HRUK

Heart Rhythm UK

CERTIFICATE OF ACCREDITATION

(NURSE - ELECTROPHYSIOLOGY)

PRACTICAL LOGBOOK

BY

DIRECTIONS FOR CANDIDATE AND ASSESSOR

Time scale for Completion of log book

The log book needs to be submitted by 31st December of the year following successful completion of the HRUK examination.

Successful completion of the logbook

All sections of the logbook should be fully completed and signed off by the candidate and assessor. Assessment should take place within the clinical area.

One assessment of competence should be performed for each of the following arrhythmias: AVNRT, AVRT, atrial flutter, atrial fibrillation (AF), atrial tachycardia, ventricular tachycardia (VT) (this can include RVOT and ILVT tachycardias).

Assessors

Assessors should be senior members of staff with the appropriate experience and qualifications.

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

CLINICAL & TECHNICAL KNOWLEDGE

Describes detailed knowledge of cardiac conduction system, mechanism of specific arrhythmia and anatomy of specific areas in the heart. Eg. Left atrium and pulmonary veins	• Demonstrates ability to explain the cardiac conduction system to the patient • Demonstrates the ability to describe mechanism of specific arrhythmia • Demonstrates the ability to explain the left atrial and pulmonary vein anatomy
Describes the treatment options available to the patient	• Discusses treatment options, risks and benefits with the patient • Discusses with the patient any pertinent physiological manoeuvres to aid self termination of arrhythmia • Encourages the patient to ask questions
Where appropriate discuses medical therapy with the patient	• Discusses appropriate medical therapy with the patient and the risks and benefits associated
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits	• Discusses in detail with the patient the electrophysiology study and catheter ablation procedure plus any risks/benefits involved • Discusses types/methods of sedation, anaesthetic and monitoring with the patient • Discusses recovery procedure with patient • Discusses length of hospital stay/discharge and follow up procedure with patient • Discusses any pertinent DVLA regulations or any other restrictions with the patient

PATIENT ASSESSMENT

Takes accurate history	• Obtains complete medical history • Obtains details of current drug therapy, concordance and any adverse reactions • Obtains history of presenting complaint
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system	• Cardiovascular system • Respiratory system

Assesses patient suitability for moderate sedation	• Assesses details of any previous adverse reactions to sedation/anaesthetic • Identifies any drugs the patient is currently taking that may be contraindicated with moderate sedation • Identifies any clinical contraindications to sedation • Records relevant baseline observations i.e. peak flow • Takes appropriate action if patient is thought not to be suitable for moderate sedation
Obtains ECG and bloods (FBC, INR & U & Es) and competently analyses findings	• Obtains relevant tests and competently analyses findings • Reports any adverse findings to appropriate health care professionals

LEGAL AND ETHICAL ISSUES SURROUNDING AUTONOMY AND CONSENT

Discusses relevant risks and benefits dependent on type of arrhythmia Explains the consent form and invites the patient to sign	• Competently identifies and discusses risks/benefits of the procedure • Demonstrates to assessor awareness of legal and ethical issues with regards to consent including policy and legislation e.g. The Department of Health policy on consent, Hospital Trust policy on consent and Nurse led consent policy

DOCUMENTATION

Records relevant data accurately and clearly	• Records all data accurately and clearly

EP & ABLATION PROCEDURES

PROCEDURE	ASSESSORS COMMENTS
Observes/checks resuscitation equipment according to lab protocol	• Demonstrates knowledge with regards to checking resuscitation equipment according to lab protocol
Observes the setting up of EP system with case specific settings	• Demonstrates understanding of relevant mapping system & relevant energy delivery system e.g. radiofrequency/cryo) and its set up
Demonstrates knowledge of patient history and indication for procedure	• Demonstrates understanding of indication for procedure and risks/benefits involved
Observes/undertakes administration of drugs during the procedure and is aware of drug action and side effects etc.	• Demonstrates knowledge with regards to drugs used in the EP lab, indications for, appropriate doses, interactions, common side-effects and reversal agents as appropriate ○ sedation drugs ○ pain relieving drugs ○ drugs used to initiate tachycardia ○ drugs used to terminate tachycardia ○ drugs used to treat bradycardia
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this	• Demonstrates understanding of rationale behind monitoring of patient observations throughout the procedure • Demonstrates ability to recognise any deviation from normal observations limits and takes appropriate action
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes	• Demonstrates knowledge with regards to vascular system • Demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes
Observe relevant mapping system & relevant energy delivery system e.g. radio frequency/cryo	• Demonstrates knowledge with regards to rational behind relevant mapping system & relevant energy delivery system e.g. radio frequency/cryo
Observes attachment of back plate to patient and RF generator	• Demonstrates knowledge with regards to rational behind attachment of back plate to patient and RF generator
Observes recording of baseline 12 lead ECG	• Demonstrates knowledge with regards to rational behind recording of baseline 12 lead ECG

PROCEDURE	ASSESSORS COMMENTS
Observes selection of appropriate catheter electrodes in collaboration with EP operator	• Demonstrates knowledge with regards to rational behind selection of appropriate catheter electrodes in collaboration with EP operator
Observes connection of catheter electrodes into junction box of EP system	• Demonstrates knowledge with regards to rational behind connection of catheter electrodes into junction box of EP system
Observes intracardiac signals on EP system screen	• Demonstrates an understanding of intracardiac signals on EP system screen
Observes set up of advanced 3-D mapping system, such as CARTO or NAVX	• Demonstrates understanding of this system and why it is used • Demonstrates understanding •
Observes performance of standard pacing & recordings (as required) • Retrograde curve • Anterograde curve • AV Wenkebach • Tachycardia induction & termination • His synchronous VPB • Entrainment • Parahisian pacing • VT stimulation	• Demonstrates understanding of performing a retrograde curve • Demonstrates understanding of performing an anterograde curve • Demonstrates understanding of recording AV Wenkebach • Demonstrates understanding of tachycardia induction & termination • Demonstrates understanding of His synchronous VPB • Demonstrates understanding of performing parahisian pacing • Demonstrates understanding of VT stimulation
Observes measurement of appropriate signals and print as required	• Demonstrates an understanding of the measurement of appropriate signals
If ablation is appropriate observes communication with EP operator and setting of energy delivery system (RF or cryo)	• Demonstrates an understanding of the setting of energy delivery system (RF or cryo)
Observes delivery of ablation therapy	• Demonstrates knowledge with regards to ablation therapy
Observe intracardiac signals and any relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during RF, accessory pathway block)	• Demonstrates ability to recognise relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during radio frequency ablation, accessory pathway block)
Observes performance of any additional pacing manoeuvres, as required,	• Demonstrates understanding of rationale behind performance of any additional pacing manoeuvres, as required, post ablation

post ablation	
Observes print out of relevant EP report	• Demonstrates understanding of rationale behind this

PROCEDURE	ASSESSORS COMMENTS
Observes archiving of EP procedure to optical disk	• Demonstrates understanding of rationale behind this
Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given	• Demonstrates understanding with regards to application of digital pressure to groin site and any after care/advice given
Observes patient recovery and recording of observations and demonstrates understanding with regards to this	• Demonstrates understanding with regards to patient recovery and recording of observations and acts appropriately on any abnormal findings

DISCHARGE PROCEDURE

CLINICAL & TECHNICAL KNOWLEDGE

<table>
<tr><td>Establishes with the patient that the planned treatment is completed</td><td>• Discusses details of procedure with the patient
• Answers patient questions competently
• Explains need for re do procedure as necessary</td></tr>
<tr><td>Ensures that patient meets the relevant ECG discharge criteria</td><td><u>ECG CRITERIA</u>
<table>
<tr><th>VT ablation</th><th>AF ablation (LACA/PVI)</th><th>Diagnostic EP study</th><th>EPS ± RFA

AVNRT/ AVRT</th><th>WPW syndrome</th><th>Atrial flutter</th><th>AV node ablation + pacemaker</th><th>VT study</th></tr>
<tr><td>No VT</td><td>Sinus rhythm or AF, (if agreed with consultant)</td><td>No new changes</td><td>PR interval 120 – 200 ms</td><td>No pre-excitation evident. Demonstrates awareness of possible post procedure ECG changes (e.g. T wave memory)</td><td>No evidence of atrial flutter</td><td>Paced rhythm</td><td>No new changes</td></tr>
</table></td></tr>
<tr><td>Ensures patient observations are within normal limits</td><td>• Checks BP/pulse/temperature</td></tr>
<tr><td>Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection</td><td>• Checks puncture sites and takes any necessary action
• Auscultate puncture sites and demonstrate awareness of clinical signs of bruits</td></tr>
<tr><td>Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures i.e. transeptal punctures, LACA</td><td>• Demonstrates awareness of need for anticoagulation following transseptal punctures and LACA procedures
• Demonstrates awareness of rationale for prescribing anti coagulation
• Describes to the patient why there is a need for anticoagulation</td></tr>
<tr><td>Ensures that patients who have undergone ablation are advised on any medication changes (if any)</td><td>• Reviews current medication
• Identifies any medications that may be discontinued and discuss changes with the patient
• Identifies any medications that may need to be prescribed and discuss with patient
• Identifies any medications that may need to be increased and discuss with the patient
• Ensure patient has supply of prescribed</td></tr>
</table>

	medication prior to discharge
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation	• Explains to the patient that they should not drive for one week following ablation procedure • Explains rationale for driving restrictions to the patient
Advises patient with regards to follow up appointment	• Informs patient that they will need a follow up appointment • Gives a time scale for expected appointment date to patient • Explains to patient rationale for out patient appointment
Discharge letter completed and given to patient	• All relevant paper work given to patient • Copy of discharge report given for GP and any other relevant health care professionals

FOLLOW UP CLINIC

PROCEDURE	ASSESSORS COMMENTS
Identify patient	• Checks patient demographic and hospital details are correct
Request/perform 12 lead ECG and other relevant investigations (ETT, echo etc)	• Compares ECG to pre procedure recording and demonstrates knowledge in relation to potential abnormal findings • Demonstrates ability to competently act upon findings • Requests appropriate further tests as necessary
Obtain patient history, particularly symptomatic enquiry	• Obtains patient post procedure history • Enquires about symptoms, assesses regularity of any further palpitations or other symptoms
Complete current medication review and assess concordance	• Reviews patient current medications • Assesses patient concordance • Demonstrates knowledge in relation to any medication changes required
Communicate outcome of procedure (successful, redo required or benign palpitation management)	• Describes procedure in detail to patient • Competently answers patient questions • Requests any further tests that may be required and explains rationale to patient • Liaises with consultant electrophysiologist with regards to any problems identified
Discharge from clinic (if no further tests/follow up required)	• Reassures patient of probable success of procedure • Reiterates contact details in case of any further problems
Generate GP letter/ arrange further follow-up, as necessary	• Generates discharge letter for patient and GP and any other pertinent health care professionals • Arrange further follow appointments if necessary

ASSESSMENT OF COMPETENCIES

AV NODAL RE-ENTRANT TACHYCARDIA

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Describes detailed knowledge of cardiac conduction system and mechanism of arrhythmia		
Describes the treatment options available to the patient		
Where appropriate discuses medical therapy with the patient		
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits of procedure		

Patient assessment	Score (1 – 9)	Assessors Comments
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	Score (1 – 9)	Assessors Comments
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	Score (1 – 9)	Assessors Comments
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

AV NODAL RE-ENTRANT TACHYCARDIA

EP & ABLATION PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes/checks resuscitation equipment according to lab protocol and demonstrates understanding of rationale behind this		
Observes the setting up of EP system with case specific settings and demonstrates understanding of rationale behind this		
Demonstrates knowledge of patient history and indication for procedure		
Observes administration of drugs during the procedure and is aware of drug action/side effects etc.		
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes		
Observe relevant mapping system & relevant energy delivery system e.g. RF/cryo and demonstrates understanding of system function		
Observes attachment of back plate to patient/RF generator and demonstrates understanding of rationale behind this		
Observes recording of baseline 12 lead ECG and demonstrates understanding of rationale behind this		
Observes selection of appropriate catheter electrodes in collaboration with EP operator and demonstrates understanding of rationale behind this		
Observes connection of catheter electrodes into junction box of EP system and demonstrates understanding of rationale behind this		
Observes intracardiac signals on EP system screen and demonstrates ability to analyse them		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes performance of standard pacing & recordings (as required) and demonstrates understanding of rationale behind this • Retrograde curve • Anterograde curve • AV Wenkebach • Tachycardia induction & termination • His synchronous VPB • Entrainment • Parahisian pacing • VT stimulation		
Observes measurement of appropriate signals and print as required and demonstrates understanding of rationale behind this		
If ablation is appropriate observes communication with EP operator and setting of energy delivery system (RF or cryo) and demonstrates understanding of rationale behind thi		
Observes delivery of ablation therapy and demonstrates knowledge with regards to type of therapy and associated risks/benefits		
Observe intracardiac signals and any relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during RF, accessory pathway block etc) and demonstrates knowledge of their relevance		
Observes performance of any additional pacing manoeuvres, as required, post ablation and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes print out of relevant EP report and demonstrates understanding of rationale behind this		
Observes archiving of EP procedure to optical disk and demonstrates understanding of rationale behind this		
Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given		
Observes patient recovery and recording of observations and demonstrates understanding with regards to this		

ASSESSMENT OF COMPETENCIES

AV NODAL RE-ENTRANT TACHYCARDIA

DISCHARGE PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Establishes with the patient that the planned treatment is completed		
Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

AV NODAL RE-ENTRANT TACHYCARDIA

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		

ASSESSMENT OF COMPETENCIES

ATRIOVENTRICULAR RE-ENTRANT TACHYCARDIA

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Describes detailed knowledge of cardiac conduction system and mechanism of arrhythmia		
Describes the treatment options available to the patient		
Where appropriate discuses medical therapy with the patient		
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits of procedure		

Patient assessment	Score (1 – 9)	Assessors Comments
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	Score (1 – 9)	Assessors Comments
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	Score (1 – 9)	Assessors Comments
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

ATRIOVENTRICULAR RE-ENTRANT TACHYCARDIA

EP & ABLATION PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes/checks resuscitation equipment according to lab protocol and demonstrates understanding of rationale behind this		
Observes the setting up of EP system with case specific settings and demonstrates understanding of rationale behind this		
Demonstrates knowledge of patient history and indication for procedure		
Observes administration of drugs during the procedure and is aware of drug action/side effects etc.		
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes		
Observe relevant mapping system & relevant energy delivery system e.g. RF/cryo and demonstrates understanding of system function		
Observes attachment of back plate to patient/RF generator and demonstrates understanding of rationale behind this		
Observes recording of baseline 12 lead ECG and demonstrates understanding of rationale behind this		
Observes selection of appropriate catheter electrodes in collaboration with EP operator and demonstrates understanding of rationale behind this		
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Observes intracardiac signals on EP system screen and demonstrates ability to analyse them		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes performance of standard pacing & recordings (as required) and demonstrates understanding of rationale behind this • Retrograde curve • Anterograde curve • AV Wenkebach • Tachycardia induction & termination • His synchronous VPB • Entrainment • Parahisian pacing • VT stimulation		
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If ablation is appropriate observes communication with EP operator and setting of energy delivery system (RF or cryo) and demonstrates understanding of rationale behind thi		
Observes delivery of ablation therapy and demonstrates knowledge with regards to type of therapy and associated risks/benefits		
Observe intracardiac signals and any relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during RF, accessory pathway block etc) and demonstrates knowledge of their relevance		
Observes performance of any additional pacing manoeuvres, as required, post ablation and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes print out of relevant EP report and demonstrates understanding of rationale behind this		
Observes archiving of EP procedure to optical disk and demonstrates understanding of rationale behind this		
Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given		
Observes patient recovery and recording of observations and demonstrates understanding with regards to this		

ASSESSMENT OF COMPETENCIES

ATRIOVENTRICULAR RE-ENTRANT TACHYCARDIA

DISCHARGE PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Establishes with the patient that the planned treatment is completed		
Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

ATRIOVENTRICULAR RE-ENTRANT TACHYCARDIA

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		

ASSESSMENT OF COMPETENCIES

ATRIAL FLUTTER

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
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Patient assessment	**Score (1 – 9)**	**Assessors Comments**
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	**Score (1 – 9)**	**Assessors Comments**
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	**Score (1 – 9)**	**Assessors Comments**
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

ATRIAL FLUTTER

EP & ABLATION PROCEDURE

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ASSESSMENT OF COMPETENCIES

ATRIAL FLUTTER

DISCHARGE PROCEDURE

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Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
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Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

ATRIAL FLUTTER

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		

ASSESSMENT OF COMPETENCIES

ATRIAL TACHYCARDIA

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
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You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
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Describes the treatment options available to the patient		
Where appropriate discuses medical therapy with the patient		
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits of procedure		

Patient assessment	**Score (1 – 9)**	**Assessors Comments**
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC, INR & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	**Score (1 – 9)**	**Assessors Comments**
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	**Score (1 – 9)**	**Assessors Comments**
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

ATRIAL TACHYCARDIA

EP & ABLATION PROCEDURE

1 - 3 Unsatisfactory
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Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes/checks resuscitation equipment according to lab protocol and demonstrates understanding of rationale behind this		
Observes the setting up of EP system with case specific settings and demonstrates understanding of rationale behind this		
Demonstrates knowledge of patient history and indication for procedure		
Observes administration of drugs during the procedure and is aware of drug action/side effects etc.		
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes		
Observe relevant mapping system & relevant energy delivery system e.g. RF/cryo and demonstrates understanding of system function		
Observes attachment of back plate to patient/RF generator and demonstrates understanding of rationale behind this		
Observes recording of baseline 12 lead ECG and demonstrates understanding of rationale behind this		
Observes selection of appropriate catheter electrodes in collaboration with EP operator and demonstrates understanding of rationale behind this		
Observes connection of catheter electrodes into junction box of EP system and demonstrates understanding of rationale behind this		
Observes intracardiac signals on EP system screen and demonstrates ability to analyse them		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes performance of standard pacing & recordings (as required) and demonstrates understanding of rationale behind this • Retrograde curve • Anterograde curve • AV Wenkebach • Tachycardia induction & termination • His synchronous VPB • Entrainment • Parahisian pacing • VT stimulation		
Observes measurement of appropriate signals and print as required and demonstrates understanding of rationale behind this		
If ablation is appropriate observes communication with EP operator and setting of energy delivery system (RF or cryo) and demonstrates understanding of rationale behind thi		
Observes delivery of ablation therapy and demonstrates knowledge with regards to type of therapy and associated risks/benefits		
Observe intracardiac signals and any relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during RF, accessory pathway block etc) and demonstrates knowledge of their relevance		
Observes performance of any additional pacing manoeuvres, as required, post ablation and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes print out of relevant EP report and demonstrates understanding of rationale behind this		
Observes archiving of EP procedure to optical disk and demonstrates understanding of rationale behind this		
Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given		
Observes patient recovery and recording of observations and demonstrates understanding with regards to this		

ASSESSMENT OF COMPETENCIES

ATRIAL TACHYCARDIA

DISCHARGE PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Establishes with the patient that the planned treatment is completed		
Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

ATRIAL TACHYCARDIA

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		

ASSESSMENT OF COMPETENCIES

ATRIAL FIBRILLATION

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Describes detailed knowledge of cardiac conduction system and mechanism of arrhythmia		
Describes the treatment options available to the patient		
Where appropriate discuses medical therapy with the patient		
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits of procedure		

Patient assessment	Score (1 – 9)	Assessors Comments
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	Score (1 – 9)	Assessors Comments
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	Score (1 – 9)	Assessors Comments
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

ATRIAL FIBRILLATION

EP & ABLATION PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes/checks resuscitation equipment according to lab protocol and demonstrates understanding of rationale behind this		
Observes the setting up of EP system with case specific settings and demonstrates understanding of rationale behind this		
Demonstrates knowledge of patient history and indication for procedure		
Observes administration of drugs during the procedure and is aware of drug action/side effects etc.		
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes		
Observe relevant mapping system (CARTO/NAVX)& relevant energy delivery system e.g. RF/cryo and demonstrates understanding of system function		
Observes attachment of back plate to patient/RF generator and demonstrates understanding of rationale behind this		
Observes recording of baseline 12 lead ECG and demonstrates understanding of rationale behind this		
Observes selection of appropriate catheter electrodes in collaboration with EP operator and demonstrates understanding of rationale behind this		
Observes connection of catheter electrodes into junction box of EP system and demonstrates understanding of rationale behind this		
Observes intracardiac signals on EP system screen and demonstrates ability to analyse them		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes performance of standard pacing & recordings (as required) and demonstrates understanding of rationale behind this • Retrograde curve • Anterograde curve • AV Wenkebach • Tachycardia induction & termination • His synchronous VPB • Entrainment • Parahisian pacing • VT stimulation		
Observes measurement of appropriate signals and print as required and demonstrates understanding of rationale behind this		
If ablation is appropriate observes communication with EP operator and setting of energy delivery system (RF or cryo) and demonstrates understanding of rationale behind thi		
Observes delivery of ablation therapy and demonstrates knowledge with regards to type of therapy and associated risks/benefits		
Observe intracardiac signals and any relevant changes (e.g. junctional beats during slow pathway ablation, tachycardia termination during RF, accessory pathway block etc) and demonstrates knowledge of their relevance		
Observes performance of any additional pacing manoeuvres, as required, post ablation and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes print out of relevant EP report and demonstrates understanding of rationale behind this		
Observes archiving of EP procedure to optical disk and demonstrates understanding of rationale behind this		
Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given		
Observes patient recovery and recording of observations and demonstrates understanding with regards to this		

ASSESSMENT OF COMPETENCIES

ATRIAL FIBRILLATION

DISCHARGE PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Establishes with the patient that the planned treatment is completed		
Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
Ensure that the patient is aware that an early recurrence of AF does not necessarily mean that the ablation has not been successful and that any arrhythmia recurrence will require ECG documentation		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

ATRIAL FIBRILLATION

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		

ASSESSMENT OF COMPETENCIES

VENTRICULAR TACHYCARDIA

FIRST CLINIC VISIT & PRE-ASSESSMENT OF PATIENT

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Describes detailed knowledge of cardiac conduction system and mechanism of arrhythmia		
Describes the treatment options available to the patient		
Where appropriate discuses medical therapy with the patient		
Where appropriate describes in detail, to patients, the catheter ablation procedure and the patient journey. Discusses relevant risks and benefits of procedure		

Patient assessment	Score (1 – 9)	Assessors Comments
Assesses patient suitability for moderate sedation		
Performs and documents comprehensive physical examination of cardiovascular system, respiratory system		
Obtains ECG and bloods (FBC & U & Es) and competently analyses findings		

Legal and ethical issues surrounding autonomy and consent	Score (1 – 9)	Assessors Comments
Discusses relevant risks and benefits of procedure. and dependent on type of arrhythmia Explains the consent form and invites the patient to sign		

Documentation	Score (1 – 9)	Assessors Comments
Records relevant data accurately and clearly Documentation		

ASSESSMENT OF COMPETENCIES

VENTRICULAR TACHYCARDIA

EP & ABLATION PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes/checks resuscitation equipment according to lab protocol and demonstrates understanding of rationale behind this		
Observes the setting up of EP system with case specific settings and demonstrates understanding of rationale behind this		
Demonstrates knowledge of patient history and indication for procedure		
Observes administration of drugs during the procedure and is aware of drug action/side effects etc.		
Observes monitoring of patient observations throughout the procedure and demonstrates understanding of rationale behind this		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Observes insertion of catheter electrodes and demonstrates understanding with regards to cardiac anatomy and appropriate positioning of electrodes		
Observe relevant mapping (CARTO/NAVX) system & relevant energy delivery system e.g. RF/cryo and demonstrates understanding of system function		
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Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
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Observes removal of electrodes and demonstrates understanding with regards to application of digital pressure to groin site and after care/advice given		
Observes patient recovery and recording of observations and demonstrates understanding with regards to this		

ASSESSMENT OF COMPETENCIES

VENTRICULAR TACHYCARDIA

DISCHARGE PROCEDURE

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Establishes with the patient that the planned treatment is completed		
Ensures that patient meets the relevant ECG discharge criteria		
Ensures patient observations are within normal limits		
Ensure the relevant procedural venous puncture sites (internal jugular, left & right femoral veins) are satisfactory i.e. no signs of bleeding, bruising infection		
Demonstrates awareness of the need for anticoagulation therapy for patients undergoing specific procedures e.g. transeptal punctures, LACA		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Ensures that patients who have undergone ablation are advised on any medication changes (if any)		
The patient is informed of the current DVLA regulations with regards to radiofrequency ablation		

ASSESSMENT OF COMPETENCIES

VENTRICULAR TACHYCARDIA

FOLLOW-UP CLINIC

1 - 3 Unsatisfactory
4 - 6 Satisfactory
7 - 9 Above expected
0 – Not applicable

You must justify each score of 1 – 3 with at least one explanation / example

Date: .....

Name of Assessor: .....

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Request/perform 12 lead ECG and other relevant investigations (ETT, Echo etc)		
Obtain patient history, particularly symptomatic enquiry		
Complete current medication review and assess concordance.		
Communicate outcome of procedure (successful, redo required or benign palpitation management.		
Discharge from clinic(if no further tests/follow up required)		

Clinical & technical knowledge	Score (1 – 9)	Assessors Comments
Generate GP letter/ arrange further follow-up, as necessary		