HEALTH BASICS

Transplant services

Transplant services assess, coordinate, and provide organ transplantation and long-term follow-up care.

WHAT IT IS
Coordinated assessment, surgery, and follow-up for organ transplantation

WHERE IT COMES UP
Advanced organ failure, donor evaluation, transplant surgery, and long-term follow-up

WHY IT MATTERS
Determines transplant suitability, timing, safety, and ongoing care

WHAT IT IS NOT
Not a disease or a diagnosis

WHO TO ASK
A transplant centre or your referring clinical team

HOW IT IS CHECKED
Clinical assessment, donor matching, and ongoing transplant monitoring

Overview

Transplant services are specialist healthcare programs for people who may need, receive, or donate an organ. They bring together surgeons, physicians, nurses, pharmacists, psychologists, social workers, coordinators, and laboratory teams.

These services most often cover solid organs such as kidneys, livers, hearts, lungs, pancreases, and intestines. Blood-forming stem cell transplants and tissue transplants use different pathways and are not the main focus of this article.

A transplant service does more than perform surgery. It assesses whether transplantation is medically appropriate, explains alternatives, coordinates donor matching, manages the waiting process, and provides long-term care after the operation. Living donors are assessed separately to protect their health and ensure that their decision is voluntary.

Transplant services are not a disease or a diagnosis. Being referred does not mean that you will need, qualify for, or receive a transplant. Referral starts a detailed assessment and discussion.

The exact process differs by organ, country, transplant centre, and your medical circumstances.

How it works

A clinician usually refers you when an organ is failing or likely to fail and transplantation may be one treatment option. For example, kidney transplantation may be considered before or after dialysis begins. Some liver, heart, or lung referrals need to happen before organ failure becomes extremely advanced.

The transplant team reviews your diagnosis, general health, previous treatment, and likely risks and benefits. Testing may include blood tests, imaging, heart and lung checks, infection screening, cancer screening, and assessment of other medical conditions. Dental checks may also be needed because untreated infection can become more serious after transplantation.

The team also considers whether you can safely manage the treatment required after surgery. This includes taking medicines reliably, attending appointments, having blood tests, and arranging practical support. Financial, travel, housing, work, or caregiving concerns can be discussed with the service. Raising these concerns should help the team plan support; it is not a medical test.

If transplantation is suitable, you may be placed on a waiting list for an organ from a deceased donor. Listing does not guarantee that an organ will become available. Allocation is not simply first come, first served. Systems use factors such as medical urgency, blood group, body or organ size, immune compatibility, time waiting, location, and the expected benefit of transplantation. The exact rules differ by organ and country.

Some organs, especially kidneys and part of the liver, can come from a living donor. A potential donor has an independent medical and psychological assessment. The donor must understand the risks and be free to change their mind. Their private medical information is not normally shared with the intended recipient.

When an organ becomes available, the service assesses whether it is a reasonable match. Human leukocyte antigens, or HLA, are markers on cells that help the immune system tell what belongs in the body. A crossmatch is a laboratory test that checks whether the recipient's blood reacts strongly against the donor's cells.

An organ offer may come with limited notice. The transplant team explains what is known about the donor organ and any important risks. You can ask questions and may accept or decline the offer. Declining can affect waiting time or future options, so the team should explain the likely consequences before you decide whenever time allows.

Care continues after surgery. The service monitors how the transplanted organ is working and looks for rejection, infection, medicine side effects, and surgical complications. Follow-up often becomes less frequent over time, but transplant care is usually long term.

Why it matters for your health

A transplant can replace some or most of the work of a failing organ. Its possible benefits must be weighed against major surgery, lifelong monitoring, and medicines that reduce immune activity.

These medicines are called immunosuppressants. They lower the chance that your immune system will attack the transplanted organ. They can also increase the risk of infection and certain cancers and may affect the kidneys, blood pressure, blood sugar, bones, or cholesterol. The risks differ between medicines and people.

Assessment helps the team estimate whether transplantation offers more benefit than other treatment. It also identifies problems that may need treatment first, such as active infection, unstable heart disease, or a recent cancer.

Matching and allocation affect how quickly an organ may become available and whether it is likely to function well. A person may be temporarily made inactive on the waiting list if surgery is not currently safe. This is sometimes called suspension or temporary hold. It does not always mean permanent removal from the list.

Long-term follow-up matters because changes in organ function may first appear in blood tests or other monitoring rather than through something you can notice yourself. Keeping contact with both the transplant service and your usual healthcare team supports coordinated care.

What can go wrong

Some people complete assessment but are not placed on the waiting list because the expected risks are greater than the likely benefits. Others may need treatment, further tests, or a period of monitoring before a decision is made. You can ask how the decision was reached and whether review or a second opinion is available.

Health can worsen while waiting, and a suitable organ may not become available in time. An offered organ may later be found unsuitable, causing an operation to be cancelled even after you arrive at the hospital.

Transplant surgery can be associated with bleeding, blood clots, wound problems, or injury to nearby structures. A transplanted organ may be slow to start working or, less commonly, may not work adequately.

Rejection happens when the immune system attacks the transplanted organ. It may be detected through blood tests, imaging, or a biopsy, in which a small tissue sample is examined.

Rejection can sometimes be treated, but it may damage the organ.

Immunosuppression can contribute to serious infection. Some infections carried silently by a donor or recipient can become active after transplantation. Donated organs are screened, but testing cannot remove every possible risk.

The original disease can sometimes affect the transplanted organ. Transplanted organs can also lose function for other reasons, including chronic rejection, medicine toxicity, blood-vessel problems, or infection.

Living donation has no medical benefit for the donor and involves surgical and longer-term risks. Independent assessment and consent are therefore essential.

What you can do

If transplantation is being considered, ask which options apply to you and what the assessment is intended to decide. Request written information about the likely benefits, major risks, alternatives, and expected follow-up.

Keep an up-to-date record of:

Tell the transplant service promptly if your health changes, you are admitted to hospital, or another clinician changes your medicines. After transplantation, do not start prescription medicines, over-the-counter products, vitamins, or herbal remedies without checking for interactions.

Attend routine appointments and blood tests even when you feel well. Ask before receiving vaccines because some live vaccines may not be suitable during immunosuppressive treatment.

Follow the transplant team's instructions about when to call urgently. After a transplant, fever, repeated vomiting that prevents you taking medicines, reduced urine output, worsening wound redness or drainage, or a sudden change in your usual health generally needs prompt contact with the transplant team.

Call emergency services for severe breathing difficulty, new severe chest pain, collapse, uncontrolled bleeding, or signs of a severe allergic reaction.

There is nothing you can do to guarantee a compatible organ or control an allocation score. You can make sure the service can contact you and ask what could change your waiting-list status.

- Your medicines, doses, allergies, and pharmacy details

- Transplant centre and emergency contact numbers
- Test results or appointments the team asks you to track
- Changes to your address, phone number, insurance, or travel plans
- Questions you want answered before listing or accepting an organ

Common questions

Does referral mean I will receive a transplant?

No. Referral begins an assessment. The team may recommend transplantation, another treatment, more testing, or continued monitoring.

Can I choose whether to accept an offered organ?

Yes. Consent is required. The team should explain the known benefits, uncertainties, and risks, as well as what declining may mean for your wait.

Can a family member volunteer as a living donor?

For some organs, yes. They should contact the relevant living-donor service. Their assessment is separate and confidential, and they may withdraw at any point.

Will my usual clinician still be involved?

Usually. The transplant centre manages specialist transplant issues, while primary care and local specialists continue other healthcare. The teams should share important information.

Does transplant care end when the operation is over?

No. Follow-up includes monitoring organ function, adjusting immunosuppressants, checking for complications, and supporting long-term health.

Sources

- Health Resources and Services Administration: The Organ Transplant Process
- Organ Procurement and Transplantation Network: How Organ Allocation Works
- NHS Blood and Transplant: Organ Transplantation
- KDIGO: Clinical Practice Guideline on the Evaluation and Management of Candidates for Kidney Transplantation, 2020

- World Health Organization: Guiding Principles on Human Cell, Tissue and Organ Transplantation, 2010
- National Institute for Health and Care Excellence: Renal Replacement Therapy and Conservative Management, NG107