**OSCE Checklist: ABPI Measurement**

### Introduction

1. Introduce yourself to the patient including your name and role
2. Confirm the patient’s name and date of birth
3. Briefly explain what the procedure will involve using patient-friendly language
4. Gain consent to proceed with ABPI measurement
5. Ask if the patient has diabetes
6. Ask the patient if they have any pain before continuing with the clinical procedure
7. Position the patient so that they are lying on the examination couch
8. Wash your hands
9. Gather and prepare equipment

### Measure the brachial pressure

10. With the patient lying on the examination couch, place the sphygmomanometer cuff over the left arm proximal to the brachial artery and position the Doppler probe on the brachial artery at a 45° angle (medial to the biceps tendon in the antecubital fossa).
11. Inflate the cuff 20-30 mmHg above the pressure at which the Doppler pulse is no longer audible and then deflate the cuff slowly, noting the pressure at which you first detect a pulse from the Doppler. This represents the systolic pressure in the vessel being assessed.
12. Assess the systolic pressure in the right brachial artery by repeating the same assessment steps
13. Record the higher of the two systolic readings, as this will be used to calculate ABPI

### Measure the ankle pressure

14. Place the sphygmomanometer on the left ankle and position the Doppler probe over the posterior tibial artery which is located posterior to the medial malleolus
15. Inflate the cuff 20-30 mmHg above the pressure at which the Doppler pulse is no longer audible and then deflate the cuff slowly, noting the pressure at which you first detect a pulse from the Doppler. This represents the systolic pressure in the vessel being assessed.
16. Keep the sphygmomanometer in the same location but re-position the Doppler probe over the dorsalis pedis artery of the left foot, which is located lateral to the extensor hallucis longus tendon.
17. Assess the systolic pressure in the dorsalis pedis artery of the left foot
18. Record the highest of the two pressures obtained from dorsalis pedis (DP) and the posterior tibial artery (PTA), as this will be used to calculate the left ABPI
19. Repeat the same process on the right leg to calculate the right ABPI

### Calculate ABPI

20. Correctly calculate ABPI

### To complete the procedure...

21. Explain to the patient that the procedure is now complete
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>22</td>
<td>Thank the patient for their time</td>
</tr>
<tr>
<td>23</td>
<td>Document the left and right ABPI results in the patient’s notes</td>
</tr>
<tr>
<td>24</td>
<td>Suggest further assessments and investigations (e.g. duplex ultrasound, angiography)</td>
</tr>
</tbody>
</table>