Unit 38: Introduction to Clinical Engineering

Level:	**2**
Unit type:	**Optional (Equipment Management & Clinical Engineering)**
Credit value:	**2**
Guided learning hours:	**12**

Unit summary

This unit aims to give learners an understanding of the role of clinical engineering and the work undertaken, the appropriate regulatory frameworks and quality assurance processes, and the importance of patient-centred care.

Unit assessment requirements

Assessment tasks and activities must enable learners to produce valid, sufficient, authentic and appropriate evidence that relates directly to the learning outcomes and assessment criteria of the unit. Suitable forms of evidence for this unit include:

- written tasks such as reports, articles for journals, newsletters, leaflets, posters
- workbooks, work logbooks or learner diaries
- written or oral presentations
- projects
- oral question and answer.

Observation records should not be used as the primary evidence of achievement for this unit, but can be used to supplement the more appropriate forms of evidence listed above or to provide sector contextualisation or evidence of how the learner has applied knowledge within their job role.

When devising the assessment activities, centres need to look closely at the verb used in each assessment criterion to ensure that learners can provide evidence with sufficient breadth and depth to meet the requirements. Centres need to produce assessment briefs for learners with clear instructions of what they are required to do.

Additional information

AC3.1 including:

- Health and Safety at Work Regulations
- infection prevention and control
- manual handling of equipment
- wearing of Protective Personal Equipment (PPE)
- the importance and type of PPE when dealing with potentially contaminated equipment
- the potential consequences of poor practice
- use of hazardous materials, i.e. Control of Substances Hazardous to Health (COSHH).

AC3.2 e.g. MHRA guidance in managing medical devices, Equipment Management Systems (EMS), keeping an inventory and record keeping

Learning outcomes and assessment criteria

To pass this unit, learners need to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria outline the requirements that the learner is expected to meet to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand the role of Clinical Engineering with respect to healthcare science and the provision of healthcare	1.1	Describe the structure of healthcare science including the Divisions of Healthcare Science			
		1.2	Describe the range of services provided by Physical Sciences and the specialisms of Medical Physics; Clinical Engineering and Decontamination Science			
		1.3	Explain the role of Clinical Engineering, including its impact on patient services and patient care			
2	Understand the range of work undertaken in Clinical Engineering including the medical equipment management life-cycle	2.1	Explain the contribution of Clinical Engineering services in supporting patient care			
		2.2	Describe the medical equipment management lifecycle			
		2.3	Describe how medical devices are managed using an Equipment Management System			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the regulatory framework within which Clinical Engineering operates, as appropriate to the job role	3.1	Outline the legislation, policy, quality management systems and good practice underpinning the practice of Clinical Engineering			
		3.2	Explain the regulatory framework underpinning the delivery of Clinical Engineering services			
		3.3	Describe the personal responsibilities regarding processes and procedures appropriate to own role			
4	Understand the importance of patient-centred care	4.1	Explain patient-centred care			
		4.2	Explain how Clinical Engineering services embed the principles of patient-centred care			
		4.3	Explain how to embed the principles of patient-centred care in own daily work			
5	Understand the quality assurance processes in own department which underpin safety and good practice	5.1	State the importance of immediately reporting any issues which are outside own scope of competence to the relevant member of staff			
		5.2	Describe how the quality management system in own service works in practice and the part played in it			
		5.3	Describe how continual improvement is sought through audit and feedback			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(*if sampled*)