

Glasgow Clinical Trials Unit Standard Operating Procedure

SOP number	17.030	Version	4.0
Title	Measuring and recording blood pressure using digital or electronic equipment		

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SOP category	17 NHS GG&C Clinical Research Facility – Clinical				
Staff category	Staff Category	R	A	C	I
	Nursing	X			
	GCRF Manager		X		
	GCRF Associate Director				X
	Senior R&I Manager				X

1. Scope

This procedure applies to all staff working within Glasgow Clinical Research Facility (GCRF).

2. Purpose

The purpose of this SOP is to describe the procedure to be followed when measuring blood pressure using digital or electronic blood pressure measuring equipment. Where the study protocol provides trial specific instructions blood pressure should be measured in accordance with the study protocol.

3. Procedures

3.1. Measurement of Blood Pressure

Blood pressure should be measured in both arms (where possible) at the first study visit. Readings should be spaced at least 1-2 minutes apart. Document all readings indicating which arm was used for each reading. The arm that provided the highest value should be used to measure blood pressure at subsequent visits.

- Explain the procedure to the participant
- Follow current NHS GG&C Hand Hygiene Policy
- The participant should sit or lie - according to protocol – in a comfortable position with legs uncrossed and rest for at least five minutes prior to commencement of the blood pressure reading.
- Ensure all tight or restrictive clothing is removed from the upper arm before placing the cuff. Position the participant's arm at heart level and ensure that the arm is well supported with the palm of the hand facing upwards.

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- A standard cuff (12-13 cm long and 35cm wide) should be used for adults unless the arm is very small or large. When a standard cuff is too large or too small, select the appropriate cuff size by visual assessment.
- Secure the cuff around the arm with the Velcro tape ensuring that the cuff encircles the arm at least once. The cuff should be secure but provide enough space to allow a finger to be inserted between the participant's arm and the cuff.
- Line up arrows/tubing with brachial artery, ensure the tubing between the cuff and monitor is not blocked or kinked and that it runs down the inside of the forearm in line with the middle finger.
- Switch on the machine
- Press start button to begin recording

3.2. Recording blood pressure reading

- Record the blood pressure reading in the relevant study documents and patient health record
- Ensure the cuff is fully deflated before removing.

4. Referenced documents

- NHS GG&C Hand Hygiene Policy

5. Related documents

- The European Society of Cardiology and European Society of Hypertension (2018) Guidelines for the management of arterial hypertension. European Heart Journal, 33, 01 September, 2018. 3025-3100.

6. Document history

Version	Date	Description
1.0	23/02/2012	Release of 1 version
2.0	15/07/2016	SOP restructure Updated to SOP template v1.4 Minor admin changes Change to approved and released by
3.0	18/10/2019	Changes to reflect new guidelines Clarity of process
4.0	24/11/2023	Update to SOP template v2.0 Addition of RACI matrix Minor changes

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