Further support and advice
It is important that you contact the Cardiac Department or the arrhythmia nurses if you experience symptoms that are similar to those prior to the insertion of the pacemaker so that we can arrange an appointment to check that it is working correctly. If you or your family would like to speak to someone about your pacemaker please contact:

Arrhythmia Nurse Specialists
Tel: 01202 726154  Email: arrhythmia.nurses@rbch.nhs.uk

They are available between the hours of 9am and 6pm, Monday to Friday. If you phone outside these hours please leave a message on the answer machine.

Please note that the above numbers should only be used for general enquiries. If you have an unrelated medical concern please contact your doctor, or in the event of an emergency please dial 999 and ask for an ambulance.

Our mission
Providing the excellent care we would expect for our own families.

The Royal Bournemouth Hospital,
Castle Lane East, Bournemouth, Dorset, BH7 7DW

The Bournemouth Hospital Charity raises funds for the Bournemouth and Christchurch Hospitals to enhance patient care and purchase items which directly benefit patients and staff above and beyond what can be funded by the NHS alone.

If you would like to contribute to the Bournemouth Hospital Charity please contact them on 01202 704060, email charity@rbch.nhs.uk or visit www.bournemouthhospitalcharity.org.

If you have any queries or concerns about your care at the Royal Bournemouth and Christchurch Hospitals NHS Foundation Trust, the Patient Advice and Liaison Service (PALS) would be happy to help you and can be contacted on 01202 704886/704301 or pals@rbch.nhs.uk.

If you would like this leaflet printed in a larger font, please contact the Communications Team on 01202 704905 during the office hours of 8.30am-5pm Monday - Friday.

Author: Arrhythmia Nurses  Date: February 2017
Version: Two  Review date: February 2020  Ref: 049/15

Website: www.rbch.nhs.uk  Tel: 01202 303626
About your pacemaker

The pacemaker is a sealed unit containing a battery powered electronic circuit. The pacemaker is connected to the inside of the heart via one or two leads. The leads are very fine, flexible wires which are covered in a layer of plastic or silicone. They are connected to the heart by a small hook or screw into the heart muscle.

How does your pacemaker work?

The pacemaker is constantly monitoring the heart rate. If the heart rate goes too slow it sends tiny electrical impulses down the leads to stimulate the heart to contract - this is called pacing. You should not be aware of the pacemaker working but occasionally people feel their heart beating faster, particularly if the heart rate was slow before the pacemaker procedure. The pacemaker will not stop the heart from going faster so if you experienced a fast heart rate before the procedure, this may continue.

Recovering at home

Initially, you may feel anxious about going home, but this is only natural. However, with help and support you should rapidly regain your independence and return to a normal lifestyle. If you would like to talk to someone about how you are feeling we can help. Please contact the Arrhythmia Nurse Specialists.

Physical activity

For at least one week it is important that you are careful with any activities that involve using the arm on the side of the pacemaker. You should avoid lifting the arm above shoulder level or using it energetically. This includes activities like hanging clothes on a washing line, washing your hair, hoovering and heavy lifting. This will give time for extra tissue to grow around the leads of the pacemaker and prevent them moving out of place. You must do gentle exercises to ensure that the movement of the shoulder does not become restricted.

Follow up care

Your pacemaker will be checked regularly. The first pacemaker check is around four weeks following your pacemaker procedure and the appointment will automatically be made for you. After this first check, if there are no problems, your follow up appointments will be once a year. The pacemaker clinics are held in the Cardiac Department and are managed by the cardiac physiologists with the involvement of the arrhythmia nurses.

During each clinic visit, the physiologist or specialist nurse will examine your pacemaker using a special external programmer. This machine allows us to assess the settings, the battery life of your device and the state of the leads that connect the pacemaker to your heart. If your condition has altered, changes may be made to the pacemaker settings using the special programmer. All the information is stored in your records.

Your pacemaker site will be checked at each visit. Please take this opportunity to ask any questions or let us know if you have any concerns.

Battery life

Generally the pacemaker box lasts seven to 10 years. Your battery will be checked at every visit and the cardiac physiologists will be able to predict when your battery needs to be changed. Please do not worry, the battery won’t be allowed to run out. If the battery is running low you will have more frequent pacemaker checks and there will be no change to how the pacemaker functions.

In order to have the box changed you will need to be admitted to hospital. The procedure is similar to having your first pacemaker fitted, but it will not usually involve having new leads put in.
Please inform the arrhythmia nurses if you have a temperature or fever or if you notice any of the following around the pacemaker site:
- skin ulceration
- soreness
- increasing swelling and/or warmth
- redness - new oozing or bleeding from the pacemaker site

If you are unable to contact the arrhythmia nurses 01202 726154, please contact the Cardiac Department on 01202 704129.

Do I need to tell anyone that I have a pacemaker?
It is important to carry your pacemaker identification card at all times as this contains information about the make, model and settings of your device. You will either be given the ID card before you go home or you will be sent it in the post. Your GP will be informed of your pacemaker by the hospital. If you are seeing another doctor or a dentist, inform them that you have a pacemaker.

When will I be able to drive?
The Driving and Vehicle Licensing Agency (DVLA) have guidelines in relation to patients who require a pacemaker and whether they are safe to drive. There will be some restrictions but these will vary according to why you had the pacemaker implanted. Generally people cannot drive for one week following the procedure. You can access the DVLA guidelines at https://www.gov.uk/driving-medical-conditions.

You must inform the DVLA and your insurance company that you have had a pacemaker implanted. Failure to do so may invalidate your insurance.

When can I return to work?
There are no specific rules about when to return to work as everyone is different. Speak to your doctor about returning to employment and discuss your pacemaker with your occupational health department or health and safety advisor if necessary.

Can I travel abroad?
It is perfectly safe to travel as long as your general health allows. At the airport always show your pacemaker identification card to security staff and ask to be searched by hand. The hand-held device used by airport staff can temporarily interfere with your pacemaker. You can walk straight through the metal detector archway but do not linger. The metal casing of the pacemaker may cause the security alarm to be activated.

You will need to inform the insurance company that you have a pacemaker. Some require written confirmation that you are able to travel. Although unable to recommend any particular company, we do provide a list of those that are happy to consider insuring people travelling with a pacemaker.

Is there any equipment that may affect the pacemaker?
Equipment that uses electricity and magnets have electromagnetic fields around them. These fields are usually weak and will not affect your pacemaker. Strong electromagnetic fields can cause electromagnetic interference (EMI) and affect the functioning of the pacemaker.

The majority of everyday mechanical and electrical devices will not affect the functioning of the pacemaker as long as they are properly maintained. Household appliances such as radios, cookers, computers, dishwashers and microwaves can all be used as long as they are in good working order.

EMI can be caused by close contact with certain procedures, activities and equipment. Try and avoid:
- direct contact with car ignition systems whilst the engine is running (during car maintenance)
- welding equipment
- standing next to large stereo speakers (e.g. those found at concerts)
- electric drills
- carrying strong magnets or placing a magnet over your chest
- power generators
Mobile phones are safe but should be kept approximately 15cm (six inches) from the pacemaker site. When making phone calls the mobile should be held to the ear on the opposite side of the pacemaker. When carrying a mobile phone do not store it in a pocket on the same side as the pacemaker.

Anti-theft security gates at shops and banks provide a very small risk of interfering with the pacemaker. Walk through doorways normally and do not wait around in the area of the security system.

If you are admitted to hospital it is important that you tell any staff looking after you that you have a pacemaker. Some medical procedures may affect your pacemaker. The procedures where special precautions need to be taken or that you should avoid include:

- Magnetic Resonance Imaging (MRI) - this is a diagnostic test that uses a strong electromagnetic field that can damage your pacemaker. Some pacemakers are compatible with MRI scans, therefore check with the cardiac department whether you are able to have one
- Diathermy and electrocautery - these are generally used in surgical procedures and may affect the functioning of the pacemaker. Adjustments can be made to the pacemaker before any surgical procedure to prevent any damage to your pacemaker
- Radiation treatment for cancer - special precautions will need to be made to protect your pacemaker
- Transcutaneous electrical nerve stimulation (TENS) - this is a device used for pain relief

Most other medical procedures will not affect your pacemaker. If you have concerns about the safety of equipment in relation to your pacemaker please contact the arrhythmia nurses.

**Wound site**

As part of the procedure you have a small incision wound. It has been closed with dissolvable stitches and will take a few days to heal completely. It is important that the wound is kept clean and dry for five days. Depending on which doctor did your procedure, the skin may have been sealed with:

**A dissolvable stitch:**
This will be covered with a dressing which needs to remain in place for three days. Please leave this dressing in place until this time.

**Glue:**
The glue will generally peel off naturally in five to ten days, however, it does sometimes take longer. Do not pick at the film or scrub the area. A dressing should not be applied over the top of the glue.

**Please read the following carefully:**
The wound site will feel sore for a few days after the procedure, regular over the counter painkillers, such as paracetamol or co-codamol, should minimise any discomfort that you are feeling. It is normal to have some bruising around the area, particularly if you are on blood thinning medication.

**Do not** soak the cut. You may bathe and shower with care. Keep the wound dry for the first five days. Prolonged exposure to steam may loosen the dressing, if one is in place. After the cut has healed you may bathe as normal, using your usual soap or shower gel. Remove the dressing (if you have one) as advised by nursing staff after you have been discharged home.

**Do not** put direct pressure on the cut, by lying face down for example, when it is still sore. It may feel sore to wear a seatbelt over the site of the pacemaker so wear the seat belt on the opposite side of your body. Having a pacemaker does not make you exempt from wearing a seat belt.

**Do not** use ointments or creams over or around the cut.