

Respiratory System

#### CLINICAL SKILLS LOG Respiratory System

This Clinical Practice Log is a body systems-based approach to clinical examination. The aim is to ensure that you have maximum opportunities to 'hone' your physical examination skills after revision of the theory component.

The physical examination skills included in this log are based on the framework that underpins a body systems approach to physical examination, which is Inspection, Palpation, Percussion and Auscultation (IPPA). The clinical log is bespoke and provides the guiding principles only. As you become more familiar with the subject content you may wish to add in additional notes.

This clinical practice log will help you to practice your physical examination skills with colleagues or relevant others.

To undertake a physical examination of the major body systems, you will require a stethoscope, therefore you are advised to purchase one. This is not an assessed piece of work and **does not need** to be submitted at the end of the module. However, you will be expected to submit a copy of the checklist below as evidence that you have completed the clinical practice log.

You can use the body systems list of clinical examinations below to keep track of your physical examination skills progression. There are no set parameters as to how may times you wish to practice, so the number of tick boxes set out below is only a guide.

#### **Completing the log**

This is an interactive PDF which can be completed on screen or printed out and filled in using a pen. For onscreen use, hover over (ot tap on a phone or tablet) the info buttons to display additional information for the current task. When using the printed version this information appears in a number-referenced panel at the end of the document.

Body System	Achieved	Not Achieved	Comment
1. Consultation & history taking			
2. Cardiovascular system			
3. Respiratory system			
4. Abdominal system			
5. Neurological system - cranial nerves			
6. Mental Health			

Skill exhibited in examination	Achieved	Not Achieved	Comment	
7. Infection control procedures - wash hands and gel				
8. Introduction (explanation/consent)				
<ol> <li>Consciously look at the patient's general appearance and look for signs of shortness of breath/dyspnoea and reposition patient if necessary</li> </ol>				
10. If in the hospital or community setting, note for oxygen, fluid, medication and look inside sputum pot if available				
11. Ask for vital signs assessment data (Respiratory Rate (RR) and Saturations (SpO2) and (Temp (T), Blood Pressure (BP) if necessary				
12. Communication skills during examination - use open and closed questioning style				
<ol> <li>History of Presenting Complaint—obtain a brief account using the mnemonic OLDCARTS (Onset, Location, Duration, Character, aggravating factors, relieving factors &amp; timing)</li> </ol>				
Inspection of system specific signs a) peripheral – exam	ples			
<ol> <li>Carbon Dioxide retention tremor- hands straight out in front &amp; cock wrists back</li> </ol>				
15. High carbon dioxide levels will cause flapping course tremor.				
16. Long term use of B2 agonists (Salbutamol inhalers) will cause fine/course tremor				
17. Look at front & back of hands				
18. Cyanosis, shape of finger nails- clubbing, staining, muscle wasting?				
19. Presence of cyanosis may indicate vasoconstriction due to low cardiac output in patients with heart failure				
Wrists				
20. Re-check radial pulse rate rhythm and volume again if necessary				
Face and neck. Examine				
<ol> <li>Shape of patients face – cushingoid related long term steroid use</li> </ol>				
22. Patient's conjunctiva for signs of anaemia (ask patient to pull down eyelids for you to examine)				
23. Note drooping or ptosis of eye lid (Horner's syndrome)				
24. Note shape of fingernails for signs of clubbing related to cyanosis (arterial oxygen deficiency)				
25. Examine for brittle nails that look spoon-shaped (koilonychia) related to presence of iron deficiency anaemia				

26. Check eyes for anaemia

Skill exhibited in examination	Achieved	Not Achieved	Comment		
27. Check mouth - cyanosis, pallor and candida infection					
28. Check jugular venous pulse					
Observation of system specific signs b) central. Examine (	oatient				
29. Sitting- examine posterior thorax and lungs (arms folded across chest, hands on shoulders)					
30. Lying down/supine- examine anterior thorax and lungs Inspection					
Standing behind patient note shape of chest and movemen	nt looking for:				
31. Deformities or asymmetry					
32. Check for sign of scars					
33. Retraction of interspaces on inspiration					
34. Impaired or delayed movement on one or both sides					
35. Use of accessory muscles					
Reassessment (if necessary)					
36. Respiratory rate (timed) specify over 1 minute					
37 Vital signs					
38. SaO2					
39. BP both arms					
40. Radial pulse- strength, rate & rhythm 1 minute					
41. Temperature					
42. Tracheal deviation					
43. Nodal examination					
44. Lung expansion bilaterally					
Anterior Palpation					
45. Tactile vocal fremitus bilaterally					
46. Percussion left anterior chest					
47. Percussion right anterior chest					
48. Percussion left posterior chest					
49. Percussion of right posterior chest					
Anterior/Posterior Percussion					
50. Auscultation of left anterior chest					

Skill exhibited in examination	Achieved	Not Achieved	Comment
51. Auscultation of right anterior chest			
52. Auscultation of left posterior chest			
53. Auscultation of right posterior chest			
54. Systematic assessment			

#### Conclusion

55. Wash and gel hands

- 56. Thank the patient and help to redress and reposition as necessary
- 57. Re- assess patient's temperature, pulse and blood pressure, heart rate, respiratory rate and saturations (SpO2)
- 58. Further investigations may be required, such as Arterial Blood Gas (ABG) or electrocardiogram (ECG), Echocardigram, Chest X-ray

# 28. Jugular veinous pressure

- Position the patient at a 45-degree angle, with neck slightly turned to the right.
- Ensure that the neck muscles are relaxed by resting the back of the head on a pillow.
- Look across the neck from the right side of the patient.
- Identify the internal jugular pulsation just above the clavicle.
- Estimate the height of the JVP in centimetres between the top of the venous pulsation and the sternal angle (normal height is <3-4 cm).
- Pulsation not visible when patient is supine and or when sat up.

### **42. Tracheal Deviation**



### 43. Nodal examination

#### Stand behind patient

Ask patient if they feel any tenderness in neck?

Palpate each lymph node systematically and note for signs of infection (usually tender) and if non-tender be suspicious.

Start with submental node (between lips and chin).

Palpate along under the jaw line (submandibular nodes) up towards just in front of the ear (parotid nodes).

Get patient to look left and press their chin on your hand to highlight their sternocleidomastoid muscle on the right-hand side, palpate on either side of this down the cervical chain



## 44. Lung expansion bilaterally



 Both sides of the thorax should expand equally during inspiration. Assess expansion of the upper lobes by observing the clavicles from behind. Diminished movement on one side indicates abnormality on that side. To assess expansion of the lower lobes place your hands firmly on the chest wall [missing text] ...around the sides of the chest.



2. Your thumbs should almost meet in the middle. Ask the patient to take a deep breath in. Your thumbs should move symmetrically apart at least 5cm.

## **46. Percussion left anterior chest**

Percussion means 'tapping' the chest. Percussion allows you to listen for the pitch and loudness of the percussed area. This technique shoul dbe performed sequentially and each side should be compared as you move down the chest wall.

- Start in the supraclavicular area and work down the chart.
- Compare side to side including the Axilla.
- Note: Percussion in a normal lung produces a resonant note. If the note heard is 'dull' then you have a 'solid' structure such as the [unreadable], heart or liver.
- A dull note heard in an area of the lung where there is no 'solid' structure is noted as 'dull note' and is usually abnormal.



## 48. Percussion left posterior chest



**i**)

## **Anterior/Posterior Percussion**



i) Place your hand on the patient's chest wall with the fingers slightly separated and aligned with the ribs and pressing the middle finger firmly again the chest.





ii) With the other hand (usually the middle



 iii) The percussing finger is removed quickly

 not dampening the generated noise.
 The percussing finger should be held partly flexed and a loose swinging motion should come from the wrist.

 Compare the quality of one percussion note with another over the entire chest wall. Therefore, percussion should always compare left to right at each level throughout the

### **50. Auscultation of left anterior chest**





When listening to the patient's chest the diaphragm component of the stethoscope is usually used. Instruct the patient to breath in and out with an open mouth every time you move the stethoscope. Listen both to the supraclavicular areas, anterior, axillary and posterior aspects of the chest. Remember to compare left with right at each level. Listen to one complete respiratory cycle (inspiration and expiration) at each position

Listen for the symmetry of sounds between left and right Listen for additional sounds:

Wheeze = musical whistling accompanying airflow

Crackles = fine crackles sound like pealing Velcro fastener, course crackles are lower in pitch and sound more like being outside on a stormy day with your hood up.

Rubs = grating sound, like sandpaper rubbing together. o Breath sounds are absent or greatly diminished over pneumothorax and pleural effusion.

#### **Vocal Resonance**

Ask patient to say "nighty nine" each time the stethoscope is moved round in the same sequence as listening to breath sounds o Spoken sound is muffled and deadened over healthy lungs

Spoken sound heard loudly through stethoscope over consolidation or fibrotic lungs

Spoken sound is absent or greatly diminished over pneumothorax and pleural effusion.