Standard Operating Procedure

Reference No: 1840 Version 3

Title: Recording Electrocardiograms on Adults

Prepared by: ESCEL Tutors and Associate Director of Nursing	
Presented to: **Care & Clinical Policies Group**	**Date:** **18 May 2016**
Ratified by: Care & Clinical Policies Group	**Date: 18 May 2016**
Links to policies:	**Review date: 4 May 2021**
· Production and Control of Clinical Policies, Guidelines, Protocols and Standard Operating Procedures · TSDFT Acute Coronary Syndromes ACS (Acute) Without Persistent ST Elevation, Suspected Ref 0016 · TSDFT 12 Lead Electrocardiogram (ECG) Recording Guideline (Ref 0195) · Patient Safety Alert, NHS England ref: NHS/PSA/W/2014/003 'Risk of associating ECG records with wrong patients'.	

Purpose of this document:
To set out and standardise the procedure for undertaking electrocardiogram (ECG) recording across the healthcare setting – hospitals, healthcare centres & clients homes,

Scope of this SOP:
Applies to all Torbay and South Devon NHS Foundation Trust (TSDFT) employed staff, who may need to undertake this procedure for adult clients aged 16 years and over who require ECG recording as requested by a Medical Clinician, as part of a treatment management regime, or who may be experiencing chest pain or sudden collapse.

Competencies required: The healthcare professional must:

- Be an HCA (or equivalent) or an Assistant Practitioner where ECGs are relevant to the job role or a registered professional
- Have attended the half day ECG recording training course at Torbay Hospital or is able to demonstrate previous competency via the Clinical Skills Passport
- Have demonstrated this skill in practice by completing the ECG competency package provided on the study day
- Be able to discuss rationale for recording of the ECG with the patient and gain consent
- Be able to correctly prepare the equipment for ECG recording
- Prepare the patient and environment for ECG recording
- Demonstrate the ability to trouble shoot and correct problems when recording.

- Ensure correct labelling of the ECG
- Ensure the patient's symptoms are documented on the ECG
- Ensure the ECG is taken directly to the appropriately trained clinician for interpretation and initiation of treatment as required.

Procedure:

For adult clients within a Hospital/Unit setting

If a patient is presenting with acute chest pain ensure that the patient is reviewed or, in a community setting, the emergency services are contacted.

1. Gain consent from patient for the ECG to be performed following discussion and explanation of procedure. Ensure the privacy and dignity of the patient is maintained.
2. Wash hands in accordance with hand washing/infection control policies.
3. Assist the patient to lie down, the recumbent position is recommended to ensure accurate recording – any variation to position must be documented on the printed ECG (Society for Cardiological Science & Technology 2010). Expose the patient's chest, whilst maintaining dignity. Removal of jewellery around the wrists may be required to enable lead positioning. Ensure electrodes are positioned away from nipple piercings.
4. Undertake appropriate skin preparation to minimise the skin to electrode impedance. If chest hair needs removing, verbal consent must be obtained and hair should be cut with scissors, not shaved as this can cause micro-abrasions leading to sore skin, discomfort, and risk of infection.
5. Check the 'auto/start' button to be pressed before commencing to reduce the risk of pressing the 'copy' button in error – this could lead to the incorrect recording/copying of another patients ECG reading – see patient safety alert ref: NHS/PSA/W/2014/003
6. Place electrodes on patient's chest and limbs as directed. Attach leads as directed (Appendix 1), record ECG. Turn off ECG machine once a clear ECG is obtained.
7. Remove leads and pads and dispose of in appropriate clinical waste container. Reassure the patient and assist them to dress. Wash hands.
8. Check that the ECG has appropriate patient name, identity number, date and time recorded on it at the point of printing.
9. The ECG recording **MUST** be shown to an appropriately trained clinician or Medical Practitioner immediately.
10. All actions to be documented in accordance with TSDNFT policies and procedures.

For community hospitals:

1. Contact emergency services if directed to do so by Medical Practitioner
2. The ECG and the clinical observation sheet must be transferred with the patient and paramedic if they are transferred to the District General Hospital.
3. Ensure patient's next of kin is informed if the patient is transferred, after gaining the patients' consent to contact them.

Procedure for adults in the community setting i.e. own homes, residential, or nursing homes

If an emergency ECG is requested by a GP, use the surgery's ECG or nearest available ECG machine. If no ECG machine is available, or If the patient has on-going chest pain, contact the emergency services.

For routine ECG requests by General Practitioners:

1. Plan and requisition portable ECG machine via TSDFT community equipment supplies
2. Contact patient to arrange date and time of visit
3. Undertake the visit and procedure in accordance with TSDFT guidelines on lone working if appropriate
4. Gain consent from patient for procedure to be undertaken. Explain rationale.
5. Ensure the privacy and dignity of the patient is maintained
6. Follow the procedure documented for clients in a hospital setting
7. The ECG recording **MUST** be shown to GP/Medical Practitioner on the day of recording unless otherwise agreed by the medical practitioner. If the patient has symptoms of chest pain, light headedness or shortness of breath, contact emergency services immediately. The ECG recording should be transferred with the patient and paramedic to hospital
8. Complete documentation in accordance with TSDFT policies and procedures
9. Plan and requisition return of portable ECG machine to Community Equipment Supplies.

Monitoring tool –
The ECG training includes practical assessment of competencies in the workplace. The candidate can practise this skill under supervision until assessed as competent to perform unsupervised. District nursing leads, hospital matrons, ward managers and GP surgery managers will monitor compliance against the guideline.

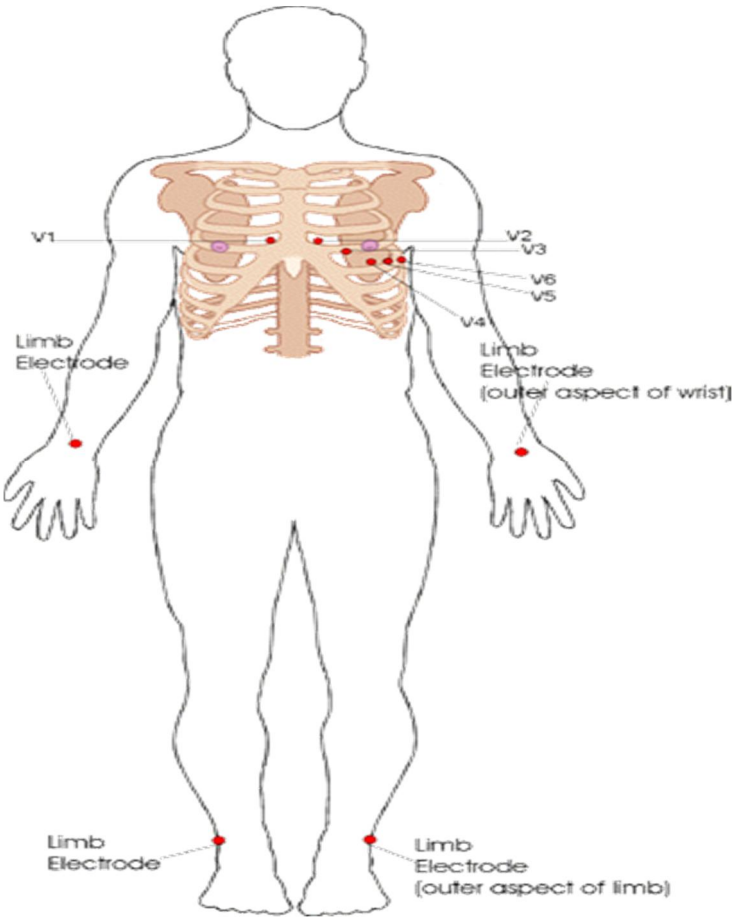
References:

· Society for Cardiological Science & Technology (2010) Clinical Guidelines by Consensus: Recording a standard 12 lead electrocardiogram – An approved methodology.
· Patient Safety Alert, NHS England ref: NHS/PSA/W/2014/003 'Risk of associating ECG records with wrong patients'

Appendix 1 – Diagram of Correct Lead Positioning

Appendix 1

Diagram of correct lead positioning



Document Control Information

This is a controlled document and should not be altered in any way without the express permission of the author or their representative.

Please note this document is only valid from the date approved below, and checks should be made that it is the most up to date version available.

If printed, this document is only valid for the day of printing.

Ref No:	1840		
Document title:	Recording of Electrocardiograms on Adults		
Purpose of document:	To set out and standardise the procedure for undertaking electrocardiogram (ECG) recording across the healthcare setting – hospitals, healthcare centres & clients homes,		
Date of issue:	4 May 2018	**Next review date:**	4 May 2021
Version:	3	**Last review date:**	April 2018
Author:	ESCEL Tutors Associate Director of Nursing		
Directorate:	Community		
Equality Impact:	The guidance contained in this document is intended to be inclusive for all patients within the clinical group specified, regardless of age, disability, gender, gender identity, sexual orientation, race and ethnicity & religion or belief		
Committee(s) approving the document:	Care and Clinical Policies Group		
Date approved:	18 May 2016		
Links or overlaps with other policies:	All TSDFT Trust Strategies, policies and procedure documents (Refer to page 1)		

	Please select	
	Yes	*No*
Does this document have training implications? *If yes please state:*	☐	☐
Does this document have financial implications? *If yes please state:*	☐	☐
Is this document a direct replacement for another? *If yes please state which documents are being replaced:*	☐	☐

Document Amendment History

Date	Version no.	Amendment summary	Ratified by:
19 March 2014	2	Ratified	Care and Clinical Policies Group
10 June 2016	3	Revised	Care and Clinical Policies Group
4 May 2018	3	Date change	ESCEL Tutor

The Mental Capacity Act 2005

The Mental Capacity Act provides a statutory framework for people who lack capacity to make decisions for themselves, or who have capacity and want to make preparations for a time when they lack capacity in the future. It sets out who can take decisions, in which situations, and how they should go about this. It covers a wide range of decision making from health and welfare decisions to finance and property decisions

Enshrined in the Mental Capacity Act is the principle that people must be assumed to have capacity unless it is established that they do not. This is an important aspect of law that all health and social care practitioners must implement when proposing to undertake any act in connection with care and treatment that requires consent. In circumstances where there is an element of doubt about a person's ability to make a decision due to 'an impairment of or disturbance in the functioning of the mind or brain' the practitioner must implement the Mental Capacity Act.

The legal framework provided by the Mental Capacity Act 2005 is supported by a Code of Practice, which provides guidance and information about how the Act works in practice. The Code of Practice has statutory force which means that health and social care practitioners have a legal duty to have regard to it when working with or caring for adults who may lack capacity to make decisions for themselves.

"The Act is intended to assist and support people who may lack capacity and to discourage anyone who is involved in caring for someone who lacks capacity from being overly restrictive or controlling. It aims to balance an individual's right to make decisions for themselves with their right to be protected from harm if they lack the capacity to make decisions to protect themselves". (3)

All Trust workers can access the Code of Practice, Mental Capacity Act 2005 Policy, Mental Capacity Act 2005 Practice Guidance, information booklets and all assessment, checklists and Independent Mental Capacity Advocate referral forms on iCare

http://icare/Operations/mental_capacity_act/Pages/default.aspx

Infection Control

All staff will have access to Infection Control Policies and comply with the standards within them in the work place. All staff will attend Infection Control Training annually as part of their mandatory training programme.

NHS South Devon and Torbay Clinical Commissioning Group Torbay and South Devon NHS NHS Foundation Trust

Rapid (E)quality Impact Assessment (EqIA) *(for use when writing policies)*

Policy Title (and number)		**Version and Date**	
Policy Author			

An (e)quality impact assessment is a process designed to ensure that policies do not discriminate or disadvantage people whilst advancing equality. Consider the nature and extent of the impact, not the number of people affected.

Who may be affected by this document?

Patients/ Service Users ☐	Staff ☐	Other, please state… ☐

Could the policy treat people from protected groups less favorably than the general population?
PLEASE NOTE: Any 'Yes' answers may trigger a full EIA and must be referred to the equality leads below

Age	Yes ☐ No☐	Gender Reassignment	Yes ☐ No☐	Sexual Orientation	Yes ☐ No☐
Race	Yes ☐ No☐	Disability	Yes ☐ No☐	Religion/Belief (non)	Yes ☐ No☐
Gender	Yes ☐ No☐	Pregnancy/Maternity	Yes ☐ No☐	Marriage/ Civil Partnership	Yes ☐ No☐

Is it likely that the policy could affect particular 'Inclusion Health' groups less favourably than the general population? (substance misuse; teenage mums; carers[1]; travellers[2]; homeless[3]; convictions; social isolation[4]; refugees)	Yes ☐ No☐

Please provide details for each protected group where you have indicated 'Yes'.

VISION AND VALUES: Policies must aim to remove unintentional barriers and promote inclusion

Is inclusive language[5] used throughout?	Yes ☐ No☐ NA ☐
Are the services outlined in the policy fully accessible[6]?	Yes ☐ No☐ NA ☐
Does the policy encourage individualised and person-centred care?	Yes ☐ No☐ NA ☐
Could there be an adverse impact on an individual's independence or autonomy[7]?	Yes ☐ No☐ NA ☐

EXTERNAL FACTORS

Is the policy a result of national legislation which cannot be modified in any way?	Yes ☐ No☐

What is the reason for writing this policy? (Is it a result in a change of legislation/ national research?)

Who was consulted when drafting this policy?

Patients/ Service Users ☐	Trade Unions ☐	Protected Groups (including Trust Equality Groups) ☐
Staff ☐	General Public ☐	Other, please state… ☐

What were the recommendations/suggestions?

Does this document require a service redesign or substantial amendments to an existing process? ***PLEASE NOTE: 'Yes' may trigger a full EIA, please refer to the equality leads below***	Yes ☐ No☐

ACTION PLAN: Please list all actions identified to address any impacts

Action	Person responsible	Completion date

AUTHORISATION:
By signing below, I confirm that the named person responsible above is aware of the actions assigned to them

Name of person completing the form		**Signature**	
Validated by (line manager)		**Signature**	

Please contact the Equalities team for guidance:
For South Devon & Torbay CCG, please call 01803 652476 or email marisa.cockfield@nhs.net

For Torbay and South Devon NHS Trusts, please call 01803 656676 or email pfd.sdhct@nhs.net
This form should be published with the policy and a signed copy sent to your relevant organisation.

[1] Consider any additional needs of carers/ parents/ advocates etc, in addition to the service user
[2] Travelers may not be registered with a GP - consider how they may access/ be aware of services available to them
[3] Consider any provisions for those with no fixed abode, particularly relating to impact on discharge
[4] Consider how someone will be aware of (or access) a service if socially or geographically isolated
[5] Language must be relevant and appropriate, for example referring to partners, not husbands or wives
[6] Consider both physical access to services and how information/ communication in available in an accessible format
[7] Example: a telephone-based service may discriminate against people who are d/Deaf. Whilst someone may be able to act on their behalf, this does not promote independence or autonomy

Clinical and Non-Clinical Policies – New Data Protection Regulation (NDPR)

Torbay and South Devon NHS Foundation Trust (TSDFT) has a commitment to ensure that all policies and procedures developed act in accordance with all relevant data protection regulations and guidance. This policy has been designed with the EU New Data Protection Regulation (NDPR) in mind and therefore provides the reader with assurance of effective information governance practice.

NDPR intends to strengthen and unify data protection for all persons; consequently, the rights of individuals have changed. It is assured that these rights have been considered throughout the development of this policy.

Furthermore, NDPR requires that the Trust is open and transparent with its personal identifiable processing activities and this has a considerable effect on the way TSDFT holds, uses, and shares personal identifiable data. The most effective way of being open is through data mapping. Data mapping for NDPR was initially undertaken in November 2017 and must be completed on a triannual (every 3 years) basis to maintain compliance. This policy supports the data mapping requirement of the NDPR.

For more information:

- Contact the Data Access and Disclosure Office on dataprotection.tsdft@nhs.net,
- See TSDFT's Data Protection & Access Policy,
- Visit our GDPR page on ICON.