

## CHAMPVA POLICY MANUAL

CHAPTER: 2  
SECTION: 31.3  
TITLE: HEART- LUNG AND LUNG TRANSPLANTATION

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AUTHORITY: 38 CFR 17.270(a), 17.272(a)(1)(4)(13)(14)(59) and 17.273

RELATED AUTHORITY: 32 CFR 199.4(e)(5)(vi)

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### I. EFFECTIVE DATE

- A. February 28, 1991, for heart-lung and lung transplantation.
- B. May 1, 1996, for epoprostenol.
- C. June 1, 1997, for living donor lobar lung transplantation.

### II. PROCEDURE CODE(S)

- A. CPT codes: 32850-32854, and 33930-33945
- B. ICD-9-CM codes: 996.83, 996.84, V42.1, V42.6, V43.2, V43.89, and V59.8

### III. POLICY

- A. Heart-lung and a single and or double lung transplantation requires pre-authorization.
- B. Living donor lobar lung transplantation requires pre-authorization.
- C. Benefits are allowed for single and double lung and living donor lobar lung transplantation when the transplant is performed at a Medicare-certified or TRICARE-certified lung transplant center or a TRICARE-certified pediatric consortium lung transplant center. Benefits are allowed for heart-lung transplantation when the transplant is performed at a Medicare-certified or TRICARE-certified heart, lung, or heart-lung transplant center or TRICARE-certified pediatric consortium heart, lung or heart-lung transplantation center. The beneficiaries must meet the following criteria:
  - 1. have irreversible, progressively disabling, end-stage pulmonary or cardiopulmonary disease;

2. have tried or considered all other medical and surgical therapies that might have been expected to yield both short and long-term survival comparable to that of transplantation;

3. have a realistic understanding of the range of clinical outcomes that may be encountered; and

4. have plans for long-term adherence to a disciplined medical regimen that are feasible and realistic.

D. In addition to meeting the above patient selection criteria, the following adverse factors must be absent or minimized:

1. acutely ill patients (i.e., with serious exacerbation of chronic end-stage disease or with nonchronic end-stage disease) or those who currently require mechanical ventilation for more than a very brief period (because there is difficulty in adequate assessment, a propensity for infection and likelihood for poor results);

2. significant systemic or multi-system disease (because the presence of multi-organ involvement limits the possibility of full recovery and may compromise the function of the newly transplanted organ(s);

3. extrapulmonary site of infection (because of the probability of recrudescence once immunosuppression is instituted);

4. hepatic dysfunction, even secondary to right ventricular failure, such as bilirubin exceeding 2.5 mg/ml (because of hepatotoxicity of many post-transplant medications and complications due to coagulopathies, hepatic encephalopathy, infection, poor wound healing, and increased postoperative mortality);

5. renal dysfunction, such as preoperative serum creatinine greater than 1.5 mg/dl or a 24-hour creatinine clearance less than 50 ml/min, except that with severe pulmonary hypertension creatinine clearance as low as 35 ml/min may be acceptable if intrinsic renal disease is excluded;

6. systemic hypertension that requires multidrug therapy for even moderate control (for example, multidrugs to bring diastolic pressure below 105 mm Hg), either at transplantation or at the development of end-stage heart-lung disease (because of substantial exacerbation of hypertension with post-transplantation drug regimen);

7. cachexia (general ill health and malnutrition) even in the absence of major end organ failure (because of the significantly less favorable survival of these patients);

8. obesity, with weight being an increasingly severe adverse factor as the patient exceeds by 20 percent of ideal weight for height and sex (because of more difficult postoperative mobilization and impaired diaphragmatic function, as well as the difficulty of weight control once corticosteroid immunosuppressant is instituted);
9. a history of a behavior pattern or psychiatric illness considered likely to interfere significantly with compliance with a disciplined medical regimen (because a lifelong medical regimen is necessary requiring multiple drugs several times a day, with serious consequences in the event of their interruption or excessive consumption);
10. continued cigarette smoking or failure to have abstained for a sufficient time (e.g., at least 1 or 2 years to indicate low likelihood of recidivism because of the expected detrimental effects of smoking on the transplanted organs);
11. previous thoracic or cardiac surgery or other bases for pleural adhesions may be a serious adverse factor depending upon site of thoracotomy/sternotomy, the degree of adhesions and the type of transplant anticipated (because of scar tissue and the propensity for inadequately controlled bleeding);
12. age beyond 50 or 55 becomes an increasingly severe adverse factor, that is, a patient has to be extremely "young for his/her age" if a heart-lung or double lung transplantation is envisioned in one who is over 50 or if a single lung transplantation is envisioned in one who is over 55 (because of greater complications beyond these ages unless this standard is used);
13. recent or current history of gastrointestinal problems (because of common post-operative gastrointestinal problems and hemorrhage);
14. chronic corticosteroid therapy that cannot be tapered and discontinued prior to transplantation has been considered a serious adverse factor by many (because of the increased risk of tracheal or bronchial dehiscence in the early post-operative period);
15. with chronic pulmonary infection (as with bronchiectasis, chronic or cystic fibrosis), single lung transplantation is contraindicated (possibility of the infection extending from the contaminated native lung into the transplanted lung) and patient must meet the criteria and benefit/risk considerations of double lung or heart-lung transplant;
16. with significant heart disease (for example, substantial irreversible right ventricular disease or significant coronary artery disease) the patient must meet the criteria and benefit/risk considerations for heart-lung transplantation; lung transplantation and concurrent repair of the cardiac abnormality may be appropriate in unusual circumstances, as in some situations with Eisenmenger's syndrome; and
17. primary or metastatic malignancies of the lung.

E. Once the transplantation has been authorized, the following services and supplies related to the transplantation may be cost shared:

1. the evaluation of potential candidate's suitability for heart-lung or lung transplant, whether or not the patient is ultimately accepted as a candidate for transplantation;
2. the pre and post-transplant inpatient hospital and outpatient services;
3. the pre and post-operative services of the transplant team;
4. the donor acquisition team, including the costs of transportation to the location of the donor organ and transportation of the team and the donated organ to the location of the transplantation center;
5. the maintenance for the viability of the donor organ is covered after all existing legal requirements for excision of the donor organ has been met;
6. the donor costs;
7. the blood and blood products required for the transplantation;
8. FDA approved immunosuppression drugs, to include off-label uses, when determined to be medically necessary and generally accepted practice within the medical community (see [Chapter 2, Section 30.8](#), *Immunosuppression Therapy*);
9. the complications associated with the transplant procedure, including inpatient care, management of infection and rejection episodes;
10. the periodic evaluation and assessment of the successfully transplanted patient;
11. the patient's cardiac rehabilitation (see [Chapter 2, Section 4.9](#), *Cardiac Rehabilitation*);
12. the patient's pulmonary rehabilitation for pre and post-lung and heart-lung transplants when pre-authorized;
13. hepatitis B and pneumococcal vaccines for patients undergoing transplantation;
14. air ambulance may be cost shared when determined to be medically necessary (see [Chapter 2, Section 32.1](#), *Ambulance Service*);
15. DNA-HIA tissue typing for determining histocompatibility is covered; and

16. prostacyclin epoprostenol (FLOLAN®) for the management of severe secondary pulmonary hypertension in patients who have been pre-authorized and awaiting lung transplantation are covered.

#### IV. POLICY CONSIDERATIONS

A. Pre-authorization or retrospective authorization of lung and heart-lung transplantation is required. When pre-authorization was not obtained, but patient meets (or as of the date of transplantation, would have met) the patient selection criteria, CHAMPVA benefits may be extended. The claim will be reviewed to determine whether the beneficiary's condition meets the clinical criteria for transplantation.

B. Claims for services and supplies related to heart-lung transplantation, through September 30, 1998, will be reimbursed based on billed charges. Effective October 1, 1998, heart-lung transplantation will be paid under DRG.

C. Charges from the donor hospital will be cost shared on an inpatient basis and must be fully itemized and billed by the transplant center under the name of the CHAMPVA patient (see [Chapter 2, Section 31.1](#), *Donor Costs*).

D. Claims for transportation of the donor organ and transplant team shall be adjudicated on the basis of billed charges, but not to exceed the transport service's published schedule of charges, and cost shared on an inpatient basis. Scheduled or chartered transportation will be cost shared.

E. Acquisition and donor costs are not considered to be components of the services covered under the DRG. These costs must be billed separately on a standard UB-92 claim form under the name of the CHAMPVA patient.

F. Claims for services related to lung transplantation through September 30, 1994, will be reimbursed based on billed charges. Effective October 1, 1994, lung transplants will be paid under the DRG. Acquisition costs related to the lung will continue to be paid on a reasonable cost basis and not included in the DRG.

G. When a patient is discharged (less than 24 hours) due to circumstances that prohibit the authorized transplantation, such as the available organ is found not suitable, all charges will be cost shared on an inpatient basis. When admitted, the expected stay was for more than 24 hours.

#### V. EXCLUSIONS

A. Services/supplies provided at no cost or if the beneficiary (or sponsor) has no legal obligation to pay. This includes expenses or charges that are waived by the transplantation center. [38 CFR 17.272 (a)(1)]

B. Services/supplies not provided in accordance with applicable program criteria (i.e., part of a research program, unproven procedure). [38 CFR 17.272 (a)(13)]

C. Services, supplies or devices, even those used in lieu of the transplantation, when determined to be related or integral to an experimental/investigational (unproven) procedure may be cost shared (see [Chapter 2, Section 16.5](#), Experimental/Investigational (Unproven) Procedures). [38 CFR 17.272(a)(14)]

D. Pre or post-transplant nonmedical expenses (i.e., out-of-hospital living expenses, to include hotel, meals, privately owned vehicle for the beneficiary or family members). [38 CFR 17.272 (a)(4)]

E. The transportation of a living organ donor or cadaver. [38 CFR 17.272 (a)(59)].

F. Administration of an experimental/ investigational (unproven) immunosuppressant drug that is not FDA approved or has not received CHAMPVA approval as an appropriate "off label" drug indication (see [Chapter 2, Section 30.8](#), *Immunosuppression Therapy*).

**\*END OF POLICY\***