

HSC361 Prepare for, and undertake physiological measurements (Imported unit)

Elements of Competence

HSC361a Prepare the environments and resources for use when taking physiological measurements

HSC361b Undertake physiological measurements

About this unit

For this unit you need to take and record physiological measurements as part of the individual's care plan. These activities could be done in a variety of care settings, including hospital wards and other departments including out-patients, nursing homes, the individual's own home, GP surgeries etc. The recording of such measurements must take into account the individual's overall condition, and the delegation of these measurements to you may change as the individual's condition changes, and sometimes this skill will fall outside of your role and responsibility. Any adverse conditions may result in other members of the care team undertaking these measurements.

Scope

The scope is here to give you guidance on possible areas to be covered in this unit. The terms in this section give you a list of options linked with items in the performance criteria. You need to provide evidence for any option related to your work area.

Appropriate documentation may include: individual's notes; charts

Appropriately prepared may include: fully charged if electrical; with batteries; clean ear pieces on stethoscopes

Consumables; disposable items (e.g. gowns); notes

Environment may include: reducing noise; ensuring adequate heat, space and light

Environmental conditions include: temperature; humidity; ventilation; general and directional light levels

Equipment may include: sphygmomanometers of electronic blood pressure recording devices; stethoscope; thermometers including tympanic membrane sensors; a watch with second hand; pulse oximeter; documentation; charts

Prepare the individual may include: adjusting clothing; ensure no recent hot/cold drinks or exercise; explanation of procedures

Prescribed sequence may include: lying and standing blood pressure; respiratory rate before and after medication such as broncho-dilators; temperature after procedures put in place to reduce raised temperature such as fan therapy, removing clothing/bed clothing

Prescribed time may include: hourly; four hourly; twice daily; daily; weekly; before food; before hot/cold drinks; on return from operating theatre or other treatment/investigation

Procedures include: routine; specialist

Resources could be: fixed items of equipment; portable items of equipment; consumables; disposable items (e.g. gowns); notes

Significant changes may include: collapse; cardiac arrest; bleeding; postural; hypertension

Standard precautions and health and safety measures including handwashing/cleansing before during and after the activity; the use of

personal protective clothing and **additional protective equipment**; handling **contaminated** items; disposing of waste; safe moving and handling techniques and untoward incident procedures.

Your **knowledge and understanding** for this unit will relate to legal requirements and codes of practice applicable to the scope of your work and others with whom you work; the nature of the work you are undertaking; your role and level of responsibility within your organisation (e.g. whether you have responsibility to support the work of others); the individuals, key people¹ and others with whom you are required to work and the degree of autonomy you have for the management of your own work activities.

Values underpinning the whole of the unit

The values underpinning this unit have been derived from the key purpose statement², the statement of expectations from carers and people receiving services, relevant service standards and codes of practice for health and social care in the four UK countries. If you are working with children and young people they can be found in the principles of care unit HSC34. If you are working with adults they can be found in HSC35. To achieve this unit you must demonstrate that you have applied the principles of care outlined in either unit HSC34 or HSC35 in your practice and through your knowledge.

This unit is directly transferable to Health national occupational standards GEN6 and CHS19

¹ If you are working with children and young people the term "individuals" covers children and young people and key people" covers parents, families, carers, friends and others with whom the child/young person has a supportive relationship

² The key purpose identified for those working in health and social care settings is "to provide an integrated, ethical and inclusive service, which meets agreed needs and outcomes of people requiring health and/or social care"

Key Words and Concepts

This section provides explanations and definitions of the key words and concepts used in this unit. In occupational standards it is quite common to find words or phrases used which you will be familiar with, but which, in the detail of the standards, may be used in a very particular way. **Therefore, we would encourage you to read this section carefully before you begin working with the standards and to refer back to this section as required.**

Additional protective equipment	Types of personal protective equipment such as visors, protective eyewear and radiation protective equipment
Contaminated	Includes: items 'contaminated' with body fluids, chemicals or radionucleatides. Any pack/item opened and not used should be treated as contaminated
Individual	An individual is the person on whom the physiological measurement is being taken and could be an adult or a child
Needs of the individuals	relating to individual characteristics that influence choice and set up of equipment and other resources (e.g. mobility, protection from radiation etc.)
Personal clothing and fashion items	includes outer clothes worn from home to work, jewellery, acrylic nails, nail varnish and false eyelashes
Personal protective clothing	Items such as plastic aprons, gloves - both clean and sterile, footwear, dresses, trousers and shirts and all in one trouser suits. These may be single use disposable clothing or reusable clothing
Standard precautions and health and safety measures	A series of interventions which will minimise or prevent infection and cross infection; including handwashing/cleansing before during and after the activity and the use of personal protective clothing and additional protective equipment when appropriate

HSC361a Prepare the environments and resources for use when taking physiological measurements

Performance Criteria

You need to show that,

1. you gather together all essential resources in advance of the procedure
2. you check and confirm that all resources are in a suitable, safe condition for the procedure to be carried out
3. you dispose of any damaged or out of date items in an appropriate safe place in accordance with local procedures
4. you handle resources safely, correctly and hygienically
5. you set up and prepare resources in the appropriate manner and time for the activity to be carried out and the **needs of the individual**
6. you confirm that sufficient and necessary forms for record taking are available for immediate use
7. you correctly apply **standard precautions** and other relevant **health and safety measures** appropriate to the setting and the procedure
8. you make sure that environmental conditions within the immediate environment are set to appropriate levels to maintain individual comfort throughout the procedure
9. you position the equipment:
 - correctly for the requirements of the procedure
 - to reduce risks
10. you promptly investigate any problems with the environment and resources and report any which you cannot solve to the relevant person to deal with them

HSC361b Undertake physiological measurements

Performance Criteria

You need to show that,

1. you apply standard precautions for infection control and apply other necessary health and safety measures
2. you take the measurement at the prescribed time and in the prescribed sequence
3. you use the appropriate equipment in such a way as to obtain an accurate measurement
4. you reassure the **individual** throughout the measurement and answer questions and concerns from the patient clearly, accurately and concisely within own sphere of competence and responsibility
5. you refer any questions and concerns from or about the patient relating to issues outside your responsibility to the appropriate member of the care team

6. you seek a further recording of the measurement by another staff member if you are unable to obtain the reading or if you are unsure of the reading.
7. you observe the condition of the individual throughout the measurement
8. you identify and respond immediately in the case of any significant changes in the individuals condition or any possible risks
9. you recognise and report without delay any measurement which falls outside of normal levels
10. you record your findings accurately and legibly in the appropriate documentation

Knowledge Specification for the whole of this unit

Competent practice is a combination of the application of skills and knowledge informed by values and ethics. This specification details the knowledge and understanding required to carry out competent practice in the performance described in this unit.

When using this specification **it is important to read the knowledge requirements in relation to expectations and requirements of your job role.**

You need to show that you know, understand and can apply in practice:

Values

1. a working understanding of why individuals need to be informed about what is happening
2. a working understanding of what is meant by "consent"

Legislation and organisational policy and procedures

3. a factual awareness of the current European and national legislation, national guidelines and local policies and protocols which affect your work practice in relation to:
 - undertaking physiological measurements
 - health and safety and infection control
 - the handling of equipment and other resources
 - accountability and responsibility for checking equipment and other resources, including vicarious liability
4. a working understanding of your responsibilities and accountability in relation to the current European and National legislation and local policies and protocols within the health and care environment

Theory and practice

5. a working understanding of the importance of applying and following standard precautions relevant to physiological measurements to be taken and the protective clothing which may be worn for the individual's and your protection
6. a working understanding of the potential consequences of poor practice in relation to the application of standard precautions
7. a working understanding of what is and is not a sterile field and how the correct level of cleanliness may be achieved for the clinical/therapeutic activity, the client and the setting
8. a working understanding of your role and the importance of working within your own sphere of competence and seeking clinical advice when faced with situations outside your sphere of competence
9. a working understanding of the roles and responsibilities of other team members
10. a working understanding of the importance of selecting and preparing resources according to the individual's plan of care
11. a working understanding of the importance of having all resources ready before starting the procedure
12. an in-depth understanding of why the recordings are necessary and the importance of undertaking measurements as directed

Care and support

13. a factual awareness of the environmental conditions appropriate for the type of clinical/therapeutic activity to be undertaken
14. a factual awareness of how to adjust environmental conditions in order to maintain the individuals comfort
15. an in-depth understanding of the help individuals may need before you can undertake the measurement
16. an in-depth understanding of why it is necessary to adjust clothing for some physiological measurements

Materials and equipment

17. a working understanding of the essential resources required for the activity including any **personal protective clothing** needed for yourself and/or the individual
18. a working understanding of the physiological measurements to be undertaken and the importance of preparing and setting out essential resources safely and efficiently
19. a working understanding of the types of essential resources which are sensitive to environmental changes and how this affects their storage and use
20. a factual awareness of the nature and function of equipment used and how to check whether or not it is functioning correctly
21. a working understanding of how to set up and prepare equipment including any adjustments which are specific to an individual's needs
22. a working understanding of the equipment used for different measurements and any alternative equipment available

Procedures and techniques

23. a working understanding of the procedures and techniques associated with the preparation of the environment and resources for use when taking physiological measurements
24. a working understanding of the importance of handling resources safely and correctly and how to do so
25. a factual awareness of the methods for ensuring all resources to be used when taking physiological measurements (including electrical equipment) are in a suitable and safe condition and the extent of the your responsibility for this, in line with local health and safety guidelines
26. a working understanding what procedures you are permitted to undertake when problems arise with equipment or resources and when you must refer the problem to others
27. a working understanding the relevant person to whom you should refer problems with the environment and/or resources
28. a factual awareness of the correct procedure for reporting problems or faults with resources
29. a working understanding of common conditions which necessitate the recording of physiological measurements within your work environment.
30. a working understanding of how blood pressure is maintained
31. a working understanding of the differentiation between systolic and diastolic blood pressure and what is happening to the heart in each reading

32. a working understanding of the normal limits of blood pressure
33. a working understanding of conditions where blood pressure may be high or low
34. a working understanding of how body temperature is maintained
35. a working understanding of what normal body temperature is
36. a working understanding of what is meant by pyrexia, hyper-pyrexia and hypothermia
37. a working understanding of what is normal respiratory rate
38. a working understanding of what affects respiratory rates in individuals, ill and well
39. a working understanding of the normal limits of pulse rates
40. a working understanding of what affects pulse rates – raising it and lowering it
41. a working understanding of the sites in the body where pulse points can be found
42. a working understanding of why an individuals pulse oximetry needs to be measured
43. a working understanding of the findings when obtaining pulse oximetry, and the implications of these findings
44. a working understanding of what BMI is and how it is used in weight/dietary control
45. a working understanding of the factors that influence changes in physiological measurements

Records and documentation

46. a working understanding of the types of records and documentation which may be required for the clinical/therapeutic activity and how they should be prepared
47. a working understanding of the importance of recording all information clearly and precisely in the relevant documentation
48. a working understanding of the importance of reporting all information to the registered practitioner
49. a working understanding of the importance of immediately reporting any issues which are outside your own sphere of competence without delay to the relevant member of staff