HEALTH BASICS

Heart and vascular services

Specialist services that assess and manage conditions affecting the heart and blood vessels.

WHAT IT IS
Specialist care for the heart, blood vessels, and circulation

WHERE IT COMES UP
Referrals, tests, procedures, rehabilitation, or long-term follow-up

WHY IT MATTERS
Helps find, treat, and monitor cardiovascular problems

WHAT IT IS NOT
Not a disease or diagnosis

WHO TO ASK
Primary care, cardiology, or vascular services

HOW IT IS CHECKED
Clinical assessment and selected heart or blood-vessel tests

Overview

Heart and vascular services are parts of healthcare that assess and manage the heart, blood vessels, and circulation. They are not a disease or a diagnosis.

Heart services are often called cardiology services . They deal with the heart's structure, pumping function, rhythm, and blood supply. Cardiac surgery services perform operations on the heart and nearby major blood vessels.

Vascular services mainly deal with arteries and veins outside the heart. Arteries carry blood away from the heart, while veins return it. Some services also manage problems involving the aorta, the body's largest artery.

These services may provide tests, medicines, procedures, surgery, rehabilitation, and follow-up. Their exact names and responsibilities differ between healthcare systems and hospitals.

Being referred does not necessarily mean that you have a serious condition or will need an operation. A referral may be used to clarify an uncertain result, assess your risk, or decide whether monitoring is enough.

How it works

You may be referred by a primary care clinician, an emergency department, or another specialist. Some people enter these services after an abnormal test, while others are referred because of a known condition or a planned procedure.

At an initial appointment, the clinical team may ask about your health history, current concerns, medicines, family history, and daily activities. They may check your pulse, blood pressure, heart sounds, circulation, or swelling.

Tests are chosen according to the question being investigated. You will not usually need every available test. Common examples include:

After assessment, the service may recommend routine monitoring, medicines, rehabilitation, or a procedure. Cardiology procedures can include opening a narrowed heart artery or treating an abnormal rhythm. Vascular procedures may restore blood flow, repair an aneurysm, or treat certain vein problems.

Some procedures are performed through a thin tube called a catheter. Others require surgery. If a procedure is suggested, the team should explain its purpose, expected benefits, important risks, alternatives, and what recovery may involve.

- An electrocardiogram , or ECG, which records the heart's electrical activity
- An echocardiogram , which uses ultrasound to show heart structure and movement
- A portable heart monitor, which records rhythm over hours or days
- Blood tests, including tests related to heart injury, cholesterol, kidneys, or anaemia
- CT or MRI scans, which create detailed images of the heart or blood vessels
- Duplex ultrasound , which shows blood flow through an artery or vein
- An ankle-brachial pressure index, which compares blood pressure at the ankle and arm
- Angiography , which uses imaging and often contrast dye to examine blood vessels

Why it matters for your health

Heart and vascular conditions can affect blood flow, oxygen delivery, heart rhythm, or the heart's ability to pump. Specialist assessment can help identify which part of the circulation is involved and whether treatment is needed.

These services also support people after a heart attack, stroke, operation, or other cardiovascular event. Cardiac rehabilitation is a structured programme that may include

supervised activity, education, emotional support, and help with cardiovascular risk factors.

Follow-up has a specific purpose. It may be used to review test results, check how a treatment is working, monitor a heart valve or blood vessel, or decide whether another test is needed. Some follow-up is short term, while some continues for years.

What can go wrong

Heart and vascular services relate to many different conditions. Heart problems include coronary artery disease, heart rhythm disorders, heart valve disease, heart failure, and conditions present from birth.

Vascular problems include peripheral artery disease, aortic aneurysm, carotid artery disease, deep vein thrombosis, and long-term vein problems. Peripheral artery disease means that narrowed arteries reduce blood flow, usually to the legs. An aneurysm is an abnormal widening of an artery. Deep vein thrombosis is a blood clot in a deep vein, often in a leg.

These conditions do not all cause the same concerns, and they are not managed in the same way. A test result must be interpreted alongside your history, examination, and other findings. For example, an unusual ECG does not by itself establish a diagnosis.

Some situations need emergency help rather than a routine appointment. Call your local emergency number for:

New one-sided leg swelling, pain, warmth, or redness can be related to deep vein thrombosis and needs prompt medical assessment. If it occurs with chest pain, breathlessness, or collapse, seek emergency help.

Stable concerns, medication questions, planned test results, and routine monitoring usually belong in scheduled follow-up. Contact the service sooner if your symptoms change or the team has given you specific instructions to do so.

- New chest pressure or pain, especially with sweating, nausea, breathlessness, or pain spreading to the arm, jaw, back, or stomach
- Sudden facial weakness, arm weakness, speech trouble, loss of balance, or vision loss
- Sudden severe breathlessness, coughing blood, collapse, or chest pain with breathing
- A limb that suddenly becomes very painful, pale, cold, weak, or numb
- Sudden severe chest, back, or abdominal pain, particularly with fainting or weakness

What you can do

Before an appointment, check why you were referred and whether you need to prepare. Some tests require you to avoid food, caffeine, or strenuous exercise for a set period, while others do not. Follow the instructions provided for your particular test.

Bring or prepare:

Tell the team if you may be pregnant, have kidney problems, have had a reaction to contrast dye, or take medicine that affects bleeding. These details can influence how some scans and procedures are planned. Do not stop prescribed medicine unless the clinician responsible for your care tells you to.

Useful questions include: What is this test looking for? What will happen during it? When and how will I receive the result? Who should I contact if my condition changes? If a procedure is proposed, ask about alternatives and recovery as well as benefits and risks.

If you have no referral, test result, known cardiovascular condition, or relevant concern, there may be nothing specific you need to do with a heart and vascular service.

- An up-to-date list of medicines, supplements, and allergies
- Relevant test results or clinic letters that the service may not have
- A brief record of what you noticed, when it happened, and what you were doing
- Details of previous heart or blood-vessel procedures
- Questions about the test, treatment, or follow-up plan

Common questions

Are cardiology and vascular surgery the same service?

No. Cardiology mainly focuses on the heart. Vascular services mainly focus on arteries and veins outside the heart. They often work together when a condition involves several parts of the circulation.

Does a referral mean I need surgery?

No. Many referrals lead to advice, monitoring, medicine, or a non-surgical test. If surgery or another procedure is considered, you should receive an explanation before deciding.

What is the difference between a cardiologist and a cardiac surgeon?

A cardiologist is a doctor who assesses and manages heart conditions, including with medicines and catheter-based procedures. A cardiac surgeon performs heart operations. Their work may overlap as part of a shared team.

Can I drive after a test or procedure?

It depends on the test, sedation, your diagnosis, and local driving rules. Ask before the appointment. Arrange transport if your instructions say you will receive sedation or must not drive afterward.

Who gives me my results?

The testing service, specialist clinic, or referring clinician may provide them. Before leaving, ask when to expect the result and whom to contact if it does not arrive.

Sources

- National Heart, Lung, and Blood Institute. Heart Tests . US National Institutes of Health
- Gulati M, Levy PD, Mukherjee D, et al. 2021 AHA/ACC Guideline for the Evaluation and Diagnosis of Chest Pain . Circulation. 2021;144:e368-e454
- Gerhard-Herman MD, Gornik HL, Barrett C, et al. 2016 AHA/ACC Guideline on the Management of Patients With Lower Extremity Peripheral Artery Disease . Circulation. 2017;135:e726-e779
- National Institute for Health and Care Excellence. Venous thromboembolic diseases: diagnosis, management and thrombophilia testing . NICE guideline NG158. 2020, updated 2023
- NHS. Electrocardiogram (ECG) . NHS health information
- NHS. Echocardiogram . NHS health information
- Centers for Disease Control and Prevention. Signs and Symptoms of Stroke