TITLE: PANCREAS-KIDNEY (SPK, PAK) TRANSPLANTATION

EFFECTIVE DATE: June 1, 2017

This policy was developed with input from specialists in endocrinology, nephrology and transplant surgery, and endorsed by the Medical Policy Committee.

IMPORTANT INFORMATION – PLEASE READ BEFORE USING THIS POLICY

These services may or may not be covered by all Medica plans. Please refer to the member’s plan document for specific coverage information. If there is a difference between this general information and the member’s plan document, the member’s plan document will be used to determine coverage. With respect to Medicare and Minnesota Health Care Programs, this policy will apply unless those programs require different coverage. Members may contact Medica Customer Service at the phone number listed on their member identification card to discuss their benefits more specifically. Providers with questions about this Medica utilization management policy may call the Medica Provider Service Center toll-free at 1-800-458-5512.

Medica utilization management policies are not medical advice. Members should consult with appropriate health care providers to obtain needed medical advice, care and treatment.

PURPOSE

To promote consistency between reviewers in utilization management decision-making by providing the criteria that determine the medical necessity of pancreas-kidney (SPK, PAK) transplantation. The Coverage Issues box below outlines the process for addressing the needs of individuals who do not meet these criteria.

BACKGROUND

I. Definitions

A. Living donor kidney transplant is a procedure in which a kidney of a healthy individual is removed and transplanted into a related (or unrelated) recipient.

B. There are three types of pancreas transplantation:
   1. Simultaneous pancreas/kidney (SPK)
   2. Pancreas after kidney (PAK)

C. Pancreatic islet cell transplantation is a procedure in which the insulin-producing islet cells alone (without the remainder of the pancreas) are transplanted from a donor to the same (autologous) or different (allogeneic) individual. Refer to the Coverage Issues section for additional information.

D. Substance use disorder, as defined by the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), is a problematic pattern of use of an intoxicating substance leading to clinically significant impairment or distress. The symptoms associated with a substance use disorder fall into four major groupings: impaired control, social impairment, risky use, and pharmacological criteria (i.e., tolerance and withdrawal).

E. Transplant or graft is a portion of the body or a complete organ removed from its natural site and transferred to a separate site in the same or different individual. Pancreas transplantation has been used to arrest or ameliorate secondary complications of diabetes by establishing insulin independence.

F. Transplant evaluation is a physical and psychosocial exam to determine if an individual is an acceptable candidate for transplantation. The specific exams and tests depend on the individual’s diagnosis and health history and vary from hospital to hospital. Tests may include the following: cardiac evaluation; lung function tests; lab tests, including blood typing, chemistry panels, and serology testing for hepatitis, HIV and other common viruses; appropriate cancer surveillance, as indicated (e.g., colonoscopy, pap smear, mammogram, prostate cancer screening); dental evaluation with treatment of existing problems; psychosocial evaluation. Additional testing or clearance may be required to address other significant coexisting medical conditions.
II. Comments
A. For individuals with uremic diabetes, combined pancreas and kidney transplantation usually removes dependencies on both insulin and dialysis.
B. Pancreas transplantation represents an alternative means of treating insulin dependence. Because organ transplantation requires commitment of the recipient to long term immunosuppression, the problems of diabetes must be of a magnitude to justify anti-rejection drugs. Thus, the main pancreas transplant applications have been in individuals who are extremely labile or experience hypoglycemia unawareness syndrome. The complications of uncontrolled labile diabetes with severe metabolic instability must be judged to be more serious than being immunosuppressed.
C. Individuals with Type II Insulin Dependent Diabetes Mellitus (IDDM) may exhibit the secondary complications of diabetes, including nephropathy, retinopathy, and peripheral/autonomic neuropathy and vasculopathy. In these individuals, insulin resistance may be an important factor in the pathophysiology of diabetes and a pancreas transplant may not be helpful, if residual beta cell function exists. In order to differentiate between Type I and Type II IDDM, a C-peptide determination or antibody studies may be necessary. In individuals with Type I IDDM, there should be no detectable C-peptide and antibodies may be present. In individuals with Type II IDDM, C-peptide levels may be normal or even elevated and antibodies are absent.

MEDICAL NECESSITY CRITERIA
I. Indications for Pancreas-Kidney Transplant Evaluation [NOTE: For multiorgan transplant, the individual must meet criteria for each organ. Please refer to applicable Medica UM policy.]
Documentation in the medical records indicates that the individual has insulin-dependent diabetes mellitus (IDDM).
II. Indications for Pancreas-Kidney Transplantation
Documentation in the medical records indicates that the individual meets all of the following criteria:
A. The individual meets the institution’s suitability criteria for transplant
B. The individual meets one of the following criteria:
   1. For simultaneous pancreas kidney transplant (SPK) all of the following criteria must be met:
      a. Insulin-dependent diabetes
      b. Imminent or established end-stage kidney disease
   2. For sequential pancreas after kidney transplant (PAK), all of the following criteria must be met:
      a. Insulin-dependent diabetes
      b. Previously successful kidney transplant with stable function.
C. Individual or guardian is able to give informed consent. Individual/guardian and family/social support system are able to comply with the treatment regimen and necessary follow-up. Inadequate funding to pay for immunosuppressive medications post-transplant is addressed and resolved.
D. For individuals with a recent (24 months) history of substance use disorder, successful completion of a chemical dependency program and 6 months of documented ongoing abstinence.
E. No documented contraindications present as indicated by all of the following:
   1. No uncorrectable medical condition that would itself significantly shorten life expectancy or make transplant success unlikely
   2. No active systemic or localized infection
   3. No active untreated or untreatable malignancy (NOTE: Patients with underlying malignancy may require oncology consult to assess prognosis and risk of recurrence)
   4. No irreversible multisystem organ failure
   5. No HIV infection with detectable viral load and CD4 counts less than 200, acquired immunodeficiency syndrome (AIDS) or history of an AIDS-defining condition that is progressive or recurrent (See Appendix 1)
   6. No active substance use disorder
   7. No irreversible severe brain damage
   8. No reversible renal failure
   9. No significant non-correctable cardiac disease
   10. No post-transplant lymphoproliferative disease (PTLD) unless no active disease demonstrated by negative PET scan and resolved adenopathy on CT/MRI
   11. No limited irreversible rehabilitative potential
   12. No ongoing pattern of noncompliance, psychiatric illness, psychological condition, or limited cognitive ability that would make compliance with a disciplined medical regimen impossible
   13. No lack of psychosocial support as indicated by either no identified caregiver or an uncommitted
caregiver
14. No inability to obtain informed consent from patient or guardian.

III. Indications for Pancreas-Kidney Retransplantation

Documentation in the medical records indicates that all of the following criteria are met:
A. Failed previous kidney/pancreas transplantation
B. The above criteria in section II for initial transplantation must be met
C. No history of behaviors since the previous transplant that would jeopardize a subsequent transplant.

COVERAGE ISSUES

1. Prior authorization is required for:
   - Pancreas-Kidney Transplantation Evaluation
   - Pancreas-Kidney Transplantation.

2. Coverage may vary according to the terms of the member’s plan document.

3. For Medicare members, refer to the following, as applicable:

4. Medica has entered into separate contracts with designated facilities to provide transplant-related health services, as described in the member’s plan document.

5. Complex cases require medical director or external review and, as necessary, discussion with the individual’s physician.

6. Underlying co-morbidity that significantly alters risk/benefit of transplant may preclude transplant eligibility.

7. Islet cell transplants, except for autologous islet cell transplants associated with pancreatectomy, are investigative and therefore, not covered.

8. If the Medical Necessity and Coverage Criteria are met, Medica will authorize benefits within the limits of the member’s plan document.

9. If it appears that the Medical Necessity and Coverage Criteria are not met, the individual’s case will be reviewed by the medical director or an external reviewer. Practitioners are advised of the appeal process in their Medica Provider Administrative Manual.

10. See also related Medica UM Policy No. III-TRA.04 Pancreas Transplantation (Pancreas Alone).

DOCUMENT HISTORY

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<tr>
<th>Original Effective Date</th>
<th>January 1, 1995</th>
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<td>Administrative Update(s)</td>
<td>05/01/2017</td>
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References:

Pre-06/2016 MPC

**06/2016 MPC**


**02/2017 MPC:**


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APPENDIX 1 – AIDS-Defining Conditions

- Bacterial infections, multiple or recurrent*
- Candidiasis of bronchi, trachea, or lungs
- Candidiasis of esophagus
- Cervical cancer, invasive†
- Coccidioidomycosis, disseminated or extrapulmonary
- Cryptococcosis, extrapulmonary
- Cryptosporidiosis, chronic intestinal (greater than 1 month's duration)
- Cytomegalovirus disease (other than liver, spleen, or nodes), onset at age greater than 1 month
- Cytomegalovirus retinitis (with loss of vision)
- Encephalopathy attributed to HIV§
- Herpes simplex: chronic ulcers (greater than 1 month’s duration) or bronchitis, pneumonitis, or esophagitis (onset at age greater than 1 month)
- Histoplasmosis, disseminated or extrapulmonary
- Isosporiasis, chronic intestinal (greater than 1 month's duration)
- Kaposi sarcoma
- Lymphoma, Burkitt (or equivalent term)
- Lymphoma, immunoblastic (or equivalent term)
- Lymphoma, primary, of brain
- Mycobacterium avium complex or Mycobacterium kansasii, disseminated or extrapulmonary
- Mycobacterium tuberculosis of any site, pulmonary†, disseminated, or extrapulmonary
- Mycobacterium, other species or unidentified species, disseminated or extrapulmonary
- Pneumocystis jirovecii (previously known as “Pneumocystis carinii”) pneumonia
- Pneumonia, recurrent†
- Progressive multifocal leukoencephalopathy
- Salmonella septicemia, recurrent
- Toxoplasmosis of brain, onset at age greater than 1 month
- Wasting syndrome attributed to HIV§

* Only among children aged less than 6 years.
† Only among adults, adolescents, and children aged greater than or equal to 6 years.
§ Suggested diagnostic criteria for these illnesses, which might be particularly important for HIV encephalopathy and HIV wasting syndrome, are described in the following references:
  - CDC. 1994 Revised classification system for human immunodeficiency virus infection in children less than 13 years of age. MMWR 1994;43(No. RR-12).
  - CDC. 1993 Revised classification system for HIV infection and expanded surveillance case definition for AIDS among adolescents and adults. MMWR 1992;41(No. RR-17).