



Summary
of the Audit on Organ Transplantation, Donation of Organs
and Alternative Medicine (1020)

The State Audit Office of Hungary (SAO) has completed the audit of transplantation, donation of organs and alternative medicine. The audit covered the evaluation of the opportunities of patients suffering from end-stage organ failure for access to the transplantation, to the preceding and follow-up treatments as well as the evaluation of the cost-effectiveness and efficiency of the regularity and organization of the transplant process and of the budget and health insurance expenditures. The audit covered the period 2005-2009.

Organ transplantation is the therapeutic use of human organs, whereby a deficient organ is replaced by a healthy organ from a donor. Transplant is carried out in four of the medical universities of Hungary and, in addition, children's heart transplant is performed at the Gottsegen György National Institute of Cardiology.

The total number of kidney, heart, liver, pancreas and lung transplantations decreased from 389 in 2005 to 354 in 2009¹, the annual expenditure of the Health Insurance Fund allocated for transplantations decreased from HUF 2.5 billion to HUF 2.4 billion. The tendency of the above indicators in Hungary is contrary to international trends and it envisages further lagging behind in the area of health care.

Those in charge of managing the sector did not evaluate the situation of health care connected to organ transplantation and did not work out the concept for its expansion, development and modernisation. In so far as to halt the decline and to achieve the 2008 average rate of organ transplantation per one million inhabitants in Europe, additionally, more than 200 interventions per annum should be carried out (60-70% increase), which would require the review and correction of each element of the total 'transplantation chain'. The Hungarian number of transplantations per one million inhabitants fall behind by 9.1 interventions in the case of the kidney; 9.7 interventions in the case of the liver; 1.9 interventions in the case of the heart; 1.5 interventions in the case of the lung and 1 intervention in the case of the pancreas transplantation compared to the EU countries' average number of implantations per one million citizens in 2008.

¹ As of the query made by the Department of Finance of the National Health Insurance Fund on 21 May 2010.

In order to achieve the transplantation average of the EU, an additional amount of HUF 2.5 billion of case funding would be needed from the health insurance fund, and the expansion of human resources and health capacity is also necessary.

In international comparisons, the domestic number of organ offerings is low, which, according to experts, often derives from people's lack of information. Besides the lack of information, the general health condition of the population of Hungary is worse than that of the advanced Western or Northern European, or overseas countries' population. In comparison to the 2-5% domestic ratio of living donors, almost 40% of the organs transplanted in Nordic countries originate from living donors.

The lack of a uniform transplantation and dialysis register prevents the transparency and the rateability of transplantation activity in Hungary. The operation of a register, independent from the National Health Insurance Fund and the service providers, suitable for international comparison and reporting, would be essential. The absence of the above makes it impossible to trace and evaluate the domestic results.

The patient utilises the whole verticum of the healthcare system before transplantation takes place. Patients suffering from organ failure move from primary healthcare through specialised healthcare to hospital transplantation and then the follow-up procedure. The follow-up procedure is of utmost importance in keeping the organ and in survival, which are the primary indicators of the quality of healthcare. The domestic survival indicators of kidney transplantations correspond to the international level.

In the case of kidney failure, transplantation improves the prospects and quality of life and, compared to dialysis, leads to a saving in expenses for the Health Insurance Fund. While the healthcare of a dialysed patient amounts to an average of HUF 5 million annually, the treatment of a transplant patient costs HUF 7,8 million for the first year and HUF 2 million from the second year on. On the basis of the above data, the 2,200 persons living with transplanted kidneys result in, approximately, HUF 6 billion savings a year for the Health Insurance Fund.

Lung transplantation is not yet an established surgical procedure in our country, thus Hungarian patients are operated in Vienna, which is financed by the National Health Insurance Fund. The aim set in the first cooperation agreement of 2001, namely, the introduction of lung transplantation in Hungary, has not been achieved to this day. The manager of the sector did not prepare a relevant plan. The agreement, valid from 2005 to 2009 and amended in May 2010,

regulated the conditions of organ transplantations, and the exact measure and manner of the payment of compensations related to it, in a general manner, not considering the requirements of an exact accountability and transparency. The agreement does not sufficiently endorse the interests of the Hungarian party. The part relating to the export of donors' lungs reflects the interests of the Austrian party, and it does not grant any advantage concerning organ implantation to the Hungarian party. One lung transplantation in 2005 amounted to HUF 15.5 million, while in 2009 it amounted to HUF 21.7 million on average.

In Hungary, liver transplantation has been developing since 1995 and the results of the 40-50 transplantations carried out per year are of world standard. International comparisons, as regards organ transplantations, show the largest domestic shortfall (73%) in the field of liver transplantations. The rate of liver transplantations per one million citizens is 13.3 in the European Union. In contrast, the respective domestic value is 3.6. The manager of the sector did not take steps to increase the annual number of cases.

Heart transplantation is the most effective way to treat end-stage heart failure. 3% of the adult population suffers from heart failure. 50% of them die within 5 years. The heart-transplantations of adult patients are performed at the Department of Cardiovascular Surgery of Semmelweis University. Following a preparation period of several years, the Children's Heart Transplant Programme began in 2007 at the Gottsegen György National Institute of Cardiology, and has been going on successfully since then. The number of Hungarian heart-transplantations per one million citizens fell behind the European average by 41.5% in 2008.

In the European Union, 756 pancreas transplantations were carried out in 2008, which equals 1.5 cases per one million inhabitants. In Hungary, the number of the transplantations was 5, according to Newsletter Transplant data, which means 0.5 cases per one million citizens that significantly falls behind the European average.

The waiting lists for organs have to be updated and published by the Hungarian National Blood Transfusion Service, based on the reports of the waiting list committees. The objectivity and transparency of the way patients are selected from the lists are not ensured. According to domestic practice, it is the privilege of the transplanting hospital to select the recipient. The management of waiting lists as well as the distribution of organs should belong to the jurisdiction of the

National Transplant Organisation, as is recommended by the European Council², however, no such organisation is currently operating in Hungary.

In the audited period, the numbers of cases of organ transplantations were determined by annual contracts concluded with each clinic and the necessary sources were available in the Health Insurance Fund. The allowance rates, with the exception of pancreas transplantations, remained unchanged since 2005. The review thereof and the establishment of a funding scheme, which covers the actually incurred expenditures, may contribute to bridging the gap.

On the basis of the above, we recommended the Minister of National Resources to have an action plan drawn up for increasing the number of transplantations, which defines the target indicators of the increase. SAO recommended that he should continuously monitor and analyse the achieved results, act in order to reveal the cause of inefficiency and evaluate the transplantation centres based on quality indicators. We recommended considering the possibility of the so-called 'Domino' implantation and voluntary organ donation based on international examples, and regulating recipient selection and waiting list management independently from the centres, involving marginal donors as well. It was also recommended that the basic charge of transplantations should be outlined according to the actual costs. Also, with the inclusion of transplantation professionals, a nationally uniform follow-up procedure should be outlined for transplant patients, whose implementation should be controlled. The uniform and verifiable patient education should be regulated covering the whole range of the transplantation, the organ donation, the pre-emptive, the living donor and the organ offering options. Moreover, SAO recommended developing and operating a national register which covers the transplantation activity and kidney-replacement treatments related to all of the organisations. By means of bilateral or multilateral cooperation agreements relating to organ exchange, it should be facilitated that offered organs or those not used in Hungary can be used for transplantation in another country, so that no organs are lost. SAO also recommended the Minister to review and ensure the transparency, organisation and accounting rules of the lung transplantation process and the traceability of the number of removed lungs according to contract and the official authorisation of the export of lungs over the quota.

² Council of Europe, Committee of Ministers (Draft recommendation N° R (2005)...of the Committee of Ministers to member states on the background, functions and responsibilities of a national transplant organisation (NTO)).