Unit 115: Renal Technology in Practice

Level: 4

Unit type: Optional (Urodynamics and Urology)

Credit value: 15

Guided learning hours: 120

Unit summary

In this unit, you will acquire the knowledge and skills to work as a Healthcare Science Associate working in renal technology. You will be able to work safely in the renal technology environment, with the emphasis on health and safety, risk management, risk assessment and equipment management. You will be expected to build your professional practice and use critical reflection to review and improve your performance in the workplace and develop skills to promote continuous professional development.

All learners must complete all generic health and safety and mandatory training contextualised to own area of practice.

Unit assessment requirements

There are no specific assessment requirements for this unit. Please refer to the assessment strategy in *Annexe B*.

Additional information

All procedures must be undertaken in accordance with the Standard Operating Procedure and Good Manufacturing Practice.

AC.1. includes:

- renal units and equipment used in the patient's home.

AC1.2 includes:

- regulatory frameworks
- legislation
- policy
- quality management systems and good practice.

AC3.3 includes:

- renal unit
- intensive care unit
- patient's home.

AC6.3 includes:

- working in patients' homes
- lone working
- decontamination issues associated with renal equipment
- contingency plans for equipment failure.

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 **in own area of work and in accordance with Standard Operating Procedures (SOPs)** to achieve the learning outcomes and the unit.

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
1	Understand safe working practices in Renal Technology	1.1	Explain the health and safety policies and regulatory framework in Renal Technology			
		1.2	Explain the quality-assurance processes underpinning safety and good practice in Renal Technology			
		1.3	Describe appropriate sources of information and guidance on health and safety issues			
		1.4	Explain personal responsibilities regarding processes and procedures within own area of practice			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Be able to communicate effectively in the Renal Technology environment	2.1	Communicate scientific and engineering information at a level appropriate to the audience, including the public			
		2.2	Adapt communication to meet varying needs and overcoming barriers to understanding			
		2.3	Explain the importance of effective communication skills within the healthcare environment			
		2.4	Treat every patient/carer with compassion, dignity and respect, maintaining the highest standards of person-centred care			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
3	Understand the work of the Renal Technology department	3.1	Explain the role of Renal Technology within the multidisciplinary team providing renal dialysis and treatment for patients			
		3.2	Explain the range of procedures undertaken in Renal Technology			
		3.3	Explain the range of areas where renal technology is used			
		3.4	Explain the phases in the equipment lifecycle and how it is used with Renal Technology			
		3.5	Explain the potential impact of Renal Technology on the patient, patient care, and staff healthcare services			
		3.6	Explain how the principles of patient-centred care are embedded in own area of practice			
4	Be able to assist in the routine maintenance of a water treatment plant	4.1	Explain the purpose of the water treatment system			
		4.2	Assist in the routine quality-assurance activities associated with water treatment systems			
		4.3	Demonstrate the necessary performance and safety checks and adjustments required as part of the routine maintenance of a water treatment plant			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Be able to assist in performing routine maintenance of renal dialysis equipment	5.1	Explain the key maintenance required by renal dialysis systems, including different types of dialysis			
		5.2	Assist in the planned maintenance of a range of dialysis systems			
		5.3	Discuss the impact of renal replacement therapy (RRT) on patients and their families			
		5.4	Critically reflect on the role of the renal technologist in promoting high-quality care			
6	Be able to perform a range of risk assessments within the renal environment in accordance with SOPs	6.1	Explain the principles of risk assessment using current statutory and professional guidance			
		6.2	Discuss the range of risk assessments performed, where they are filed and how to access them			
		6.3	Perform a range of risk assessments within the renal environment in accordance with SOPs			
		6.4	Explain the requirements for accurate record keeping			
		6.5	Complete all records accurately and store in correct location for future use			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
7	Be able to complete an incident report in accordance with local procedures	7.1	Explain the incident reporting process			
		7.2	Explain the local and national regulatory incident identification and escalation process			
		7.3	Explain the process of equipment-related indent reporting to MHRA and equipment manufacturers			
		7.4	Explain the process of equipment-related warning notice distribution			
		7.5	Complete an incident report under supervision			
8	Understand the need for the effective management of other medical devices used in the renal dialysis environment	8.1	Explain the policies and procedures relating to the effective management of medical equipment in the clinical area, including: • specialist renal dialysis technology • other medical equipment			
		8.2	Discuss why effective lifecycle management of medical equipment is necessary			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

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