

## Patient information factsheet

# Cardiac resynchronisation therapy (CRT)

Your doctor has recommended you have the above procedure.

This factsheet has been written to help you understand what is involved. If there is anything you do not understand, or you are unsure why you need this treatment, please ask a member of your healthcare team, who will be happy to explain further.

To help you understand this factsheet please refer to our “how the heart works” factsheet first. This is available on: [www.uhs.nhs.uk](http://www.uhs.nhs.uk) or ask a member of your healthcare team.

### What is cardiac resynchronisation therapy (CRT)?

CRT is a treatment used to help the heart pump more effectively. It is recommended for some patients with poor ventricular function (when the heart is not pumping as well as it should). It involves having a small device containing a battery and electronic circuits implanted under your skin.

This is connected to your heart with wires (called leads). The device monitors your heart and helps to maximise its pumping function. It does this by producing electrical impulses which help coordinate the ventricles (lower chambers of the heart).

### Is it a type of pacemaker?

Yes, but a normal pacemaker only has wires (leads) in the right side of the heart. With CRT, an extra wire is placed into the left ventricle. This enables both sides to beat together (resynchronisation). Making the lower chambers of the heart work together can improve its overall pumping function, and reduce the symptoms of breathlessness and fatigue.

### Next steps

Your doctor is likely to suggest you have a number of tests before the decision is taken to implant a CRT device. These may include:

#### **Angiogram (cardiac catheter) to check the blood supply to the heart**

Reduced blood flow to the heart can be caused by a blockage or narrowing in one of the coronary arteries (vessels that supply the heart muscle with blood). This can cause ischaemia (lack of oxygen to the heart muscle), which can reduce the pumping function of the heart. In some cases, this may be treated by angioplasty (a procedure where a balloon is used to widen the narrowed artery) or by cardiac surgery (an operation), meaning you may no longer require CRT.

#### **MRI (magnetic resonance imaging)**

You may need to have an MRI scan. This will allow your doctors to look at the structures and muscle of the heart in great detail. MRI may not be suitable for some patients with an implanted cardiac device (ICD), or pacemaker.

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Your healthcare team will be able to give you more information about this, and about any other tests which may be required.

## Risks

CRT implantation is safe. However, as with any procedure, there are potential risks. These will be fully explained by your doctor before you have your procedure. CRT implantation is performed safely in children and adults.

## Follow-up care

The cardiac rhythm management (CRM) team will give you specific follow-up instructions when you leave hospital. The doctor will write a letter to your GP detailing your hospital stay and treatment.

## Cancellations

Unfortunately we do sometimes have to cancel procedures. If this happens to you, we will always try to explain the reason. We fully appreciate that this is a stressful time for you and your family and we will do our best to provide you with a new date that is convenient for you as soon as possible.

## Who will perform my procedure?

Your procedure will be performed by a specially trained doctor with appropriate experience (although we aren't able to guarantee that you will be treated by a particular member of staff). If the doctor is undertaking training on this procedure they will be supervised by an appropriately qualified colleague

## Contact us

If you have any questions regarding your procedure please call: **023 8120 8436** to speak to a cardiac rhythm management (CRM) clinical nurse specialist.

You can also email: **[uhs.crmnurses@nhs.net](mailto:uhs.crmnurses@nhs.net)**

If you have a query relating your admission date please contact the cardiac rhythm management coordinator on: **023 8120 8772**.

## Useful links

The following websites also provide useful information:

[www.bhf.org.uk](http://www.bhf.org.uk)

[www.heartrhythmcharity.org.uk](http://www.heartrhythmcharity.org.uk)

An online version of this factsheet is available on our website **[www.uhs.nhs.uk](http://www.uhs.nhs.uk)**.

Navigate to: Our services > Blood, heart and circulation > Cardiac rhythm management > Useful information and resources.

For a translation of this document, or a version in another format such as easy read, large print, Braille or audio, please telephone **023 8120 4688**.

For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **[www.uhs.nhs.uk/additionalneeds](http://www.uhs.nhs.uk/additionalneeds)**