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Royal Cornwall Hospitals NHS Trust

Cardiac Implantable Electronic Devices: Deactivation of Arrhythmia Therapies at End of Life Policy

V2.0

February 2023

Summary:

Key:

General Notes

In-patient wards

ED/MAU/SRU/Acute GP/Amb-Care

GP/SWASFT

In-patient with a CRT-D or ICD in situ, approaching the end of their life and are either receiving or at risk of receiving therapy for a ventricular arrhythmia. This therapy would not be of clinical benefit to the patient and would be likely to cause distress.

Clinician responsible for in-patient care episode to Contact on call Consultant Cardiologist (via RCHT switchboard) to arrange device therapy deactivation

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Cardiologist to review patient and clearly document a request for device deactivation in the patients' medical records

(see Appendix 3 for guidance)

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During routine working hours

(Monday to Friday 09:00 to 17:00)

- Clinician responsible for in-patient care episode to request device deactivation through MAXIMs 'Cardiology device therapies deactivation Inpatient Service'
- Cardiologist to contact Cardiac Department to flag requirement for programmed deactivation.
- If Physiologist not immediately available, temporary device deactivation may be carried out by a suitably trained professional who has completed the necessary training & been assessed as competent to RCHT standards (see appendix 5)

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Out of hours

(between 17:00 and 09:00, at weekends or on bank holidays)

- Clinician responsible for in-patient care episode to request device deactivation through MAXIMs 'Cardiology device therapies deactivation Inpatient Service'
- Temporary device deactivation can be carried out by a suitably trained professional who has completed the necessary training & been assessed as competent to RCHT standards. (see appendix 5)
- The on call Cardiologist will have access to the register of personnel who are competent to temporarily deactivate device therapies

Temporary or programmed device therapies deactivation must be documented in the patients' medical records by the person who carried out either temporary or programmed device therapy deactivation

Advanced Planning

Patient has a CRT-D or ICD in situ and is assessed as being close to end of life **(Primary Care)**

The GP managing the patients care to Contact the CRM Physiologist via the Cardiac Department to discuss device therapy deactivation prior to the patients next pacing clinic appointment.

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Cardiac Physiologist to list the patient for discussion at the Cardiology electrical Multi-Disciplinary Team (e-MDT)

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The Cardiology e-MDT to review the patients' medical records and clearly document a request for device deactivation in the patients' medical records. Outcome also to be documented on MAXIMs eMDT referral

(see Appendix 3 for guidance)

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During routine working hours

(Monday to Friday 09:00 to 17:00)

- Cardiac Physiologist attending the Cardiology e-MDT meeting to flag requirement for programmed deactivation to colleagues in the cardiac Department.
- If Programmed device deactivation is not immediately available, temporary device deactivation can be carried out by a suitably trained professional who has completed the necessary training & been assessed as competent to RCHT standards (see appendix 5)
- Urgent deactivation, where a Physiologist needs to attend the patients home to perform programmed deactivation, should only be performed in exceptional circumstances.

Temporary or programmed device therapies deactivation must be documented in the patients' medical records by the person who carried out either temporary or programmed device therapy deactivation

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Data Protection Act 2018 (General Data Protection Regulation – GDPR) Legislation

The Trust has a duty under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team

Royal Cornwall Hospital Trust rch-tr.infogov@nhs.net

1. Introduction

1.1. Implantable cardioverter defibrillators (ICDs) can prolong life by terminating life-threatening cardiac arrhythmia (ventricular fibrillation [VF] and ventricular tachycardia [VT]) in people at risk of cardiac arrest and sudden death. Some episodes of VT may be interrupted by the device delivering a burst of rapid pacing to the heart, but termination of VF and of some episodes of VT requires delivery of an electric shock to the heart.

1.2. Most ICDs also function as a pacemaker that will maintain heart rate in the event of spontaneous bradycardia. Some ICDs are combined as a single device with a biventricular pacemaker, used to synchronise contraction of the left and right ventricles (cardiac resynchronisation therapy [CRT]) and thereby reduce symptoms in some people with heart failure. These are referred to as CRT-D devices. The CRT and ICD functions of every device are programmable independently of each other.

1.3. As the indications for ICD implantation have expanded, the number of people with ICDs has increased progressively. As a result, more people have survived longer with ICDs and some of those people approach the end of their life, either due to progression of their heart disease to an advanced stage (usually advanced heart failure) or due to development of another irreversible terminal condition. Providing such a person with high-quality end-of-life care and allowing them a dignified death requires consideration and discussion of deactivation of the shock function of their ICD. When the ICD is not deactivated in this way the person may receive multiple painful or distressing shocks from the device during the last hours or days of their life. In some instances, the device may delay the person's natural death with shock delivery that the patient would not have chosen to receive if they had been given a chance to discuss deactivation.

(BHRS Deactivation of implantable cardioverter-defibrillators towards the end of life).

1.4. This version supersedes any previous versions of this document.

2. Purpose of this Policy/Procedure

This policy provides information on how to arrange deactivation of Cardiac Implantable Electronic Device (CIED) therapies for patients who are either in-patients under the care of the Royal Cornwall Hospitals Trust (RCHT) or under the care of GPs within the RCHT facing population and are approaching the end of their life.

3. Scope

3.1. This document provides guidance for any professional involved in the clinical management of RCHT facing patients, who are approaching the end of their life and have a 'complex' cardiac device in situ which requires therapies deactivation. It also provides limited guidance on temporary device deactivation in the emergency care setting. This will include:

- Consultants.
- Specialty Registrars.

- Junior Doctors.
- Cardiac Physiologists.
- Cardiology Specialist Nurses (RCHT).
- Cardiology ward/unit-based nurses (RCHT).
- Emergency Department/Medical Admissions Unit medical and nursing staff.
- General Practitioners.
- Community Cardiac Specialist Nurses.
- Community Matrons.
- Hospice clinical staff.
- South Western Ambulance Service Trust (SWAST).

3.2. This document does **not** provide guidance for professionals involved in the clinical management of patients, who are approaching the end of their life and have a CIED in situ which does not deliver defibrillation therapy (bradycardia pacemakers). There is currently no indication for deactivating this type of CIED as the patient approaches the end of their life. In many cases deactivation of a bradycardia pacemaker may hasten the end of life. Please see section 6.9 of this document for information regarding aftercare for patients who have died with a CIED in situ.

4. Definitions / Glossary

4.1. Device types covered by this guidance.

- Internal Cardioverter Defibrillators (ICDs).
- Cardiac Resynchronisation Therapy – Defibrillators (CRT-Ds).

4.2. Therapies.

CRT-D's and ICD's are capable of bradycardia pacing, anti-tachycardia pacing (ATP) and defibrillation. If therapies are deactivated this will only deactivate ATP and defibrillation, it will not deactivate bradycardia pacing. It is very important that the healthcare professional, patient and their family understand this prior to device deactivation. This is particularly important where the patient is pacemaker dependant.

4.3. Abbreviations used:

- ATP Anti Tachycardia Pacing.
- CIED Cardiac Implantable Electronic Device.
- CITS Cornwall Information Technology Service.

- CRM Cardiac Rhythm Management.
- CRT-D Cardiac Resynchronisation Therapy – Defibrillators.
- CRT-P Cardiac Resynchronisation Therapy – Pacemaker.
- e-MDT (Cardiology) electrical Multi-Disciplinary Team (meeting).
- EOL End of life.
- HCP Health Care Practitioner.
- ICD Internal Cardioverter Defibrillators.
- MDT Multi-Disciplinary Team.
- NOK Next Of Kin.
- RCHT Royal Cornwall Hospitals Trust.
- SWAST South West Ambulance Service Trust.
- S-ICD Subcutaneous ICD.
- TEP Treatment Escalation Plan.
- VF Ventricular Fibrillation.
- VT Ventricular Tachycardia.

5. Ownership and Responsibilities

This section provides a detailed overview of the strategic and operational roles responsible for the development, management and implementation of this policy/procedure.

5.1. Role of the arrhythmia clinical lead, the heart function nursing service lead and the cardiac physiologist pacing lead

The arrhythmia clinical lead, the heart function nursing service lead and the cardiac physiologist pacing lead are responsible for:

- Reviewing this document every 3 years (or sooner if new, relevant national guidelines are published).

  Maintaining a register of professionals who are competent to deactivate complex cardiac device therapies, either temporarily or programmed in both the primary and secondary care settings.

5.2. Role of the managers

Line managers are responsible for:

- Ensuring staff are aware of, and act upon, the Trust‘s procedural documents.
- Implementing the procedural documents for the areas in which they apply.
- Notifying all new and existing staff on how to access both current and archived Trust procedural documents.
- Ensuring that all staff members have access to the Trust intranet site to enable access to published procedural documents.
- Ensuring that all staff members are aware of their responsibility in maintaining compliance with Trust documents.

5.3. Role of the cardiology speciality governance group

The cardiology speciality governance group is responsible for:

- Signing off the reviewed document prior to upload to the document library.

5.4. Role of individual staff

All staff members are responsible for:

- Making themselves aware of the procedural documents that relate to their role and responsibilities.
- Complying with agreed Trust procedural documents where they apply.
- Raising any queries about implementation of Trust documents with their line manager.
- Alerting their line manager of any non-compliance with procedural documents where it is noted and represents an actual risk to the Trust, its staff, patients or the public. Contacting the CITS Service Desk (01209 881717) if experiencing difficulties accessing the electronic Document Library.

6. Standards and Practice

6.1. Device types

6.1.1. ICD’s

A transvenous ICD is a CIED which is able to deliver bradycardia pacing, ATP and Defibrillation. An S-ICD has no lead inside the heart so is unable to deliver bradycardia pacing or ATP, it only has a defibrillation function. Throughout this document both types of ICD will be referred to collectively as ‘ICD’s’.

Where deactivation of therapies takes place and the ICD is transvenous, this does not necessarily deactivate the bradycardia pacing function. It is important for all involved to understand that

deactivation of therapies means that the patient will no longer receive treatment for potentially fatal fast or disorganised rhythms; **it does not mean that the patient will die immediately on device deactivation.**

6.1.2. CRT-D's

A CRT-D is a CIED which is able to deliver bradycardia pacing, ATP and Defibrillation. It also synchronises ventricular contraction in an attempt to reduce heart failure symptom burden. Like the ICD, deactivation of therapies does not necessarily deactivate the pacing function. It is important for all involved to understand that deactivation of therapies means that the patient will no longer receive treatment for potentially fatal fast or disorganised rhythms; **it does not mean that the patient will die immediately on device deactivation.**

6.2. Members of the cardiology Multi-Disciplinary Team (MDT)

For the purpose of this document, the specific team members involved in complex cardiac device management.

6.2.1. Arrhythmia clinical lead

A Consultant Cardiologist with a sub-specialty interest in arrhythmia management who has overarching responsibility for service delivery audit and governance of all aspects of cardiac rhythm management at the Royal Cornwall Hospitals Trust.

6.2.2. Complex device implanter

A Consultant Cardiologist who has undergone further sub-specialty training to implant complex CIED's (CRT-P, CRT-D, ICD's).

6.2.3. Cardiac physiologist

A Cardiac Physiologist, after a period of training (usually at least at degree level), is responsible for the recording and analysis of different physiological data required to assist in the diagnosis and treatment of known or suspected cardiac disease. **Please note:** Not all Cardiac Physiologists are qualified in complex device programming.

6.2.4. Heart function specialist nurse

A registered Nurse with significant experience in Cardiac Nursing who has undertaken additional training in the clinical management and education of patients with heart function disorders (Heart Failure and Arrhythmia).

6.3. Advanced planning

6.3.1. Device deactivation prior to surgery or radiotherapy

If a patient needs to undergo a surgical procedure or receive radiotherapy their defibrillator therapies should be deactivated via the programmed method prior to their surgical or radiotherapy procedure. It will need to be reactivated immediately after their procedure. Programmed device deactivation and reactivation can only occur Monday to Friday between the hours of 9 to 5. Requests for device deactivation for these reasons should be made via 'Cardiology Device Check Request Service' on MAXIMs.

If emergency surgery needs to occur outside of normal working hours, temporary device deactivation can be utilised, but this only should occur in exceptional circumstances.

6.3.2. Device deactivation at end of life

Wherever possible, discussion about end-of-life care and device therapy deactivation should take place as early as possible. This will allow the patients, their family and carers to be involved in the decision and will avoid unnecessary anxiety for all involved. Patients routinely have device deactivation discussed with them prior to device implant so should be aware that this conversation needs to occur in a timely way.

6.4. Temporary device therapy deactivation

Temporary device deactivation is only to be utilised when programmed device therapy deactivation is not available and at the documented request of an RCHT employed Consultant Cardiologist for example if a patient is experiencing multiple inappropriate therapies which are unnecessary and causing distress to the patient or if the patient is at end of life and receiving (or likely to receive) inappropriate device therapy.

Temporary device deactivation should only be carried out by staff who have been:

- trained to temporarily deactivate complex device therapies **and**
- have this competency included in their Job Description **and**
- have been assessed as competent to the agreed RCHT Cardiology specialty standard.

6.4.1. At end of life or during a cardiac arrest

If temporary device therapies deactivation is required because the patient is at the end of their life or deactivation is required during a cardiac arrest the magnet should be taped in place.

6.4.2. **Patient receiving multiple inappropriate therapies**

If temporary device therapies deactivation is required because the patient is receiving multiple inappropriate therapies, then the patient should be sat upright and holding the magnet in place. If the patient loses consciousness due to an arrhythmia which requires therapy their hand will release the magnet and the device will then be able to detect the abnormal rhythm and deliver therapy if indicated.

6.5. Programmed device therapy deactivation

Programmed device deactivation should wherever possible be the deactivation method of choice.

Programmed device deactivation should only be carried out following review of the patient by an RCHT employed Consultant Cardiologist and at their documented request by staff who have been:

- trained to carry out programmed complex cardiac device therapies deactivation **and**
- have this competency included in their job description **and**
- have been assessed as competent to the agreed RCHT Cardiology specialty standard.

6.6. Community deactivation

Discussions should take place at the earliest opportunity between the GP and the complex device implanting cardiologist if a patient is approaching end of life in a primary care setting. This will:

- allow elective programmed device deactivation in a timely way.
- ensure the patient, their family and carers are involved in the decision avoiding unnecessary anxiety for all concerned.
- avoid the patient receiving unnecessary device therapies at the end of life.

Wherever possible (and when appropriate) device deactivation will be discussed with a patient and arranged prior to discharge from RCHT.

6.7. Review

Review of the patient and their clinical condition should be on going. Heart Failure patients in particular have disease trajectories which vary from patient to patient and make recognition of end stage heart failure challenging. It may be appropriate for a device to be re-activated if their condition unexpectedly improves after device therapies deactivation.

6.8. Treatment Escalation Plan (TEP) and Resuscitation Decision Record (RDR)

A TEP form including RDR needs to be considered as a minimum on any patient that is at foreseeable risk of clinical deterioration and/or cardiac or respiratory arrest. Certainly if the answer to the question “Would you be surprised if this patient died within the next 6-12 months?” is NO then a TEP form and a RDR should be completed.

Please see ‘Treatment Escalation Plan & Resuscitation Decision Record (in relation to the adult patient over 18 years)’ for further information.

6.8.1. Is deactivation of implantable Cardioverter (ICD) therapies appropriate?

If the appropriate discussions have taken place as stated in the summary flow charts on pages 2 and 3 of this documents, then yes should be circled. If there has been no discussion with or clinical review by an RCHT employed Consultant Cardiologist, then no should be circled.

6.8.2. Do Not Attempt Resuscitation (DNACPR)

Some healthcare professionals express a view that a DNACPR decision always implies that an ICD should be deactivated. For people with an ICD, a DNACPR decision or the recognition that they might be dying should trigger a discussion about ICD deactivation. However, some people choose not to have CPR attempted because of its trauma or relatively low probability of success but wish to continue to receive treatment from their ICD for shockable ventricular arrhythmia. These choices must be respected and kept under review with the opportunity for decisions to be changed as the person’s condition progresses. (taken from BHRS Deactivation of implantable cardioverter-defibrillators towards the end of life).

6.9. Aftercare

All CIEDs can explode if exposed to extreme heat so must be removed if a patient is going to be cremated. Prior to removal the device must be deactivated fully via the programmed method (see 6.4). If a device capable of delivering a shock is not deactivated prior to removal it will deliver a shock to the person removing it. Under no circumstances should the defibrillator leads be cut if the device has not been deactivated. It is the responsibility of the clinician caring for the patient to inform the mortician or funeral director of the presence of a CIED.

7. Dissemination and Implementation

7.1. This document will be disseminated electronically to all relevant stakeholders once published. It will also be available on the RCHT Document library.

7.2. There are no previous versions of this document.

7.3. A Cardiology Specialty competency document is available to support the education of any professionals who will be either temporarily deactivating device therapies (see 6.4) or programming device therapy deactivation (see 6.5).

7.4. Once assessed as competent, the name of the assesee will be added to a Cardiology specialty held register. The register will be jointly maintained by the Cardiology Specialty Arrhythmia clinical lead, The Heart Function Nursing service lead and the Cardiac Physiologist pacing lead. This Register will be visible through the Cardiology shared drive. Only professionals on this register will be deemed competent to deactivate complex cardiac device therapies. Their competency will be revalidated every 3 years in line with policy updating and review timeframes.

7.5. This register will also contain the names of recognised competency assessors. The Arrhythmia clinical lead is ultimately responsible for ensuring all assessors are competent to fulfil their role.

8. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Documented instruction to deactivate device therapies. Documentation regarding device deactivation. Suitability of personnel carrying out deactivation
Lead	Cardiac Physiologist Pacing lead – responsible for monitoring pacing files for RIP patients so best placed to flag when device therapies deactivation may have occurred. Also the first port of call if anyone at RCHT requires device deactivation.
Tool	Please see tool in appendix 4
Frequency	Each time a temporary or programmed deactivation occurs
Reporting arrangements	Report to the specialty through the Cardiology governance and business meeting.
Acting on recommendations and Lead(s)	The Arrhythmia lead in conjunction with the Cardiology Specialty Governance group will undertake subsequent recommendations and action planning for any or all deficiencies and recommendations within reasonable timeframes. Required actions will be identified and completed in a specified timeframe

Information Category	Detail of process and methodology for monitoring compliance
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned. The length of time required to action changes of practice will be dictated by the change required and whether additional training is involved. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders

9. Updating and Review

9.1. This document will be reviewed and updated collaboratively by the arrhythmia clinical lead, the heart function nursing service lead and the cardiac physiologist pacing lead every 3 years.

9.2. Revisions will be made ahead of the review date if new, relevant national guidelines are published. Where the revisions are significant and the overall policy is changed, the Arrhythmia Clinical lead and the Heart Function nursing service lead will ensure the revised document is taken through the standard consultation, approval, and dissemination processes.

9.3. Where the revisions are minor, e.g. amended job titles or changes in the organisational structure, approval will be sought from the Executive Director responsible for signatory approval and can be re-published accordingly without having gone through the full consultation and ratification process.

9.4. Any revision activity is to be recorded in the Version Control Table as part of the document control process.

10. Equality and Diversity

10.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the 'Equality, Diversity & Human Rights Policy' or the Equality and Diversity website.

10.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	Cardiac Implantable Electronic Devices: Deactivation of Arrhythmia Therapies at End of Life Policy V2.0
This document replaces (exact title of previous version):	Cardiac Implantable Electronic Devices: Deactivation of Arrhythmia Therapies at End of Life Policy V1.0
Date Issued/Approved:	16 February 2023
Date Valid From:	February 2023
Date Valid To:	February 2026
Directorate / Department responsible (author/owner):	Medicine, ED & WCH / Cardiology Specialty (Joanna Davies: Clinical Nurse Specialist, Heart Function)
Contact details:	01872 253018
Brief summary of contents:	Cardiology specialty agreed guidance on temporary or programmed deactivation of complex cardiac device therapies for patients who have their complex device care and management delivered by RCHT.
Suggested Keywords:	• Device therapy deactivation • ICD (Internal Cardioverter Defibrillator) • S-ICD (Subcutaneous Internal Cardioverter Defibrillator) • CIED (Cardiac Implantable Electronic Device) CRT (Cardiac Resynchronisation Therapy)
Target Audience:	RCHT: Yes CFT: No CIOS ICB: No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Resus team
General Manager confirming approval processes:	Rachael Pearce

Information Category	Detailed Information
Name of Governance Lead confirming approval by specialty and care group management meetings:	Siobhan Hunter
Links to key external standards:	None
Related Documents:	None
Training Need Identified?	Yes
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Cardiology

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
June 2019	V1.0	Initial Issue	Joanna Davies, Clinical Nurse Specialist, Heart Function
January 2023	V2.0	Updated onto latest Trust accessible template. No changes to content as part of this full review.	Joanna Davies, Clinical Nurse Specialist, Heart Function

All or part of this document can be released under the Freedom of Information Act 2000

This document is to be retained for 10 years from the date of expiry.
This document is only valid on the day of printing

Controlled Document

This document has been created following the Royal Cornwall Hospitals NHS Trust Policy for the Development and Management of Knowledge, Procedural and Web Documents (The Policy on Policies). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	Cardiac Implantable Electronic Devices: Deactivation of Arrhythmia Therapies at End of Life Policy V2.0
Directorate and service area:	Cardiology
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Joanna Davies, Clinical Nurse Specialist, Heart Function
Contact details:	01872 253018

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	Any health care professional involved in the clinical management of RCHT facing patients, who have a 'complex' cardiac device in situ which requires therapies deactivation.
2. Policy Objectives	To provide clear guidance on the management of deactivation of device therapies.
3. Policy Intended Outcomes	Provision of safe monitored device therapy deactivation in line with national recommendations
4. How will you measure each outcome?	See section 8 for details
5. Who is intended to benefit from the policy?	Patients with complex CIEDs capable of delivering therapy to terminate life threatening arrhythmias

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Resus team
6c. What was the outcome of the consultation?	Approved
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff or patient surveys:** No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	
Marriage and civil partnership	No	

Protected Characteristic	(Yes or No)	Rationale
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Joanna Davies, Clinical Nurse Specialist, Heart Function

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis

Appendix 3. Guidance for documentation regarding deactivation of therapies request.

Cardiologist – Please ensure the following considerations are fully documented in the patients' medical notes to facilitate timely device therapy deactivation

- Does the patient have the capacity to make decisions about their care? If there is any doubt regarding their capacity, please follow the mental capacity assessment on the reverse of the Cornwall TEP and resuscitation decision record.

- Patient NOK or family involved in discussion about device therapy deactivation? Who?

- Explanation given to patient and NOK/family regarding only therapies deactivated, (not CRT or brady pacing)?

- Document clear instruction for programmed deactivation of device therapies, with additional clear instruction to temporarily deactivate device therapies if appropriate/necessary.

- Clear documentation of the name of the Cardiac Physiologist with whom programmed device deactivation was discussed (include contact number/bleep)

Once deactivation of therapies has been carried out:

- Healthcare professional who carried out deactivation must document whether temporary or programmed deactivation has been carried out and who by.

Appendix 4. Tool for monitoring compliance and effectiveness

Device type (please circle)	CRT-D	ICD	S-ICD
Indication for therapies deactivation (please circle)	EOL	Cardiac arrest	Inappropriate therapies
Name of Consultant/GP requesting device therapies deactivation			
Cardiologist confirming device deactivation appropriate and agreed			
Temporary therapies deactivation carried out? (please circle)	YES		NO
Appropriate method used -see section 6.4 of policy (please circle)	YES		NO (please give details in 'notes' overleaf)
HCP carrying out temporary therapies deactivation			(name and designation)
Is this HCP on the Cardiology specialty held competency register	YES		NO (please give details in 'notes' overleaf)
Programmed therapies deactivation carried out? (please circle)	YES		NO
HCP carrying out programmed therapies deactivation			(name and designation)
Is this HCP on the Cardiology specialty held competency register	YES		NO (please give details in 'notes' overleaf)
Have device therapies been reactivated?	YES (please give details in 'notes' overleaf)		NO (please give details in 'notes' overleaf)

Draft Only Do Not Use

Notes:	
Name and designation of Health Care professional carrying out monitoring	Date monitoring carried out

A copy of this should be filed in the patients pacing notes (held in the cardiac department) and a copy should be sent to the arrhythmia clinical lead

Draft Only
Do Not Use

Appendix 5. RCHT competency standard for temporary device therapy deactivation

The purpose of this competency standard is to facilitate the safe delivery and high quality care of temporary deactivation of a complex device for all patients who may benefit.

The appropriately qualified healthcare professional undertaking temporary deactivation must:

1. Have sufficient knowledge and understanding of the condition for which complex device therapy was indicated.

2. Adhere to their relevant code of conduct and maintain their competencies in any extended scopes of professional practice

3. Demonstrate their ability to accurately assess a patients' level of knowledge, understanding and preparedness for their temporary device deactivation and what action to take if they are not.

4. Demonstrate an understanding of potential complications and consequences of temporary device deactivation and what action to take in these circumstances.

5. Demonstrate knowledge and understanding of the policies and protocols related to temporary device deactivation and an ability to apply this guidance

6. Demonstrate the ability to accurately document and utilise escalation tools, which supports the device deactivation process and referral guidelines.

7. Have knowledge and understanding of the circumstances which lead to temporary device deactivation and the implications for patients.

8. Ensure that the patient fully understands as far as possible their planned deactivation procedure to promote and enhance informed consent.

9. Demonstrate an understanding of the temporary deactivation process

10. Recognise the importance of good communication with patient, family and the multi-disciplinary team.

11. Know what process to follow if the patient is unfit for or declines their device deactivation.

To achieve this standard, the appropriately qualified healthcare professional will:

1. Be instructed, guided and supervised by a competently trained professional who has already been deemed competent to train appropriate colleagues to temporarily deactivate complex devices

2. Continue to update their competency and provide evidence that supports their continued level of competence.

3. Ensure that they keep up to date with research and current developments within the complex device sub-speciality of Cardiology.

4. Adhere to the RCHT complex device therapy deactivation protocol.

5. Ensure that they are aware of any national or local targets, initiatives or guidance that impact on the patient's pathway and care.

Through completion of the relevant competency documentation the HCP will demonstrate they have the cognitive and technical skills to provide temporary device therapy deactivation.

Appendix 6. RCHT competency standard for programmed device therapy deactivation

The purpose of this competency standard is to facilitate the safe delivery and high quality care of programmed deactivation of a complex device for all patients who may benefit.

The appropriately qualified, healthcare professional undertaking programmed deactivation must:

1. Have sufficient knowledge and understanding of the condition for which complex device therapy was indicated.

2. Adhere to their relevant code of conduct and maintain their competencies in any extended scopes of professional practice

3. Demonstrate their ability to accurately assess a patients' level of knowledge, understanding and preparedness for their programmed device deactivation and what action to take if they are not.

4. Demonstrate an understanding of potential complications and consequences of programmed device deactivation and what action to take in these circumstances.

5. Demonstrate knowledge and understanding of the policies and protocols related to device deactivation and an ability to apply this guidance

6. Demonstrate the ability to accurately document and utilise escalation tools, which supports programmed device deactivation process and referral guidelines.

7. Have knowledge and understanding of the circumstances which lead to device deactivation and the implications for patients.

8. Ensure that the patient fully understands as far as possible their planned deactivation procedure to promote and enhance informed consent.

9. Demonstrate an understanding of the programmed deactivation process

10. Recognise the importance of good communication with patient, family and the multi-disciplinary team.

11. Know what process to follow if the patient is unfit for or declines programmed device therapy deactivation.

To achieve this standard, the appropriately qualified, healthcare professional will:

1. Be instructed, guided and supervised by a competently trained professional who has already been deemed competent to train appropriate colleagues to carry out programmed device therapy deactivation.

2. Continue to update their competency and provide evidence that supports their continued level of competence.

3. Ensure that they keep up to date with research and current developments within the complex device sub-speciality of Cardiology.

4. Adhere to the RCHT complex device therapy deactivation protocol.

5. Ensure that they are aware of any national or local targets, initiatives or guidance that impact on the patient's pathway and care.

Through completion of the relevant training the HCP will demonstrate they have the cognitive and technical skills to provide programmed device therapy deactivation.

Appendix 7. References

Deactivation of implantable cardioverter-defibrillators towards the end of life. Available at: http://www.bhrs.com/files/files/Guidelines/CIEDs_Deactivation.pdf

Treatment Escalation Plan & Resuscitation Decision Record (in relation to the adult patient over 18 years). Available at:

http://intranet.cornwall.nhs.uk/DocumentsLibrary/RoyalCornwallHospitalsTrust/Clinical/CriticalCareAndResuscitation/TreatmentEscalationPlanAndResuscitationDecisionRecordAdult.pdf