Medical Policy
Small Bowel, Liver, and Multivisceral Transplant

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Policy Number: 632
BCBSA Reference Number: 7.03.05

Related Policies
- Isolated Small Bowel Transplant, #631

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity

A small bowel/liver transplant or multivisceral transplant may be MEDICALLY NECESSARY for pediatric and adult patients with intestinal failure (characterized by loss of absorption and the inability to maintain protein-energy, fluid, electrolyte, or micronutrient balance) who have been managed with long-term total parenteral nutrition (TPN) and who have developed evidence of impending end-stage liver failure.

A small bowel/liver retransplant or multivisceral retransplant may be MEDICALLY NECESSARY after a failed primary small bowel/liver transplant or multivisceral transplant.

In addition to the above information, we do not cover pancreas transplantation when any of the following conditions are present:
- Known current malignancy, including metastatic cancer
- Recent malignancy with high risk of recurrence
  - Note: the assessment of risk of recurrence for a previously treated malignancy is made by the transplant team; providers must submit a statement with an explanation of why the patient with a recently treated malignancy is an appropriate candidate for a transplant.
- History of cancer with a moderate risk of recurrence
- Systemic disease that could be exacerbated by immunosuppression
- Untreated systemic infection making immunosuppression unsafe, including chronic infection
  - Other irreversible end-stage disease not attributed to intestinal failure
- Psychosocial conditions or chemical dependency affecting ability to adhere to therapy

Candidates should meet the following criteria:
- Adequate cardiopulmonary status
• Documentation of patient compliance with medical management.

HIV [human immunodeficiency virus]-positive patients who meet the following criteria, as stated in the 2001 guidelines of the American Society of Transplantation, could be considered candidates for small bowel/liver or multivisceral transplantation:
• CD4 count greater than 200 cells per cubic millimeter for greater than 6 months
• HIV-1 RNA undetectable
• On stable anti-retroviral therapy >3 months
• No other complications from AIDS [acquired immune deficiency syndrome] (e.g., opportunistic infection, including aspergillus, tuberculosis, coccidiosis mycosis, resistant fungal infections, Kaposi’s sarcoma, or other neoplasm), and meeting all other criteria for transplantation.

A small/bowel/liver transplant or multivisceral transplant is INVESTIGATIONAL in all other situations.

Medicare HMO Blue<sup>SM</sup> and Medicare PPO Blue<sup>SM</sup> Members

BCBSMA covers small bowel and multi-visceral transplants when performed for patients who have failed TPN for the following indications for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD:
• Impending or overt liver failure due to TPN induced liver injury,
• Thrombosis of the major central venous channels; jugular, subclavian, and femoral veins,
• Frequent line infection and sepsis. The development of two or more episodes of systemic sepsis secondary to line infection per year that requires hospitalization and/or a single episode of line related fungemia, septic shock and/or Acute Respiratory Distress Syndrome, and
• Frequent episodes of severe dehydration despite intravenous fluid supplement in addition to TPN. Under certain medical conditions such as secretory diarrhea and non-constructable gastrointestinal tract, the loss of the gastrointestinal and pancreatobiliary secretions exceeds the maximum intravenous infusion rates that can be tolerated by the cardiopulmonary system.

BCBSMA does not cover small bowel and multi-visceral transplants for all other indications for Medicare HMO Blue and Medicare PPO Blue members in accordance with CMS NCD.

Intestinal transplantation is covered by Medicare if performed in an approved facility. The criteria for approval of centers will be based on a volume of 10 intestinal transplants per year with a 1-year actuarial survival of 65 percent using the Kaplan-Meier technique.

National Coverage Determination (NCD) for Intestinal and Multi-Visceral Transplant (260.5)

Intestinal and multi-visceral transplants must take place in a Medicare-approved facility:

Prior Authorization Information
Pre-service approval is required for all inpatient services for all products.
See below for situations where prior authorization may be required or may not be required for outpatient services.
Yes indicates that prior authorization is required.
No indicates that prior authorization is not required.

<table>
<thead>
<tr>
<th>Outpatient</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
<td>N/A</td>
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<tr>
<td>Commercial PPO and Indemnity</td>
<td>N/A</td>
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</table>
CPT Codes / HCPCS Codes / ICD-9 Codes
The following codes are included below for informational purposes. Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

CPT Codes

<table>
<thead>
<tr>
<th>CPT codes</th>
<th>Code Description</th>
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</thead>
<tbody>
<tr>
<td>44135</td>
<td>Intestinal allotransplantation; from cadaver donor</td>
</tr>
<tr>
<td>44136</td>
<td>Intestinal allotransplantation; from living donor</td>
</tr>
<tr>
<td>47135</td>
<td>Liver allotransplantation; orthotopic, partial or whole, from cadaver or living donor, any age</td>
</tr>
<tr>
<td>47136</td>
<td>Liver allotransplantation; heterotopic, partial or whole, from cadaver or living donor, any age</td>
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</table>

HCPCS Codes

<table>
<thead>
<tr>
<th>HCPCS codes</th>
<th>Code Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S2053</td>
<td>Transplantation of small intestine and liver allografts</td>
</tr>
<tr>
<td>S2054</td>
<td>Transplantation of multivisceral organs</td>
</tr>
</tbody>
</table>

ICD-9 Procedure Codes

<table>
<thead>
<tr>
<th>ICD-9-CM procedure codes</th>
<th>Code Description</th>
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</thead>
<tbody>
<tr>
<td>00.91</td>
<td>Transplant from live related donor</td>
</tr>
<tr>
<td>00.92</td>
<td>Transplant from live non-related donor</td>
</tr>
<tr>
<td>00.93</td>
<td>Transplant from cadaver</td>
</tr>
<tr>
<td>46.97</td>
<td>Transplant of intestine</td>
</tr>
<tr>
<td>50.59</td>
<td>Other transplant of liver</td>
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</table>

Description
Small bowel/liver transplantation is transplantation of an intestinal allograft in combination with a liver allograft, either alone or in combination with 1 or more of the following organs: stomach, duodenum, jejunum, ileum, pancreas, or colon.

Small bowel transplants are typically performed in patients with short bowel syndrome, defined as an inadequate absorbing surface of the small intestine due to extensive disease or surgical removal of a large portion of small intestine. In some instances, short bowel syndrome is associated with liver failure, often due to the long-term complications of total parenteral nutrition. These patients may be candidates for a small bowel/liver transplant or a multivisceral transplant, which includes the small bowel and liver with 1 or more of the following organs: stomach, duodenum, jejunum, ileum, pancreas, and/or colon. A multivisceral transplant is indicated when anatomic or other medical problems preclude a small bowel/liver transplant.
Summary
Evidence for small bowel/liver and multivisceral transplant and retransplant consists of case series. Though infrequently performed, the transplant procedures are demonstrated to provide a survival benefit, and the procedure is considered medically necessary for patients who have been managed with long-term total parenteral nutrition and who have developed evidence of impending end-stage liver failure.

Policy History

<table>
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<tr>
<th>Date</th>
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<tbody>
<tr>
<td>4/2014</td>
<td>Coding information clarified</td>
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<tr>
<td>12/2013</td>
<td>BCBSA National medical policy review. New medically necessary indications described. Effective 12/1/2013. Coding information clarified</td>
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<tr>
<td>11/2011-4/2012</td>
<td>Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements</td>
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<tr>
<td>5/2012</td>
<td>BCBSA National medical policy review. Changes to policy statements.</td>
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<td>10/2010</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
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<tr>
<td>5/2009</td>
<td>BCBSA National medical policy review. No changes to policy statements.</td>
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Information Pertaining to All Blue Cross Blue Shield Medical Policies
Click on any of the following terms to access the relevant information:
Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References