

Discussion on the Accounting of the Organ Procurement Funds of the Human Organ Procurement Organization (OPO) with Public Hospitals as the Supporting Unit under China Government Accounting System

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Abstract: The development of human organ transplantation technology has benefited a large number of end-stage organ failure patients. As a specialized medical organization or institution for the acquisition, repair, maintenance, preservation and transfer of human organs, organ procurement organization(OPO) plays an important role in promoting the high-quality development of human organ donation and transplantation in China. This paper focuses on the issue of accounting for the donation of organ acquisition funds in the process of organ acquisition by OPO, and provides a standardized accounting method for the majority of OPO organizations, and then promotes the healthy development of human organ donation and acquisition.

Keywords: OPO; Organ Acquisition Funding; Accounting

1. Introduction

Organ transplantation is one of the greatest achievements of modern medicine and has given life back to thousands of patients suffering from terminal organ failure. Organ Procurement Organizations (OPO) plays an important role in organ donation and acquisition, taking the lead in a series of processes leading up to organ transplantation surgery, starting with the identification of potential donors, the signing of documents such as informed consent for human organ donation with donors or their next of kin, and the acquisition, preservation, and transportation of human organ tissue, as well as the handover confirmation of organ donation with the hospital of the intended recipient of that organ tissue.

In June 2021, the National Health and Wellness Commission, the National Development and Reform Commission, and seven other departments jointly issued the Notice on the Issuance of Measures for Charges and Financial Management of Human Donor Organ Acquisition (for Trial Implementation) (hereinafter referred to as the Measures) [1]. The Measures state that OPO should set up a separate OPO bank account or conduct independent accounting under the bank account of the relying unit to independently manage the funds related to organ donation acquisition. At present, the OPO relying units are mainly designated by provincial health care committees, and all of them are public hospitals as the OPO relying units. This article focuses on how OPO, with public hospitals as the relying units, can be independently accounted for.

2. OPO operation mode

2.1 OPO Business Operation Process

The role of the OPO in the pre-transplant acquisition process is to communicate throughout the entire process from discovery \rightarrow acquisition \rightarrow pre-transplant surgery.

There are two main spatial sites involved in OPO business operations: one is the organ acquisition hospital and the other is the transplant hospital. The main service or communication targets involved in OPO are: patients (patients waiting to receive organ transplants), donor families, donor hospitals, third-party organizations, Red Cross, individual specialists, etc.

After the OPO and the donor's family sign the relevant donation documents, the patient needs to pay the organ acquisition fee to the transplant hospital, and the transplant hospital needs to transfer the fee to the OPO account after issuing medical bills or compliant invoices to the patient, and the OPO forms the funding income and does the income accounting treatment.

At the same time, each step in the OPO's business process generates service and resource consumption. According to the requirements of the Measures, the service and resource consumption occurring in the donor organ acquisition process is paid by the OPO to the service provider and is included in the cost of the OPO's acquisition of the donor organ. The OPO pays the corresponding costs to the relevant service entities and the donor's family, and the OPO forms the expenses and does the expense accounting.

2.2 Accounting for OPO organ access funding revenue

The source of income obtained by the OPO is mainly the donor organ acquisition fee charged to the patient. In terms of account management, OPOs should incorporate all donor organ acquisition fees collected into the unified financial management of the relying unit and prohibit off-book transfers.

In order to meet the requirement of independent accounting, the accounting treatment of income obtained by OPO can be referred to the following way: Setting up a new account in the liabilities category "Collection of organ acquisition costs", which records the credit for organ acquisition costs charged by OPO and the debit for the cost of organ acquisition by OPO. In order to achieve the unique identification, it is necessary to set the "Customer" auxiliary under this account, which can be set as "Patient's name + organ site", so as to distinguish each collection on behalf of The "Customer" auxiliary can be set to "Patient Name + Organ Site" to distinguish each organ acquisition cost. The specific entry is as follows.

Financial Accounting:

Debit:

Bank deposit

Credit: Collection of organ acquisition fees (customer assistance: patient name + organ site)

No budgetary accounting is required under this method of accounting.

3. Discussion on accounting for OPO organ acquisition expenses

3.1 Clear responsibilities and approval authority [2]

OPO should set up hierarchical approval authority for each expenditure, which can adopt a three-level approval system of manager, reviewer and approver, and should clarify the responsibilities and authority of approvers at all levels.

3.2 Clarify the scope of expenses

The scope of OPO's operational expenses shall be categorized as follows according to the consumption of services and resources incurred in the process of donor organ acquisition as listed in the Measures:

3.3 Direct costs.

- (1) Costs associated with organ donors, mainly including:
- a. Donor medical support costs.
- b. Specimen Retention Costs.

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- c. Costs for restoration and aftercare of remains.
- d. Organ donation administration costs.

(2) Costs associated with organ acquisition, mainly including:

- a. Cost of organ acquisition surgery.
- b. Organ medical support costs.
- c. Organ transfer costs.

(3) Costs associated with the family of an organ donor, mainly including:

Costs of transportation, accommodation, and allowances for lost work during the period when the organ donor's family is handling organ donation matters according to the law.

3.4 Indirect costs.

Indirect costs mainly refer to OPO operation and management costs. In this paper, we subdivide the indirect costs into the following with practical working experience:

- (1) Staff-related costs, mainly including:
- a. Costs such as personnel labor [3] and allowances incurred for visits, evaluation, maintenance, repair, preservation, distribution, transfer, and surgery related to organ acquisition and related staff performance incentives;
 - b. Travel and labor costs for out-of-hospital specialist consultations related to organ procurement;
 - (2) Training and learning, business development-related costs, mainly including:

Domestic and foreign business training, study, business development, conference fees, publicity fees, and fees for various Red Cross memorial activities related to organ acquisition work.

(3) Other costs, mainly including:

Costs for the acquisition and maintenance of instruments and equipment associated with organ acquisition work.

3.5 Set spending standards

In order to ensure the standardization of organ acquisition behavior, in addition to clarifying the scope of expenditures, various types of expenditure standards should be set. In this paper, we refine the various expenditure items in the operation of OPO business according to the actual business situation. See Table 1 for details.

Table 1 Human donor acquisition funds labor class expenditure standards

Identity	Labor Standards
Organ Acquisition Specialist	Heart death, brain death determination [4]: *RMB/person/case
Donor Transport Specialist	Assessment of organ function in potential cases of human organs: *RMB/person/case Specimen collection: *RMB/person/case
	3. Pathologist: *RMB/person/case
	4. Organ allocation assistant: *RMB/person/case
	5. Donor-recipient corresponding image consultation and analysis [5]: *RMB/person/case
Donor Maintenance Specialist	Donor transfer information collection and transmission:*RMB/person/case Dedicated driver for transfer: *RMB/person/case
Transplantation specialist	1.ICU donor maintenance
	2.Transplant donor maintenance
	3.Collaborative discipline maintenance
	4.Organ function maintenance
	5.Liver reserve function measurement

Coordinators [7]	1. Transplant surgeon: *Yuan/person/case
	2. Anesthesiologist: *Yuan/person/case
	3. Instrument nurse: *Yuan/person/case
	4. off-stage assistant: *RMB/person/case
	5. Post-operative patient telemedicine [6]: *RMB/person/case
Clinical Medical Ethics Committee	1. Conducting knowledge dissemination, publicity and consultation on human organ donation:
	*RMB/person/case
	2. Communication with families of potential human organ donors: *RMB/person/case
	3. Witnessing organ allocation: *RMB/person/case
	4. Contacting organ acquisition: *RMB/person/case
Transplantation specialist	Ethical discussion and ethical consultation on human organ donation:
	*RMB/person/case

4. Recommendations for accounting for OPO expenses.

Corresponding to the above revenue treatment, the accounting for expenses can be referred to the following practice:

Assuming that when we obtain donor organ acquisition fees, we will account for the revenue by setting up a new account "Collection of organ acquisition fees" and setting up a "Customer" subsidiary under the new account. Then, when donor organ acquisition occurs, the cost expenses can be accounted for by debiting the new account "Collection of organ acquisition fees" and setting up the "Customer" subsidiary. The "Customer" subsidiary can be set to "Donor Name", which uniquely identifies each expense.

Specific journal entries are referenced below.

Financial Accounting.

Debit: Receipt of organ acquisition fee (customer assistance: donor's name)

Credit: Bank deposit

No budgetary accounting is required under this method.

With this method of accounting, OPO's surplus status can be checked through the three-column ledger. If there is a debit balance in "Organ Acquisition Fees Received", it means that the OPO has a deficit in organ donation; if there is a credit balance in "Organ Acquisition Fees Received", it means that the OPO has a surplus in organ donation.

5. Concluding remarks and reflections

Accounting issues of OPO are crucial in the process of construction and development of OPO, and are a prerequisite and foundation for the construction of OPO norms, as well as an important part of guaranteeing the normative compliance of human organ donation process. With the continuous refinement of organ transplantation technology, there is still a need for continuous exploration at all levels regarding how to enable the healthy and orderly development of the discipline with high quality, in addition to the standardized construction of OPO accounting.

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