The availability of donor organs is often a question of life and death for patients requiring a transplant. With transplantation now a commonplace technique, one of the main factors limiting the number of transplants is the shortage of organs. Continuous efforts are being made to address this shortage and make transplant systems more efficient and accessible.

Progress made in the transplant field raises a number of challenges. In most EU countries, there are too few organs available to meet the growing demand. More than 64,000 people in the EU are on organ waiting lists.

In 2007, the European Commission highlighted the need to ensure greater availability of and accessibility to high quality and safe transplantation. In 2008, the Commission adopted an Action Plan to strengthen cooperation between EU member states in this area. In 2010, a new EU Directive defined standards of quality and safety for human organs intended for transplantation.

There have also been considerable advances in the therapeutic use of human tissue and cells. As a fast-growing field, it is crucial that the various substances and procedures are subject to European safety and quality requirements.
Shared solutions

Through the second EU health programme 2008-2013, the European Commission has co-funded, via its Consumers, Health and Food Executive Agency (Chafea), actions that can help improve transplant systems and increase the supply of organs.

In line with the EU Action Plan, support has been given to projects which advance cooperation on donation and transplantation. For example, projects supported have raised public awareness on organ donation, improved hospital-based systems for organ donation, facilitated the exchange of organs between EU countries, and promoted standards for living donor programmes.

To further improve transplant therapies, novel technologies have been developed and shared across borders, improving outcomes for recipients. Sharing scientific knowledge and clinical best practice in transplantation enhances the quality of all donated organs and increases life expectancy for all transplanted patients.

In addition to organ transplantation, the medical application of human tissues and cells (bone, skin, cardiac valves, haematopoietic stem cells, reproductive cells, etc.) is a strongly expanding field of medicine offering excellent opportunities for the treatment of many diseases. In order to minimise the risks associated with the application of donated tissues and cells, it is essential to ensure their quality and safety.

The EU Tissue and Cells Directives created a benchmark for the standards that must be met when carrying out any activity involving tissues and cells, from donation until human application.

The European Commission has supported EU countries in their efforts to implement the Directives by providing funding for several projects under the EU health programme.

Source: Organización Nacional de Trasplantes

A deceased donor can save up to eight lives and improve the lives of many more.

Actual deceased organ donors - both DBD and DCD included. Annual rate p.m.p 2013.
Working together to raise standards

Project name: Achieving Comprehensive Coordination in Organ Donation throughout the European Union (ACCORD), Joint Action

Number of partners: 33 from 23 countries. BG, CZ, DE, EE, IE, EL, ES, FR, HR, IT, CY, LV, LT, HU, MT, NL, NO, PL, PT, RO, SI, SE, UK. EC funding: €1,440,000. Duration: 42 months.

Variation in donation and transplantation activities across Europe can lead to differences in deceased/living donation rates. To help reduce disparities, promote best practice and support EU countries in reaching their full potential in this field, the second EU health programme co-funded a Joint Action to strengthen cooperation.

The Action aims to develop living donor registries, foster international data sharing on live donations and increase the availability of organs from deceased donors. It is strengthening cooperation between intensive care units (ICUs) and donor transplant coordinators (DTCs), and supports several ‘twinning’ projects between EU countries to build specific, operational capacities such as training surgeons and establishing auditing systems.

Visit www.accord-ja.eu

Improving hospital donation systems

Project name: European Quality System Indicators and Methodology on Organ Donation (ODEQUS)

Number of partners: 13 from 11 countries. DE, ES, FR, HR, IT, AT, PL, PT, RO, SE, UK. EC funding: €599,966. Duration: 36 months.

The way in which hospitals organise their donation system influences the number of organs donated. ODEQUS explored best practices in hospitals’ organ donation structures and practices. It identified 130 quality criteria (QC) and 30 quality indicators (QI) in three types of organ donation: after brain death, after circulatory death and living donation.

These tools, which were tested in 12 European hospitals, can help to evaluate the efficiency of hospitals’ organ donation systems. The QIs were shown to be an effective measure of hospital quality performance and can be a valuable means of hospital self-assessment, external review or the development of a European auditing model.

Visit www.odequs.eu

Cross-border exchange of organs

Project name: Facilitating exchange of organs donated in EU member states (FOEDUS), Joint Action

Number of partners: 18 from 18 countries. BE, BG, CZ, DE, EL, FR, HR, IT, LT, HU, MT, NL, PL, PT, RO, SI, SK, UK. EC funding: €1,149,902. Duration: 36 months.

Organs are a scarce, life-saving resource for which demand is greater than supply. Despite this, sometimes organs cannot be transplanted in a country, when there is no suitable recipient on the waiting list or no transplant programme in place yet to perform such a transplant procedure. FOEDUS is a Joint Action which seeks to address this problem by facilitating the donation of organs from a donor in one EU country to a recipient in another.

Building on existing bilateral or multilateral collaborations and on previous European projects such as MODE and COORENOR, FOEDUS aims to enable EU countries to exchange more organs across borders, when needed, thus building upon the potential identified for substantial growth in cross-border organ exchange. This can help match the right organ with the right patient, minimising discard and reducing transplantation waiting lists.

Visit www.foedus.eu
Quality and safety of living organ donation

Project name: European Living Donor Psychosocial Follow-up (ELIPSY)

Number of partners: 7 from 7 countries. DE, ES, FR, CY, NO, PT, SE. EC funding: €299 128. Duration: 36 months.

It is crucial to ensure that living donors who are donating voluntarily are fully healthy and will be followed up in the long term. The EULID project, co-funded under the first EU health programme, was developed to build consensus in this area of living donation. The ELIPSY project built on EULID results to consolidate standards on the medical and psychosocial follow-up of living donors.

In addition, ELIPSY supported high quality living organ donation by creating a follow-up model to evaluate the psychosocial well-being and quality of life of living donors.

The results of EULID and ELIPSY will be shared widely in order to further contribute to improving the quality of living donation in Europe.

Visit www.eulivingdonor.eu

Improving vigilance and surveillance in tissue transplantation

Project name: Vigilance and Surveillance of Substances of Human Origin (SOHOV&S)

Number of partners: 9 from 7 countries. BE, IE, ES, FR, IT, PL, UK. EC funding: €794 313. Duration: 36 months.

The safety of recipients and donors of human tissue and cells can be improved by monitoring adverse reactions and events. The EU tissues and cells legislation requires EU countries to develop their vigilance and surveillance (V&S) systems, but vigilance remains a complex area with wide variation in practices and terminology.

SOHOV&S builds on the work of the EUSTITE project which provided regulators and professionals with the first tools and guidance in this field. SOHOV&S has developed common vigilance guidelines for competent authorities and health professionals, and supported EU countries in establishing new, effective V&S systems by providing training for national officials with responsibilities in this area.

Visit www.sohovs.org

Better practice, safer tissue grafts

Project name: European Good Tissue Practices (Euro-GTPs)

Number of partners: 12 from 7 countries. BE, DE, ES, IT, NL, PL, FI. EC funding: €491 824. Duration: 36 months.

Improving how tissues establishments (TE) procure, process, preserve, store and distribute tissue for transplantation can increase the health and safety of recipients. Euro-GTPs aimed to develop and apply good tissue practices on a European-wide scale in order to improve the performance of TE personnel.

The project analysed the current regulations and practices in TEs. From this, the partners devised detailed European Good Tissue Practices in areas such as ocular, cardiovascular, musculoskeletal and skin grafts. A training course for TE personnel was developed based on the GTPs.

By sharing these practices widely, the project helped to raise and harmonise standards of practice in areas such as donor selection, risk management and traceability.

Visit eurogtps.com/

Find out more

Consumers, Health and Food Executive Agency (Chafea)
ec.europa.eu/chafea/index.html
Chafea database of EU co-funded projects and actions
ec.europa.eu/chafea/projects/database.html

Policy of the European Commission in the field of transplantation
ec.europa.eu/health/blood_tissues_organs/organisms/index_en.htm
ec.europa.eu/health/blood_tissues_organs/tissues/index_en.htm