Unit 80: Measure Optical Prescriptions and Refractive Error

Level: 3

Unit type: Optional (Ophthalmology)

Credit value: 5

Guided learning hours: 42

Unit summary

In this unit, you will apply knowledge, understanding and skills to measure optical prescriptions and refractive error. You will also develop your skills with respect to patient-centred compassionate care. You will be expected to build your patient-centred professional practice to enable you to undertake this skill safely in the workplace.

Unit assessment requirements

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

Additional information

AC1.2 includes:

- myopia
- hypermetropia
- astigmatism
- presbyopia.

Learning outcome 4 to include spectacles with a range of spherical and cylindrical corrections, and bifocal and varifocal additions.

Learning outcomes 4 and 5 include:

- communicating effectively with the individual and carer/s, confirming individual's identification, explaining personal role and nature and purpose of procedure at a level appropriate to the individual/carer's understanding, and ensuring the individual has the opportunity to explain any problems or difficulties
- identifying any special needs, e.g., age, sensory impairment, physical disability, learning disability, cognitive dysfunction, and adapting communication style and testing methods to meet these needs
- obtaining verbal consent from individual/carer

- maintaining individual's confidentiality: auditory, written and electronic
- demonstrating effective infection control practices according to local protocols
- demonstrating, as required, procedures for calibration and maintenance of equipment
- ensuring equipment is working correctly.

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 the optical system of the eye, and optical defects (refractive errors)	1.1	Explain the optical system of the eye and how light is focused on the retina			
		1.2	Explain the optical defects of the eye, to include myopia			
		1.3	Explain the effects of myopia, hypermetropia and astigmatism on vision			
		1.4	Explain how the eye focuses for near, and how the eye loses focusing power with age			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
2	Understand how optical defects of the eye are corrected and how to interpret optical prescriptions	2.1	Explain how optical defects of the eye are corrected with spectacle and contact lenses			
		2.2	Explain optical prescription notation and how to interpret an optical prescription			
		2.3	Explain single vision, bifocal and progressive power prescriptions			
		2.4	Explain how to transpose an optical prescription			
		2.5	Explain how to calculate spherical equivalence			
3	Understand the principles of focimetry and auto-refraction	3.1	Explain the principles of focimetry and the function of a focimeter			
		3.2	Explain the principles of auto-refraction and the function of an auto-refractor			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
4	Be able to determine the optical prescription of visual aids (focimetry)	4.1	Confirm patient's existing use of optical correction			
		4.2	Measure optical prescription of spectacles, including distance, intermediate and near corrections			
		4.3	Transpose optical prescription			
		4.4	Calculate spherical equivalent as required			
		4.5	Document optical prescription accurately, with correct notation, in patient record			

Learning outcomes		Assessment criteria		Evidence type	Portfolio reference	Date
5	Be able to measure refractive error of the eye with an autorefractor	5.1	Confirm patient's existing use of optical correction			
		5.2	Confirm patient's understanding of procedure and requirements for compliance			
		5.3	Control infection risks in accordance with workplace protocols			
		5.4	Position and align patient correctly			
		5.5	Measure refractive error for distance with an autorefractor			
		5.6	Transpose the optical prescription as needed			
		5.7	Document refraction accurately, with correct notation in patient record			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

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