



MASSACHUSETTS

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Medical Policy

Small Bowel, Liver, and Multivisceral Transplant

Table of Contents

- [Policy: Commercial](#)
- [Policy: Medicare](#)
- [Authorization Information](#)
- [Coding Information](#)
- [Description](#)
- [Policy History](#)
- [Information Pertaining to All Policies](#)
- [References](#)

Policy Number: 632

BCBSA Reference Number: 7.03.05

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

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 small bowel/liver transplant or multivisceral 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 BlueSM and Medicare PPO BlueSM 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 pancreaticobiliary 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)

<http://www.cms.gov/medicare-coverage-database/details/ncd-details.aspx?NCDId=280&ncdver=2&DocID=260.5&bc=gAAAAAgAAAAAA%3d%3d&>

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

<http://www.cms.gov/Medicare/Provider-Enrollment-and-Certification/CertificationandCompliance/Downloads/ApprovedTransplantPrograms.pdf>

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.

N/A indicates that this service is primarily performed in an inpatient setting.

Outpatient

Commercial Managed Care (HMO and POS)	N/A
Commercial PPO and Indemnity	N/A
Medicare HMO BlueSM	N/A
Medicare PPO BlueSM	N/A

CPT Codes / HCPCS Codes / ICD Codes

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.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity:

CPT Codes

CPT codes:	Code Description
44135	Intestinal allotransplantation; from cadaver donor
44136	Intestinal allotransplantation; from living donor
47135	Liver allotransplantation; orthotopic, partial or whole, from cadaver or living donor, any age

HCPCS Codes

HCPCS codes:	Code Description
S2053	Transplantation of small intestine and liver allografts
S2054	Transplantation of multivisceral organs

ICD-10 Procedure Codes

ICD-10-PCS procedure codes:	Code Description
0DY60Z0	Transplantation of Stomach, Allogeneic, Open Approach
0DY60Z1	Transplantation of Stomach, Syngeneic, Open Approach
0FYG0Z0	Transplantation of Pancreas, Allogeneic, Open Approach
0FYG0Z1	Transplantation of Pancreas, Syngeneic, Open Approach
0DY80Z0	Transplantation of Small Intestine, Allogeneic, Open Approach
0DY80Z1	Transplantation of Small Intestine, Syngeneic, Open Approach
0FY00Z1	Transplantation of Liver, Syngeneic, Open Approach
0FY00Z0	Transplantation of Liver, Allogeneic, Open Approach
0DT80ZZ	Resection of Small Intestine, Open Approach
0DT84ZZ	Resection of Small Intestine, Percutaneous Endoscopic Approach
0DYE0Z0	Transplantation of Large Intestine, Allogeneic, Open Approach
0DYE0Z1	Transplantation of Large Intestine, Syngeneic, Open Approach

Description

SHORT BOWEL SYNDROME

Short bowel syndrome is 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.

Treatment

A small bowel/liver transplant or a multivisceral transplant includes the small bowel and liver with one or more of the following organs: stomach, duodenum, jejunum, ileum, pancreas, and/or colon. The type of transplantation depends on the underlying etiology of intestinal failure, quality of native organs, presence or severity of liver disease, and history of prior abdominal surgeries. A multivisceral transplant is indicated when anatomic or other medical problems preclude a small bowel/liver transplant. Complications following small bowel/liver and multivisceral transplants include acute or chronic rejection, donor-specific antibodies, infection, lymphoproliferative disorder, graft-versus-host disease, and renal dysfunction.

Summary

For individuals who have intestinal failure and evidence of impending end-stage liver failure who receive a small bowel and liver transplant alone or multivisceral transplant, the evidence includes a limited number of case series. Relevant outcomes are overall survival, morbid events, and treatment-related mortality and morbidity. These transplant procedures are infrequently performed and few reported case series exist. However, results from the available case series have revealed fairly high postprocedural survival rates. Given these results and the exceedingly poor survival rates of patients who exhaust all other treatments, transplantation may prove not only to be the last option, but also a beneficial one. Transplantation is contraindicated for patients in whom the procedure is expected to be futile due to comorbid disease, or in whom posttransplantation care is expected to significantly worsen comorbid conditions. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

For individuals who have a failed small bowel and liver or multivisceral transplant without contraindications for retransplant who receive a small bowel and liver retransplant alone or multivisceral retransplant, the evidence includes case series. Relevant outcomes are overall survival, morbid events, and treatment-related mortality and morbidity. Although limited in quantity, the available post retransplantation data have suggested reasonably high survival rates. Given exceedingly poor survival rates without retransplantation of patients who have exhausted other treatments, evidence of postoperative survival from uncontrolled studies is sufficient to demonstrate that retransplantation provides a survival benefit in appropriately selected patients. Retransplantation is contraindicated for patients in whom the procedure is expected to be futile due to comorbid disease or in whom posttransplantation care is expected to significantly worsen comorbid conditions. The evidence is sufficient to determine that the technology results in a meaningful improvement in the net health outcome.

Policy History

Date	Action
10/2018	BCBSA National medical policy review. No changes to policy statements. New references added. Background and summary clarified.
9/2017	New references added from BCBSA National medical policy.
1/2017	New references added from BCBSA National medical policy.
1/2016	Clarified coding information.
8/2015	Coding information clarified.
10/2014	Medical policy remediation: New indications for non-coverage. Coding information clarified. Effective 10/1/2014.
4/2014	Coding information clarified.
12/2013	BCBSA National medical policy review.

	New medically necessary indications described. Effective 12/1/2013. Coding information clarified.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
5/2012	BCBSA National medical policy review. Changes to policy statements.
11/2010	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements.
10/2010	BCBSA National medical policy review. No changes to policy statements.
6/2010	BCBSA National medical policy review. Changes to policy statements.
11/2009	BCBSA National medical policy review. Changes to policy statements.
11/2009	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements.
5/2009	BCBSA National medical policy review. No changes to policy statements.
11/2008	Reviewed - Medical Policy Group - Gastroenterology, Nutrition and Organ Transplantation. No changes to policy statements.

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](#)

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