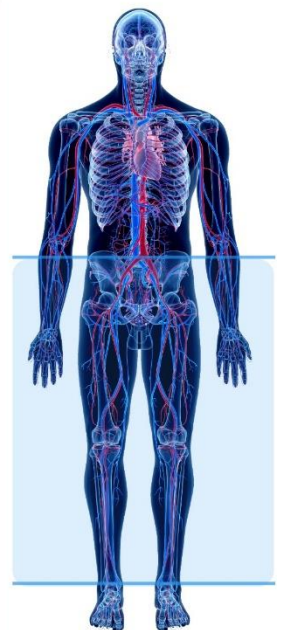
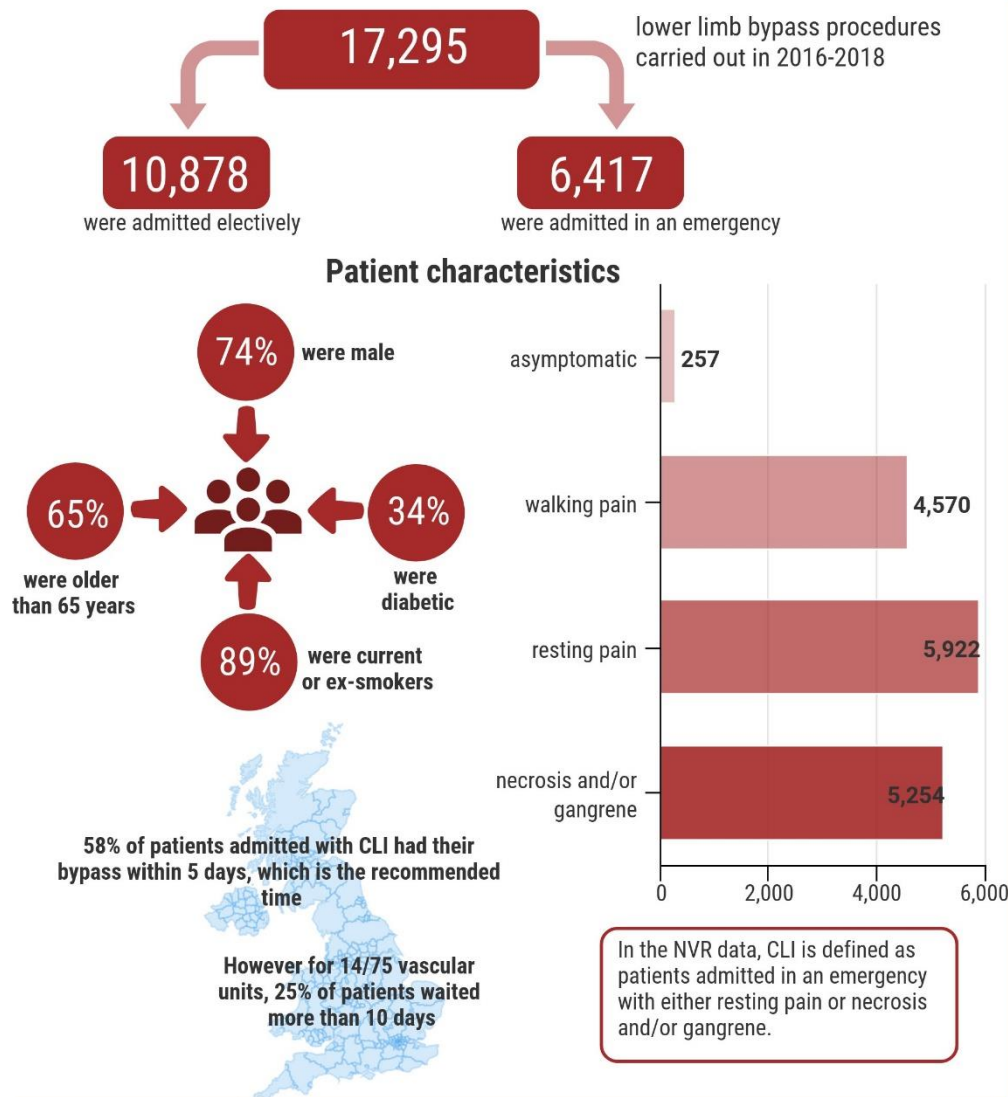


# Lower limb bypass for peripheral arterial disease to prevent limb loss

Peripheral arterial disease (PAD) is a restriction of the blood flow in the lower limb arteries that can severely affect a patient's quality of life, and risk their limb.

Open surgical (bypass) interventions become options when conservative therapies have proved to be ineffective.



## Glossary

The average is the median; "typically between" is the interquartile range.

Critical limb ischaemia (CLI) is the most severe form of PAD, where the blood flow to the legs becomes severely restricted.

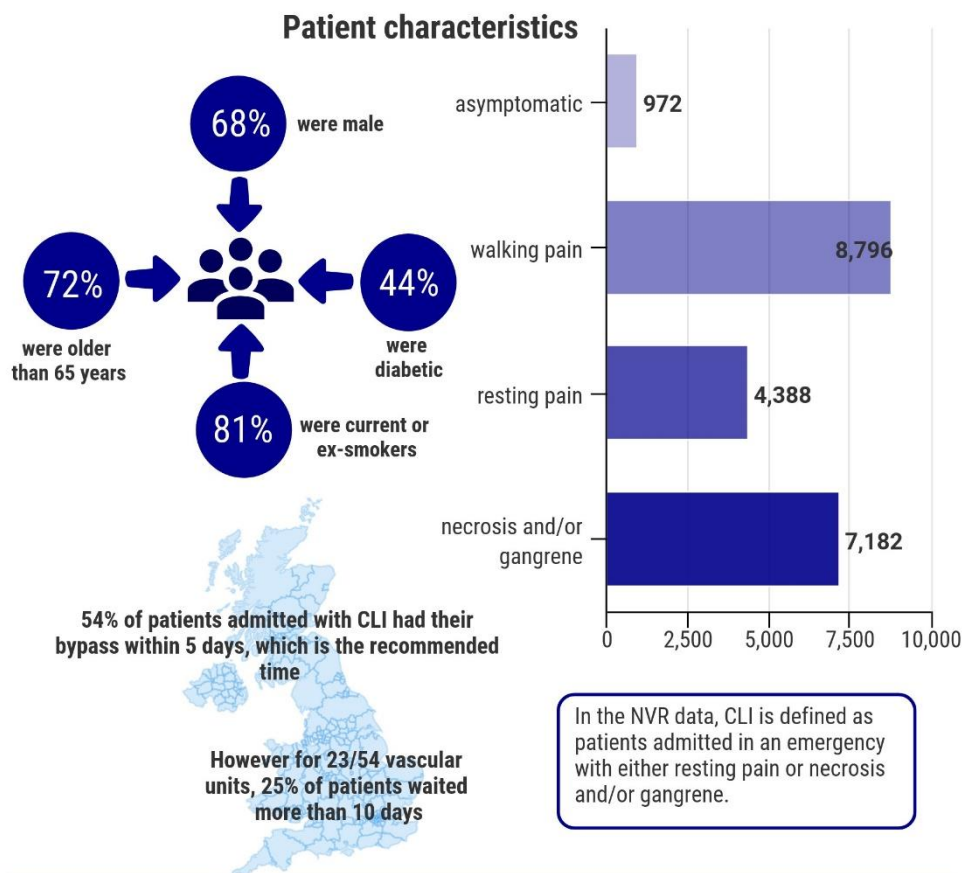
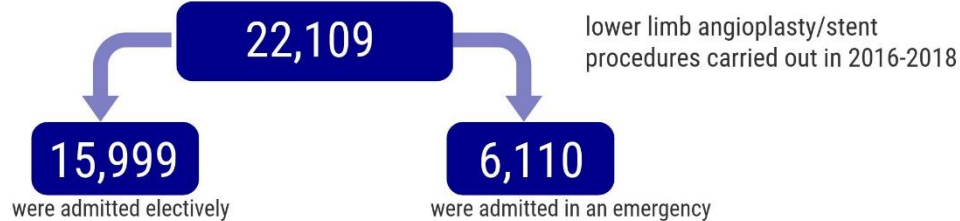
## Patient outcomes post bypass



# Lower limb angioplasty/stenting for peripheral arterial disease

Peripheral arterial disease (PAD) is a restriction of the blood flow in the lower limb arteries that can severely affect a patient's quality of life, and risk their limb.

Endovascular interventions become options when conservative therapies have proved to be ineffective.



## Glossary

The average is the median; "typically between" is the interquartile range.

Critical limb ischaemia (CLI) is the most severe form of PAD, where the blood flow to the legs becomes severely restricted.

## Patient outcomes post procedure

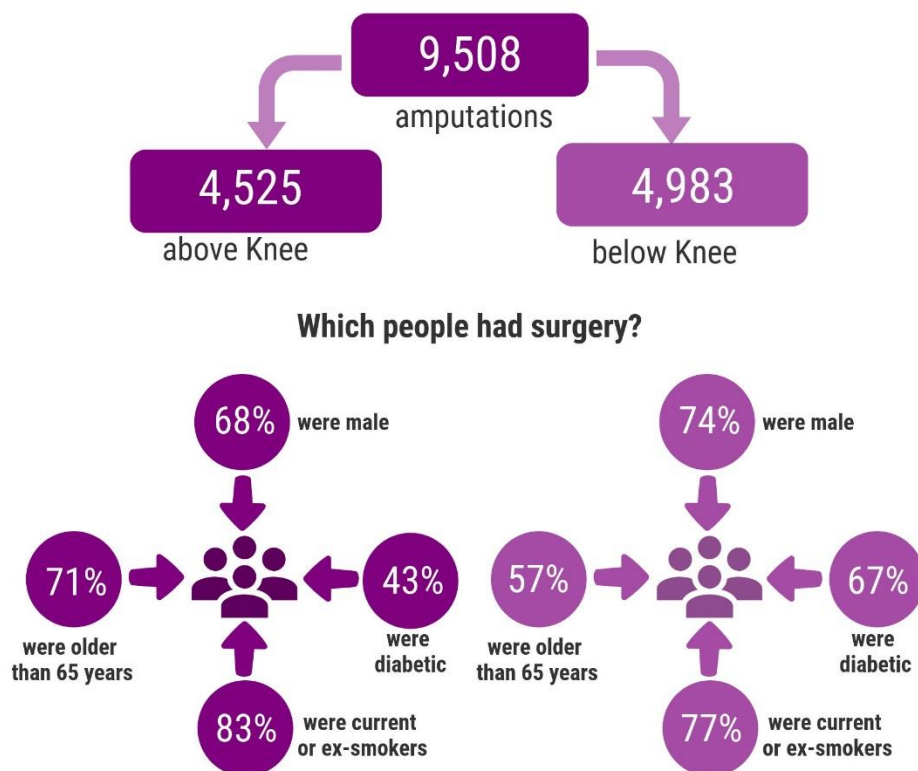


# Lower limb major amputation for peripheral arterial disease

Peripheral arterial disease (PAD) is a restriction of the blood flow in the lower limb arteries that can severely affect a patient's quality of life, and risk their limb.

Despite open and endovascular revascularisation procedures, PAD can gradually progress in some patients to critical limb ischaemia. In these situations, patients will require amputation of the lower limb.

In 2016-2018 there were 9,508 major lower limb amputations submitted to the NVR.



## Glossary

The average is the median; "typically between" is the interquartile range.

## Patient outcomes after surgery



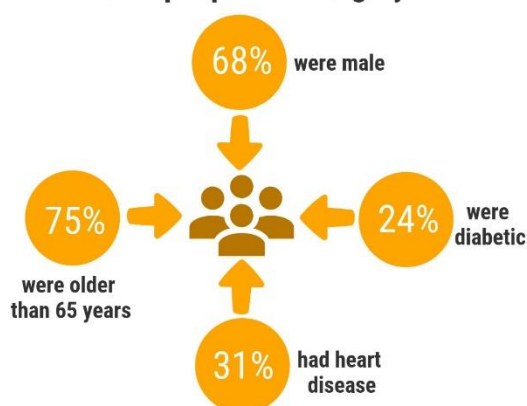


# Carotid artery surgery to prevent stroke

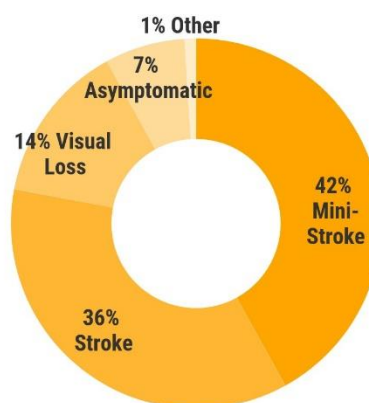
A procedure in which build-up of plaque is removed from the carotid artery in the neck is called a carotid endarterectomy (CEA).

There were 4,178 CEAs submitted to the NVR in 2018, which is approximately 96% of all procedures in the UK.

## Which people had surgery?

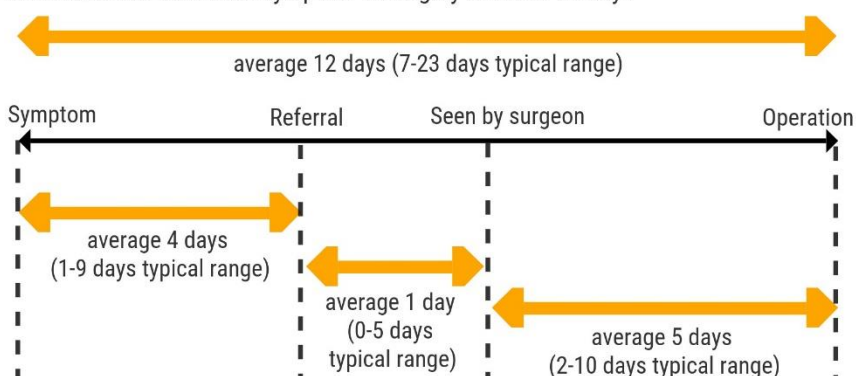


## Reasons for surgery



## Treatment times for symptomatic patients

Recommended time from symptom to surgery is within 14 days



## Glossary

A mini stroke, also known as a transient ischaemic attack (TIA), resolves completely within 24 hours.

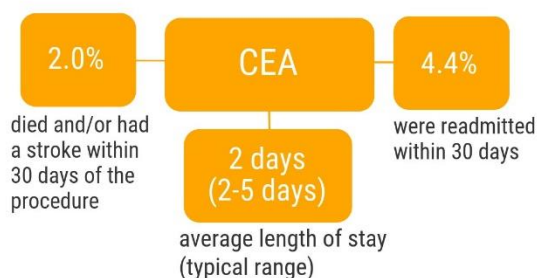
Visual loss, also known as amaurosis fugax, is the loss of vision in one eye due to an interruption of blood flow to the retina.

The average is the median; "typically between" is the interquartile range.

A patient showing symptoms is known to be symptomatic.

The average delay for symptom to surgery in NHS vascular units ranged from 4 to 42 days

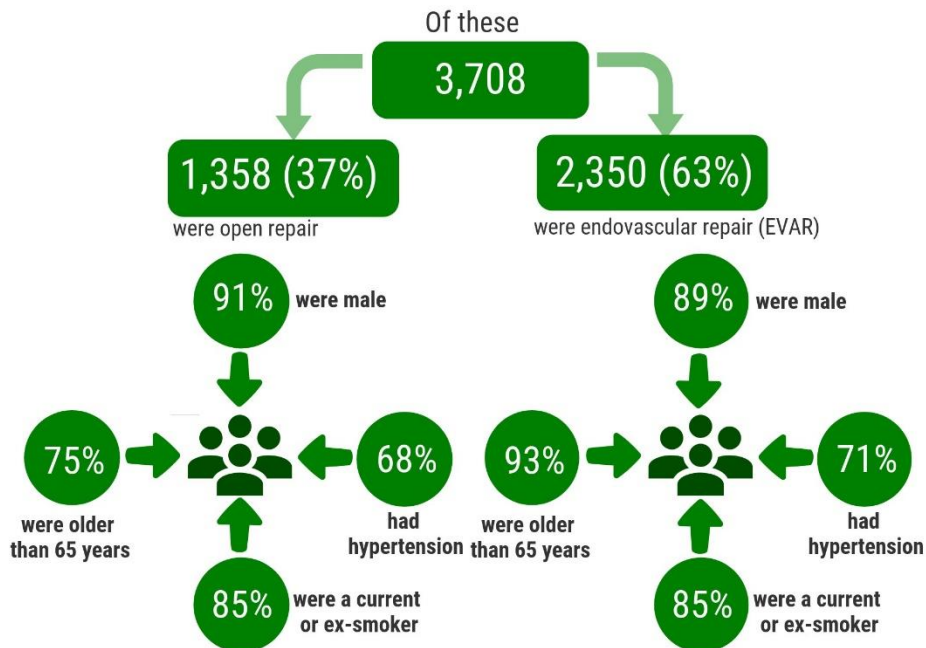
## Outcomes of surgery



# Repair of abdominal aortic aneurysm (AAA) to prevent rupture

AAA is an abnormal expansion of the aorta (the largest vessel taking blood away from the heart). If left untreated, it may enlarge and rupture causing fatal internal bleeding. An infra-renal aneurysm occurs below the level of the renal (kidney) arteries within the aorta.

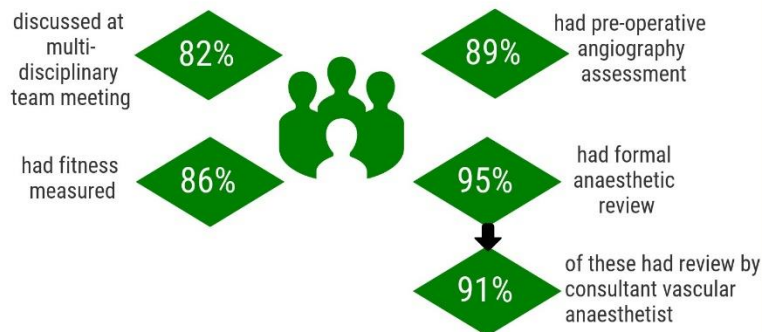
There were 3,708 elective infra-renal AAA repairs submitted to the NVR in 2018, which is approximately 91% of all procedures carried out in the UK.



## Glossary

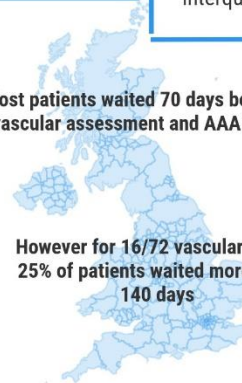
The average is the median; "typically between" is the interquartile range.

## How were patients assessed?

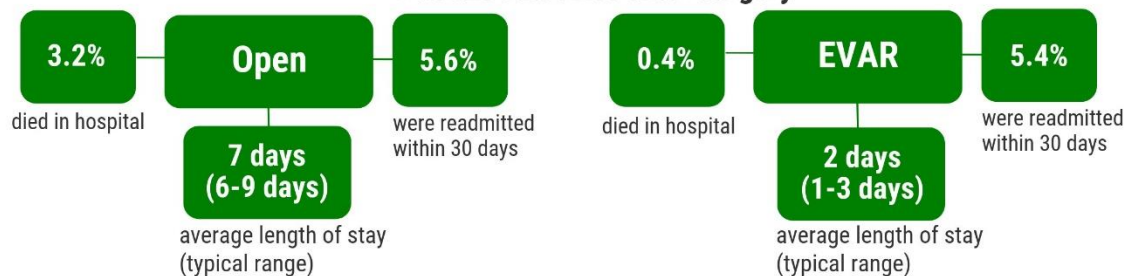


Most patients waited 70 days between vascular assessment and AAA repair

However for 16/72 vascular units, 25% of patients waited more than 140 days



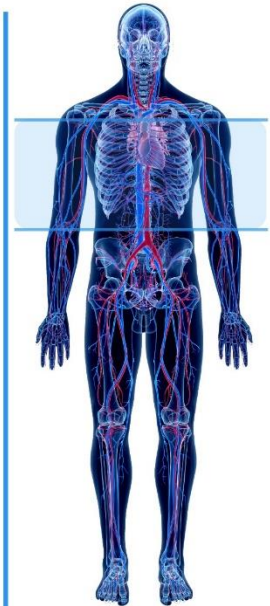
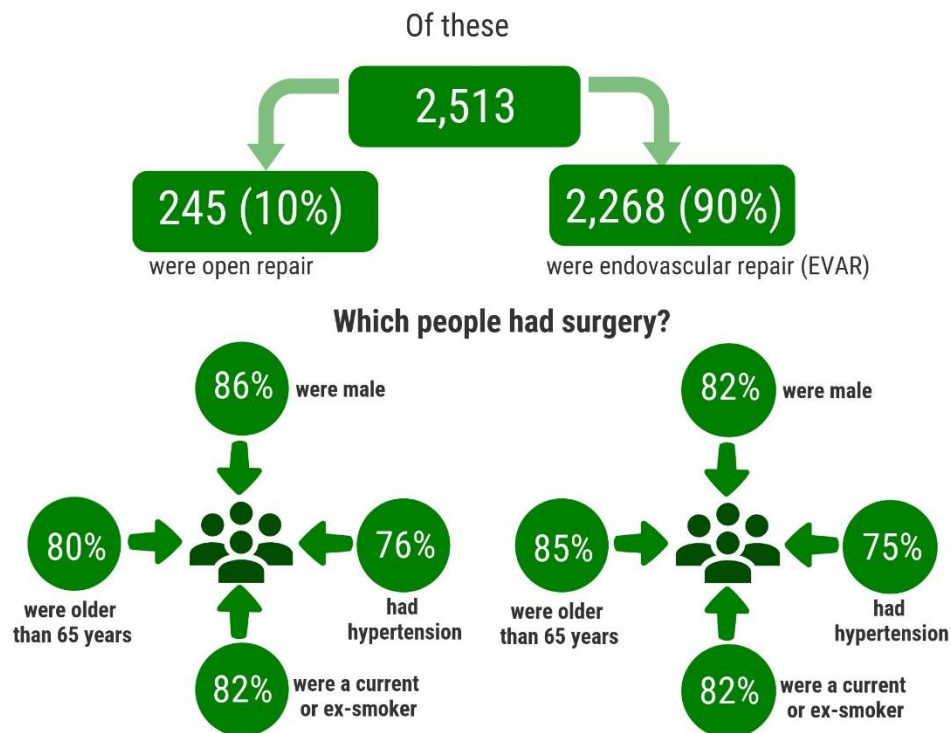
## Patient outcomes after surgery



# Repair of elective complex aortic aneurysms to prevent rupture

The term **complex** is used to describe those aneurysms that occur above the level of the renal (kidney) arteries. These are more complicated than the standard infra-renal repairs and will require specialist teams, often within a specialist hospital.

There were 2,513 repairs of elective complex AAAs carried out in 2016-2018.



## Glossary

The average is the median; "typically between" is the interquartile range.

The most common complex EVAR procedures were:

Fenestrated EVARs (FEVAR), which involves a graft containing holes (fenestrations) to allow the passage of blood vessels from the aorta. Branched EVAR (BEVAR), which involves separate grafts being deployed on each blood vessel from the aorta after the main graft has been fitted. Thoracic endovascular aortic/aneurysm repair (TEVAR), which involves a repair of the aorta within the chest region of the body.

## Patient outcomes after surgery

