

Step-by-step guide

Manual Blood Pressure

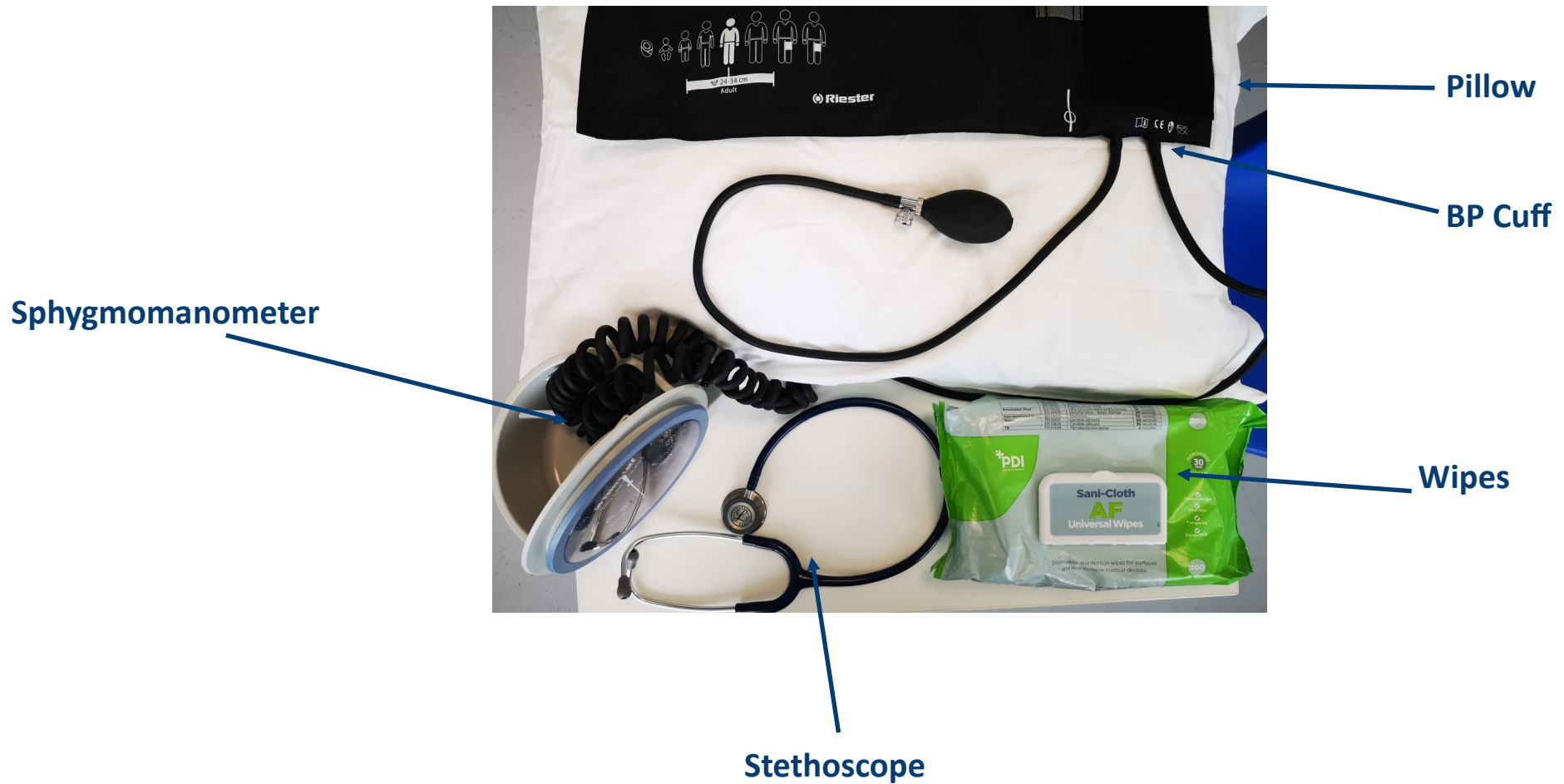


**LIVERPOOL
JOHN MOORES
UNIVERSITY**



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Gather your equipment



Procedure

Explain the Procedure



Discuss the procedure with the patient. Explain what will happen

Check patient identity

Gain consent

Ensure privacy and dignity is maintained throughout the procedure

Wash hands



Wash hands

Apply appropriate PPE

Ensure all equipment is clean prior to use

Patient position



Ensure the patient is comfortable and relaxed

The patient should be seated unless thigh or orthostatic blood pressure measurements are required

Feet should be on the floor, legs uncrossed and the back should be supported

Support the arm



This can be done either by a pillow or supporting on a flat surface such as a desk/table

The arm should be outstretched and free from clothing

Procedure

Brachial artery



Palpate the brachial artery
The brachial artery should be positioned equal to heart level

Apply the cuff A



Select the correct size cuff for your patient
You can measure the mid-upper arm of the patient to obtain the correct cuff size
The cuff should be placed 2-3cm above the antecubital fossa, with the artery arrow in line with the brachial artery

Apply the cuff B



The tubes can emerge either from the bottom or top (the top can avoid any interference with the stethoscope). Follow local trust policy
You should be able to insert one finger between the cuff and patients skin
Ask the patient to stop talking and eating during the procedure

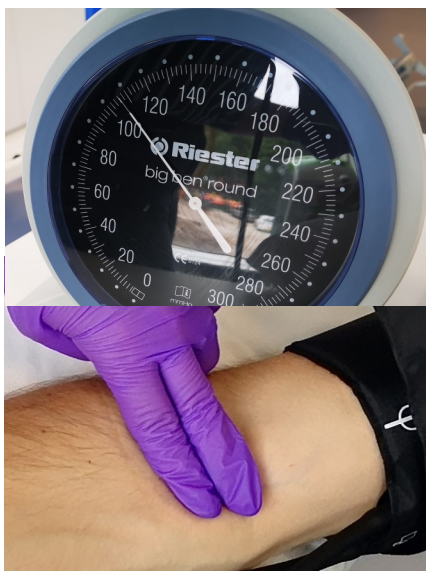
Palpate systolic pressure A



Palpate the brachial artery (or radial if unable to locate the brachial)
Rapidly inflate the cuff, until the pulse disappears, then inflate a further 20mmHg above this

Procedure

Palpate systolic pressure B



Deflate the cuff slowly

When you can palpate the pulse again, take note of the pressure on the sphygmomanometer

This is an approximate systolic pressure

Measuring blood pressure



Leave the arm to rest for at least 30 seconds

Now place the stethoscope (diaphragm) firmly over the brachial artery, ensuring the earpieces are in place

Inflate the cuff 20-30 mmHg above the approximate systolic pressure

Deflate the cuff A



Deflate the cuff at a steady rate of 2 mmHg per second

As the cuff deflates you will begin to hear the Korotkoff sounds

Take note of the pressure when you first hear the clear tapping sounds

This is the systolic reading

Deflate the cuff B



As the cuff deflates further the sounds will become muffled/quieter

When you hear the last sound, this is the diastolic reading

Continue to deflate the cuff and listen for a further 20-30 mmHg ensuring all the sounds have disappeared

Procedure

Deflate the cuff C



For the patients comfort, deflate the cuff rapidly

Remove the cuff

Documentation

C Blood pressure mmHg Score uses systolic BP only	≥220	
	201–219	
	181–200	175
	161–180	
	141–160	
	121–140	
	111–120	
	101–110	
	91–100	93
	81–90	
	71–80	
	61–70	
51–60		
≤50		

Document all findings contemporaneously

Discuss the findings and plan of care with the patient

Clean all equipment



Clean all equipment after use as per local trust policy