



CERTIFICATION

(DEVICES)

PRACTICAL LOGBOOK 2020/2021

Candidate Name:

Examination Registration No.:

INTRODUCTION TO LOGBOOK AND INSTRUCTIONS FOR USE

This logbook supersedes any previous versions and must be used if you have registered to sit the BHRS certification exam in 2020 or after.

The logbook forms part of the requirements for British Heart Rhythm Society certification. It is specifically aimed at practitioners with a particular interest in cardiac device implantation and management. A separate logbook exists for cardiac electrophysiology.

There is only one logbook covering devices. All sections of the logbook must be completed prospectively and submitted by 16th May 2022. Logbooks submitted after this date will not be marked unless prior written authorisation for an extension has been granted.

You must obtain verification of the information and completion of the assessment sections from your supervisor, who must be experienced in device management and ideally hold BHRS certification (previously Heart Rhythm UK certificate of accreditation) or the IBHRE qualification (pacing and devices) or the EHRA CP/AP qualifications. Medical device company representatives will not be accepted as a supervisor.

How to apply for a log-book extension

Only one extension will be awarded for exceptional circumstances. No extension will be awarded retrospectively.

A request for a log book extension must be put in writing and sent to British Heart Rhythm Society, email admin@bhers.com

SPECIFIC POINTS

The logbook is divided into 3 sections

Section 1: Implanting procedure (as physiologist)

Section 2: Follow-up (as physiologist)

Section 3: Assessments

For doctors / allied health prof completing the log you need to take on the role as a cardiac physiologist for ALL sections of the logbook.

Summary of Information Required

	Number
<u>Section 1: Implants</u>	
Pacemaker Implants	10
ICD / CRT Implants	10
<u>Section 2: Follow-up</u>	
Pacemakers	20
ICD	10
CRT ± ICD	10
<u>Section 3: Skills Assessment</u>	
Implant assessments	3
Follow up assessments	4

BHRS CERTIFICATION: CARDIAC DEVICE LOG BOOK

Candidate Details

Name	
Address	
Contact details Telephone and/or email	

Hospitals In Which Work Undertaken

Time Period	Address

Supervisor Details

Name	
Professional title/position	
Address	
Contact details Telephone and/or email	

EXTRACT FROM SPECIALTY TRAINING CURRICULUM FOR CARDIOLOGY TRAINEES (StRs) AUGUST 2010

CORE HEART RHYTHM TRAINING

The necessary skills, attitudes and experience will come from a mixture of attendance at specialist arrhythmia clinics, experiential learning, formal training at study days and/or postgraduate courses. ***As part of a portfolio you should keep a logbook of cases and procedures observed and undertaken.***

As a guide, it is likely that in order to gain sufficient experience procedures the trainee will need to be involved in: the implantation as well as the pre- and post- procedure care of at least 25 patients requiring permanent pacemakers; at least five ICD implants and five CRT procedures

ADVANCED HEART RHYTHM TRAINING

Numbers of Procedures

There is a widespread perception that numbers of procedures undertaken provide a guide to development of competence but trainees learn at different rates and absolute numbers, however high, may not guarantee competence. Therefore, competence will be assessed using DOPS, (Direct Observation of Procedural Skills). However, to guide planning of training there are indicative minimum numbers of procedures likely to be needed to be completed before competence is achieved.

Implantable Devices for Managing Arrhythmias: Implantation of 100 systems by the trainee; 100 follow up patients requiring pacemaker interrogation and/or programming; implantation of 25 ICDs and supervision of 50 patients in programming clinics; implantation of 30 BiV devices and their programming and optimisation in a minimum of 30 patients with heart failure using techniques such as reprogramming of LV pacing vectors, fusion based pacing, analysis of HF diagnostics and interpreting echo measurements.

Continuing Medical Education & Professional Development

Trainees will be expected to have: CCAD-verified training logbooks for procedures and outcomes; attendance of local and national training days – at least 2 per year; certified attendance at BHRS / Heart Rhythm UK arrhythmia and device therapy training days each year; certified attendance at one international EP meeting a year during advanced EP training is highly desirable; certified attendance at live electrophysiology/device courses where appropriate.

SECTION 1: DEVICE IMPLANT PROCEDURE (AS PHYSIOLOGIST)

Section 1

10 pacemaker implants.

Out of the 10 cases 5 should be for elective generator replacements (box changes)

In addition to the 10 pacemaker implants 10 ICD/CRT implants are required of which 5 must include CRT (P or D) devices

Note: *No programming strips or ECGs are required to be submitted.*

Specify patient symptoms, ECG abnormality and aetiology in addition to their codes. Copies of 12 lead ECGs are not required for completion of section 1

Anaesthetic:	Local or general. If general, give reason
Vascular access:	Subclavian, cephalic, other
Sutures:	Vicryl, Ethibond, etc. Specify suture material used for sleeves and wound closure
Antibiotic regimen:	Pre and post procedure and peri-procedure (e.g. gentamicin to pocket)

SECTION 1: PACEMAKER IMPLANT (AS PHYSIOLOGIST)

No. 1	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator: Atrial Lead: Ventricular Lead:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Amplitude (mV)			
Antibiotic Regimen:				Impedance (Ω)		
Sutures Used:			Slew rate (Vs^{-1})			

No. 2	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator: Atrial Lead: Ventricular Lead:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Amplitude (mV)			
Antibiotic Regimen:				Impedance (Ω)		
Sutures Used:			Slew rate (Vs^{-1})			

No. 3	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator: Atrial Lead: Ventricular Lead:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Amplitude (mV)			
Antibiotic Regimen:				Impedance (Ω)		
Sutures Used:			Slew rate (Vs^{-1})			

No. 4	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Atrial Lead:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Ventricular Lead:	Ventricular Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures Used:			Impedance (Ω)			
			Slew rate (Vs^{-1})			

No. 5	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Atrial Lead:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Ventricular Lead:	Ventricular Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures Used:			Impedance (Ω)			
			Slew rate (Vs^{-1})			

No. 6	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Atrial Lead:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Ventricular Lead:	Ventricular Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures Used:			Impedance (Ω)			
			Slew rate (Vs^{-1})			

No. 7	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Atrial Lead:	Amplitude (mV)		
Antibiotic Regimen:	Ventricular Lead:	Impedance (Ω)				
Sutures Used:		Slew rate (Vs^{-1})				Final Pacing Mode:

No. 8	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Atrial Lead:	Amplitude (mV)		
Antibiotic Regimen:	Ventricular Lead:	Impedance (Ω)				
Sutures Used:		Slew rate (Vs^{-1})				Final Pacing Mode:

No. 9	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Pacing Threshold @ 0.5ms (V)	Atrial	Ventricular	Follow Up Arrangements:	
Vascular Access:			Atrial Lead:	Amplitude (mV)		
Antibiotic Regimen:	Ventricular Lead:	Impedance (Ω)				
Sutures Used:		Slew rate (Vs^{-1})				Final Pacing Mode:

No. 10	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS			Complications up to Discharge:
Anaesthetic:	Generator:	Atrial Lead:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Ventricular Lead:	Ventricular Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures Used:			Impedance (Ω)			
			Slew rate (Vs^{-1})			

SECTION 1: ICD/CRT IMPLANT (AS PHYSIOLOGIST)

No. 1	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	<u>IMPLANT DETAILS</u>	<u>MANUFACTURER AND MODEL</u>	<u>PACING PARAMETERS</u>			Complications up to Discharge:
Anaesthetic:		Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:		Atrial Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures used:			RV Lead & LV Lead:	Impedance (Ω)		
			Slew rate (V/sec)			
Details of LV lead placement: Guide catheter(s) used: Vein used:						

No. 2	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:			Aetiology Implant Code:
	<u>IMPLANT DETAILS</u>	<u>MANUFACTURER AND MODEL</u>	<u>PACING PARAMETERS</u>			Complications up to Discharge:
Anaesthetic:		Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:			Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:		Atrial Lead:	Amplitude (mV)			Final Pacing Mode:
Sutures used:			RV Lead & LV Lead:	Impedance (Ω)		
			Slew rate (V/sec)			
Details of LV lead placement: Guide catheter(s) used: Vein used:						

No. 3	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 4	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 5	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		Complications up to Discharge:
Anaesthetic:	Generator:		Atrial	Ventricular	
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 6	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		Complications up to Discharge:
Anaesthetic:	Generator:		Atrial	Ventricular	
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 7	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 8	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 9	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

No. 10	Date: Patient Initials:	Symptom Implant Code:	ECG Implant Code:		Aetiology Implant Code:
	IMPLANT DETAILS	MANUFACTURER AND MODEL	PACING PARAMETERS		
Anaesthetic:	Generator:		Atrial	Ventricular	Follow Up Arrangements:
Vascular Access:		Pacing Threshold @ 0.5ms (V)			
Antibiotic Regimen:	Atrial Lead:	Amplitude (mV)			
	RV Lead & LV Lead:	Impedance (Ω)			
Sutures used:		Slew rate (V/sec)			Final Pacing Mode:
Details of LV lead placement: Guide catheter(s) used: Vein used:					

SECTION 2: PACEMAKER FOLLOW-UP (AS PHYSIOLOGIST)

No.	Implant Date	Patient Initials	Generator (Manufacturer and model)	Amplitude		Pacing Threshold		Impedance		Battery		Wound Site OK?	Describe any parameters reprogrammed?	Pacing Mode	Supervisor Initials
				A	V	A	V	A	V	Imp	V				
1															
2															
3															
4															
5															
6															
7															
8															
9															
10															
11															
12															

No.	Implant Date	Patient Initials	Generator (Manufacturer and model)	Amplitude		Pacing Threshold		Impedance		Battery		Wound Site OK?	Describe any parameters reprogrammed?	Pacing Mode	Supervisor Initials
				A	V	A	V	A	V	Imp	V				
13															
14															
15															
16															
17															
18															
19															
20															

SECTION 2: ICD FOLLOW-UP (AS PHYSIOLOGIST)

No.	Device	Implant Date	Patient Initials	Generator (Manufacturer and model)	Amplitude			Pacing Threshold			Impedance			Wound Site OK?	Describe any parameters reprogrammed?	Pacing Mode	Supervisor Initials
					A	RV	LV	A	RV	LV	A	RV	LV				
1	ICD																
2	ICD																
3	ICD																
4	ICD																
5	ICD																
6	ICD																
7	ICD																
8	ICD																
9	ICD																
10	ICD																

SECTION 2: CRT FOLLOW-UP (AS PHYSIOLOGIST)

No.	Device	Implant Date	Patient Initials	Generator (Manufacturer and model)	Amplitude			Pacing Threshold			Impedance			Wound Site OK?	Describe any parameters reprogrammed?	Pacing Mode	Supervisor Initials
					A	RV	LV	A	RV	LV	A	RV	LV				
1	CRT±D																
2	CRT±D																
3	CRT±D																
4	CRT±D																
5	CRT±D																
6	CRT±D																
7	CRT±D																
8	CRT±D																
9	CRT±D																
10	CRT±D																

SECTION 3: DUAL CHAMBER PACEMAKER IMPLANT MEASUREMENTS – SKILLS ASSESSMENT

Assessor:	Date:
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Assessment: 1 - 3 Unsatisfactory
 4 - 6 Satisfactory
 7 - 9 Above expected
 (0 not applicable)

SKILL	ASSESSMENT (AS PER KEY)
PSA Connections	
A and V lead impedance	
R Wave measurement	
Ventricular threshold test	
Explanation of Wedensky effect	
P Wave measurement	
Atrial threshold test	
Stability	
10V	

Assessor comments (*You must justify each score of 1 – 3 with at least one explanation / example*):

SECTION 3: ICD IMPLANT MEASUREMENTS – SKILLS ASSESSMENT

Assessor:	Date:
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Assessment: 1 - 3 Unsatisfactory
 4 - 6 Satisfactory
 7 - 9 Above expected
 (0 not applicable)

SKILL	ASSESSMENT (AS PER KEY)
Kit selection	
Device set-up pre-implant	
Implant forms completion	
P and R wave measurement	
A and V lead impedance	
A and V threshold tests	
Device measurements	
VF induction	
Post-implant set-up	

Assessor comments *(You must justify each score of 1 – 3 with at least one explanation / example):*

SECTION 3: CRT IMPLANT MEASUREMENTS – SKILLS ASSESSMENT

Assessor:	Date:
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Assessment: 1 - 3 Unsatisfactory
 4 - 6 Satisfactory
 7 - 9 Above expected
 (0 not applicable)

SKILL	ASSESSMENT (AS PER KEY)
Kit selection	
Coronary vein identification	
PSA connections	
A, RV and LV signal measurement	
A, RV and LV lead impedance	
Atrial threshold test	
RV threshold test	
LV threshold test	
VF induction	
Post-implant set-up	

Assessor comments (<i>You must justify each score of 1 – 3 with at least one explanation / example</i>):

SECTION 3: DIRECT OBSERVATION OF PROCEDURAL SKILLS (DOPS)

Instructions for assessor(s)

Please mark each component of the exercise on a scale of 1 (extremely poor) to 9 (extremely good). A score of 1 - 3 is considered unsatisfactory, 4 - 6 satisfactory and 7 - 9 is considered above that expected

Please note that your scoring should reflect the performance of the trainee against that which you would reasonably expect at their stage of training and level of experience

You must justify each score of 1 - 3 with at least one explanation/example in the comments box, failure to do so will invalidate the assessment

Please feel free to add any other relevant opinions about the trainee's strengths and weaknesses in the space provided

SKILLS ASSESSMENT (FOR FOLLOW-UP PROCEDURES)

- Single chamber pacemaker
- Dual chamber pacemaker
- ICD
- CRT (P or D)

SECTION 4: SINGLE CHAMBER PACEMAKER FOLLOW UP – SKILLS ASSESSMENT

1. Interacts appropriately with staff in pacing clinic									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

2. Prepares patient appropriately									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

3. Obtains clinical history									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

4. Appropriate R/P wave measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

5. Appropriate lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

6. Appropriate threshold test									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

7. Appropriate retrograde conduction check									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

8. Appropriate diagnostics interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

9. Reprogramming / recommendations									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

10. Overall technical ability									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

Assessors comments on trainee's performance on this occasion:

Trainee's comments on their performance on this occasion:

Signature of trainee:

Signature of supervisor:

Date:

SECTION 3: DUAL CHAMBER PACEMAKER FOLLOW UP – SKILLS ASSESSMENT

1. Interacts appropriately with staff in pacing clinic									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

2. Prepares patient appropriately									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

3. Obtains clinical history									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

4. Appropriate R/P wave measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

5. Appropriate lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

6. Appropriate threshold test									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

7. Appropriate retrograde conduction check									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

8. Appropriate diagnostics interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

9. Reprogramming / recommendations									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

10. Overall technical ability									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

Assessors comments on trainee's performance on this occasion:

Trainee's comments on their performance on this occasion:

Signature of trainee:

Date:

Signature of supervisor:

SECTION 3: ICD FOLLOW UP – SKILLS ASSESSMENT

1. Interacts appropriately with staff in pacing clinic									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
2. Prepares patient appropriately									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
3. Obtains clinical history									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
4. Appropriate diagnostics interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
5. Appropriate arrhythmia interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
6. Appropriate R/P wave measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
7. Appropriate lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
8. Appropriate shock lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

9. Appropriate threshold test									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

10. Reprogramming / recommendations									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

11. Overall technical ability									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

Assessors comments on trainee's performance on this occasion:

Trainee's comments on their performance on this occasion:

Signature of trainee:

Signature of supervisor:

Date:

SECTION 3: CRT FOLLOW UP – SKILLS ASSESSMENT

1. Interacts appropriately with staff in pacing clinic									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
2. Prepares patient appropriately									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
3. Obtains clinical history									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
4. Appropriate diagnostics interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
5. Appropriate arrhythmia interpretation									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
6. Appropriate R/P wave measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
7. Appropriate lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		
8. Appropriate shock lead impedance measurement									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

9. Appropriate threshold test									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

10. Reprogramming / recommendations									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

11. Overall technical ability									
N/A	1	2	3	4	5	6	7	8	9
Unsatisfactory			Satisfactory				Above expected		

Assessors comments on trainee's performance on this occasion:

Trainee's comments on their performance on this occasion:

Signature of trainee:

Signature of supervisor:

Date: