data is available from the University of Chicago where the procedure is performed less frequently.

Living donor pancreas transplant is a highly specialized procedure and has not become as popular compared to living donor kidney or liver because there is a higher technical failure rate and because of the magnitude and potential complications associated with the donor operation (Gruessner, et al., 2001). During the procedure for living-donor pancreas transplant, a hemipancreatectomy is performed on the living donor (either open or laparoscopically) and then implanted as a segment into a recipient with diabetes mellitus. As a result, there is potential risk for development of diabetes in the donor and ongoing assessment is important. Nevertheless, compared to a matched deceased organ, the use of a living donor pancreas reduces wait time, offers enhanced immunologic compatibility, and decreases cold ischemic injury.

In 2003 ECRI conducted a health technology assessment to evaluate living donor pancreas transplantation. At the time of the review, the evidence consisted of published case series from two centers: the University of Minnesota and the University of Illinois at Chicago. After reviewing the evidence ECRI concluded that the effectiveness of living donor SPK transplantation in terms of recipient and graft survival rates appeared to be comparable to (and perhaps slightly better than) cadaveric transplantation results. There was no difference in recipient morbidity between living donor and cadaveric transplant. There was no reported mortality among donors and short-term morbidity appeared to be low, however they reported long-term consequences for donors were unknown.

The evidence for living donor pancreas transplant is primarily in the form of few retrospective case series, case reports, and patient-registry data (Troppman, et al., 1996; Gruessner, et al. 1997; Humar, et al., 1997; Tan, et al., 2005; Horgan, et al., 2007). Measured outcomes include graft and patient survival and as well as adverse events. A small number of case studies have suggested a patient survival rate of up to 85-90% at five years after receiving a living-related donor pancreas transplant (Gruessner, et al., 2001; Humar, et al., 1997). Evidence regarding the long-term effects of transplant on glycemic control or the impact on secondary diabetic complications is limited. Additionally, the peer-reviewed scientific evidence suggests living donor pancreas grafts are more prone to arterial and venous thrombosis and to infection, although graft rejection is lower compared to cadaveric transplant. Long-term clinical outcomes have not been reported and it has not been clearly established that living donor pancreas transplantation reverses complications associated with diabetes. However, in the short-term, there is limited evidence supporting normalizing insulin production for selected individuals.

Patient selection criteria for living donor pancreas transplant have not been clearly defined in the medical literature. It has been suggested that the best recipients are those with high panel-reactive antibody concentrations who are likely to have a long wait for a deceased donor, but have a crossmatch negative live donor whose beta cell reserve is excellent (White, et al., 2009). According to this same group of authors,

exclusion criteria generally include diabetes in first degree relatives, gestational diabetes, body mass index greater than 27 kg/$m^{2,}$ hemoglobin A_{1c} greater than 6% and age over 50 years.

The authors for the Live Organ Donor Consensus Group (Abecassis, et al., 2000) recommend that highly specialized donor procedures, including living donor pancreas, should only be performed at centers with necessary management resources and only by surgeons with appropriate expertise. The risks of complications to the live kidney donor are not the same as the risks for being a live liver, lung, intestine or pancreas donor. Reynoso et al. (2009) reported that although there have been no reports of living donor morbidity from the surgical procedure, a reluctance to use living donors for pancreas transplant is based on the anatomy of the pancreas as an unpaired organ and the risk of serious organ-specific complications, such as pancreatitis, leak and pseudocyst. Furthermore, possible deterioration of glucose metabolism as a result of the hemipancreatectomy is a lifelong concern to the donor.

Type II Diabetes Mellitus
Pancreas transplant is not typically used for the treatment of type II diabetic individuals. In contrast to persons with type 1 DM, individuals who have type II DM produce some insulin; however, for unknown reasons, the body is unable to use it effectively. Methods of treatment for type II diabetes are being investigated, and the options for insulin therapy and methods of insulin delivery continue to increase. In some cases, individuals with type II DM demonstrate insulinopenia similar to that of an individual with type I DM. While in general there is no simple laboratory test to distinguish between type I and type II DM, C-peptide levels are often used to verify insulinopenia, in combination with a documented clinical exam and/or insulin sensitivity and resistance testing. Clearly identifying type II diabetics who are candidates for pancreas transplant is challenging; C-peptide levels increase in the presence of renal disease and there is limited information regarding C-peptide levels for defining the type of diabetes in subjects with ESRD.

Despite these challenges, some authors have proposed pancreas transplant to achieve insulin independence in persons with type II DM demonstrating insulinopenia, and have shown encouraging results (Light and Barhyte, 2005; Nath, et al., 2005). However, evidence in the peer-reviewed, published scientific literature supporting the ability of pancreas transplant to achieve insulin independence in this subset of individuals has not been consistently demonstrated and is not a proven standard of care. Pancreas transplantation as an alternative treatment for individuals with type II DM and insulinopenia remains controversial.

Simultaneous Pancreas-Kidney (SPK)/Pancreas after Kidney (PAK)
Kidney failure is one of the major diabetic complications and, as a result, most potential pancreas recipients are also uremic. Due to the poor five-year survival rate of diabetics on dialysis, kidney transplantation is the treatment of choice for end-stage diabetic patients on dialysis.

Individuals with type 1 DM and impending or established ESRD who have minimal or limited secondary complications of DM are considered optimal candidates for kidney transplantation (Pirsch and Stratta, 2001). Kidney transplant is generally recommended for cases with advanced chronic kidney disease. (i.e., stage 4 or stage 5), as these individuals have a high propensity for progression to ESRD in a relatively short period of time with well-known multiple comorbid conditions and poor outcomes. Authors recommend referral to a nephrologist for renal replacement therapy when the GFR is < 30 mL/min/1.73 m2 (i.e., stage 4) (Eknoyan, Levy, 2002; Bolton, 2003).

Increasingly, pancreas transplantation is being offered to individuals who require a kidney transplant or who had a previously successful kidney transplant. SPK is performed to correct complications of type 1 DM and renal failure with reliance on dialysis. In subjects with type 1 DM who have had a successful kidney transplantation to correct previous uremia, PAK is performed to improve quality of life by: 1) eliminating the need for exogenous insulin and its associated difficulty controlling glucose levels; and 2) to limit secondary diabetic complications, including retinopathy, neuropathy, nephropathy, and vasculopathy. There is some concern regarding the appropriateness of pancreas transplantation because of the increased morbidity associated with the procedure and the lack of controlled trials that demonstrate a significant benefit on secondary complications of DM. Despite these concerns, pancreas transplantation has continued to grow in popularity as an option for diabetic patients with complications, since it can enhance quality of life and is the single most effective method of achieving tight glucose control (Pirsch and Stratta, 2001).

Evidence in the scientific published literature supports SPK and PAK transplantation as an appropriate therapeutic intervention for individuals with type I DM who require or have previously had a kidney transplant (Dieterle, et al., 2007; Grochowiecki, et al., 2006; Larsen, et al., 2004; Knoll and Nichol, 2003; Reddy, et al., 2003; Bunnapradist, et al., 2003; Sureshkumar, et al., 2002; Humar, et al., 2001). Morath et al. (2009) reported that evidence suggests longstanding normoglycemia can halt or even reverse diabetic lesions in various organs such as the heart and kidney, surgical complication rates are low, and with potent immunosuppressive medication long term allograft and patient survival are excellent (Morath, et al., 2009). SPK and PAK is a well established and accepted method of treatment for these individuals.

Pancreas Transplant Alone (PTA)
Pancreas transplantation alone (PTA) may be indicated for individuals who have uncontrolled type 1 DM (i.e., abnormal hemoglobin A_{1c}, inability to maintain blood glucose levels in the normal range) but adequate renal function. The purpose of PTA is to control blood glucose levels and to prevent diabetes-related complications of retinopathy, neuropathy or end-stage renal disease.

Evidence in the published scientific literature is mixed regarding survival rates and improved outcomes associated with PTA (Venstrom, et al., 2003; Gruessner, et al., 2004) however most patients who undergo PTA achieve insulin dependency.

Bioartificial Pancreas
Bioartificial pancreas devices are currently being investigated by some authors. In theory, the technology involves transplanting healthy islet cells (pancreatic cells that release insulin) into a subject with diabetes; current studies consist mainly of animal trials. Islet cell sources include human or allogeneic cells, porcine or xenographic cells, and engineered cells. The islet cells are encapsulated with a semipermeable membrane, such as hydrogel or polymer, and are then placed in the body. Authors contend the bioartificial pancreas device acts a substitute for the endocrine portion of the pancreas, avoiding obstacles in islet cell transplantation which include limited supply and immunosuppressive drug therapy. The optimal site for implantation has not been clearly defined, although the intended use is for implantation into a vascular site or the peritoneal cavity.

Retransplantation
The number of pancreas transplants performed annually is growing; however, due to surgical and immunological problems, graft failure after transplantation is high. Complications related to vascular problems, urologic problems, exocrine pancreatic drainage, pancreatitis and wound infections have been reported in the literature. More recently however, it has been noted that improvements in preservation, technical aspects of the procedure and newer immunosuppressive therapies have led to reduced graft failure rates (Ming and Chen, 2007).

For all three types of transplant, survival rates for a second transplant are lower than for the primary transplant, although an elective retransplant may be considered suitable for a select group of patients. Various authors have reported outcomes for pancreas retransplant in the literature (Humar, et al., 2000; Genzini, et al., 2006; Sansalone et al., 2006; Fellmer, et al., 2007), in addition to the International Pancreas Transplant Registry (2004) which has reported data specifically for pancreas retransplant graft function. According to the registry, there was no significant difference in graft survival rates for all types of pancreas retransplant between 1999 and 2003. For SPK however there was a significant difference between retransplant and primary transplant at one year (69% versus 84.7%, respectively). Pancreas graft survival rates for PAK and PTA retransplant were similar to primary transplants (77% versus 78.5%, and 73% versus 78.2%, respectively). The medical literature suggests in some patients, a retransplant could improve health outcomes after graft loss, although there is insufficient data regarding health outcomes associated with third and subsequent pancreas transplants to allow strong conclusions.

Professional Societies/Organizations: An official position statement regarding the use of C-peptide criteria for distinguishing between type I and type II DM could not be found for either the American Association of Clinical Endocrinologists or the ADA. However, according to the National Coverage Determination (NCD) for "Pancreas Transplant", the Centers for Medicare and Medicaid Services (CMS) has defined type I diabetes as "patients that are beta-cell autoantibody positive" or "insulinopenia defined as a fasting C-peptide level that is less than or equal to 110% of the lower limit of normal of the laboratory's measurement method". In the context of the NCD, they further clarify that fasting C-peptide levels will only be considered valid with a concurrently obtained fasting glucose $\leq$225 mg/dL."

Based on a technical review, the American Diabetes Association (ADA) has adopted the position that PTA should only be considered in type 1 diabetic patients who exhibit the three following criteria: 1) a history of frequent, acute and severe metabolic complications (e.g., hypoglycemia, hyperglycemia and ketoacidosis) requiring medical attention; 2) incapacitating clinical and emotional problems with exogenous insulin therapy; and 3) acute complications despite insulin-based management. Furthermore, pancreas transplantation should be considered an acceptable therapeutic alternative to continued insulin therapy in diabetic patients with imminent or established ESRD who have had or plan to have a kidney transplant, because the successful addition of a pancreas does not jeopardize patient survival, may improve kidney survival, and will restore normal glycemia. Although there is no recent update, the ADA position statement did not address segmental versus whole organ transplant (Robertson, et al., 2006).

Contraindications to Pancreas or Pancreas-kidney Transplantation
Many factors affect the outcome of a solid organ transplant. A fairly rigid selection process is required in order to obtain the best result for each patient. In addition to the absolute contraindications noted in the Coverage Position above, relative contraindications to pancreas or pancreas-kidney transplantation include, but are not limited to, the following:

- active substance abuse within the last six months, including tobacco, alcohol and narcotic/other addictive pain medications
- potential complications from immunosuppressive medications that are unacceptable to the patient
- cerebrovascular disease or accident or progressive neuropathy or myopathy that is not amenable to rehabilitation
- body mass index (BMI) less than 17 or greater than 33
- any active medical process that is currently not optimally treated and/or stable and that is likely to result in end-organ damage or medical emergency without appropriate management, such as active peptic ulcer disease, diverticular disease, active hepatitis, cholecystitis, pancreatitis, hypertension, autoimmune disease or cytopenia
- untreated osteoporosis with a T-score greater than 2.5 standard deviations (SD) from mean or Z-score greater than two SD from mean
- hepatic fibrosis or cirrhosis
- hepatitis C with biopsy-proven, histologic evidence of hepatic disease
- uncorrected abdominal aortic aneurysm greater than four centimeters
- advanced age
- peripheral vascular disease not amenable to surgical or percutaneous therapy as evidenced by:
    - asymptomatic stenosis greater than 75% or symptomatic carotid stenosis of less severity
    - ankle brachial index less than 0.7 or substantial risk of limb loss with diminished perfusion
- systemic infection making immune response risky, including human immunodeficiency virus (HIV), hepatitis B virus (HBV) in the recipient or cytomegalovirus (CMV) in the donor

Additionally, there are other organ-specific special considerations that require further investigation to ensure the best chance for successful pancreas-kidney transplantation:

- history of recurrent infection or bladder dysfunction: urological evaluation
- potential renal malignancy: magnetic resonance imaging (MRI), computed tomography (CT) or renal ultrasound
- reflux nephropathy, history of recurrent infections, nephrolithiasis, heavy proteinuria, hypertension resistant to therapy, and enlarged or symptomatic polycystic kidneys: evaluation for potential nephrectomy
- autosomal dominant polycystic kidney disease (ADPKD): high-resolution CT or MRI to evaluate for intracranial aneurysms

Summary
Pancreas transplantation has been demonstrated to be efficacious in improving the quality of life of people with diabetes, primarily by eliminating acute complications. Pancreas transplantation alone (PTA) and pancreas

transplant after kidney transplant (PAK) is considered a viable option in the management of patients with uncontrolled or severely disabling type 1 diabetes mellitus (DM) with adequate renal function. Simultaneous pancreas kidney transplant (SPK) is considered a treatment option for type 1 diabetic patients who have already developed end-stage renal disease (ESRD) or for whom ESRD is inevitable. There is insufficient evidence in the peer reviewed scientific literature to support safety and efficacy for living donor pancreas transplant and bioartificial pancreas devices.

Coding/Billing Information

Note: This list of codes may not be all-inclusive.

Covered when medically necessary:

CPT®* Codes	Description
48550	Donor pancreatectomy (including cold preservation), with or without duodenal segment for transplantation
48551	Backbench standard preparation of cadaver donor pancreas allograft prior to transplantation, including dissection of allograft from surrounding soft tissues, splenectomy, duodenotomy, ligation of bile duct, ligation of mesenteric vessels, and Y-graft arterial anastomoses from iliac artery to superior mesenteric artery and to splenic artery
48552	Backbench reconstruction of cadaver donor pancreas allograft prior to transplantation, venous anastomosis, each
48554	Transplantation of pancreatic allograft
48556	Removal of transplanted pancreatic allograft
50300	Donor nephrectomy (including cold preservation); from cadaver donor, unilateral or bilateral
50320	Donor nephrectomy (including cold preservation); open, from living donor
50323	Backbench standard preparation of cadaver donor renal allograft prior to transplantation; including dissection and removal of perinephric fat diaphragmatic and retroperitoneal attachments, excision of adrenal gland, and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary
50325	Backbench standard preparation of living donor renal allograft (open or laparoscopic) prior to transplantation, including dissection and removal of perinephric fat and preparation of ureter(s), renal vein(s), and renal artery(s), ligating branches, as necessary
50327	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; venous anastomosis, each
50328	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; arterial anastomosis, each
50329	Backbench reconstruction of cadaver or living donor renal allograft prior to transplantation; ureteral anastomosis, each
50340	Recipient nephrectomy (separate procedure)
50360	Renal allotransplantation, implantation of graft; without recipient nephrectomy
50365	Renal allotransplantation, implantation of graft; with recipient nephrectomy
50370	Removal of transplanted renal allograft
50547	Laparoscopy, surgical; donor nephrectomy (including cold preservation), from living donor

HCPCS Codes	Description
S2065	Simultaneous pancreas kidney transplantation
S2152	Solid organ(s), complete or segmental, single organ or combination of organs;

	deceased or living donor(s), procurement, transplantation, and related complications including: drugs; supplies; hospitalization with outpatient follow-up; medical/surgical, diagnostic, emergency, and rehabilitative services; and the number of days pre- and post-transplant care in the global definition

ICD-9-CM Diagnosis Codes	Description
250.01	Diabetes mellitus without mention of complication, type I [juvenile type], not stated as uncontrolled
250.03	Diabetes mellitus without mention of complication, type I [juvenile type], uncontrolled
250.11	Diabetes with ketoacidosis, type I [juvenile type], not stated as uncontrolled
250.13	Diabetes with ketoacidosis, type I [juvenile type], uncontrolled
250.21	Diabetes with hyperosmolarity, type I [juvenile type], not stated as uncontrolled
250.23	Diabetes with hyperosmolarity, type I [juvenile type], uncontrolled
250.31	Diabetes with other coma, type I [juvenile type], not stated as uncontrolled
250.33	Diabetes with other coma, type I [juvenile type], uncontrolled
250.41	Diabetes with renal manifestations, type I [juvenile type], not stated as uncontrolled
250.43	Diabetes with renal manifestations, type I [juvenile type], uncontrolled
250.51	Diabetes with ophthalmic manifestations, type I [juvenile type], not stated as uncontrolled
250.53	Diabetes with ophthalmic manifestations, type I [juvenile type], uncontrolled
250.61	Diabetes with neurological manifestations, type I [juvenile type], not stated as uncontrolled
250.63	Diabetes with neurological manifestations, type I [juvenile type], uncontrolled
250.71	Diabetes with peripheral circulatory disorders, type I [juvenile type], not stated as uncontrolled
250.73	Diabetes with peripheral circulatory disorders, type I [juvenile type], uncontrolled
250.81	Diabetes with other specified manifestations, type I [juvenile type], not stated as uncontrolled
250.83	Diabetes with other specified manifestations, type I [juvenile type], uncontrolled
250.91	Diabetes with unspecified complication, type I [juvenile type], not stated as uncontrolled
250.93	Diabetes with unspecified complication, type I [juvenile type], uncontrolled
585.4	Chronic kidney disease, Stage IV (severe)
585.5	Chronic kidney disease, Stage V
585.6	End stage renal disease

Experimental/Investigational/Unproven/Not Covered:

CPT®* Codes	Description
48999†	Unlisted procedure, pancreas

†**Note: Experimental, Investigational/Unproven/Not Covered when used to report living donor pancreas transplantation (i.e., partial pancreas transplantation, segmental pancreas transplantation)**

HCPCS Codes	Description
L8699††	Prosthetic implant, not otherwise specified

††**Note: Experimental, Investigational/Unproven/Not Covered when used to report bioartificial pancreas device**

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Policy History

Pre-Merger Organizations	Last Review Date	Policy Number	Title
CIGNA HealthCare	9/15/2007	0146	Kidney Transplantation
Great-West Healthcare	5/16/2006	95.216.04	Transplantation, Kidney