National School of Healthcare Science

NHS England

IACC 2023 Case-based discussion (CBD) scenario

Specialty:	**Rehabilitation Engineering**

CBD Scenario

CBD Scenario Title	Writing a Standard Operating Procedure for a complex medical equipment								
CBD Scenario Aim	To test the trainee's understanding of complex medical devices: underlying science, calibration, quality assurance, safety, risk and infection control								
CBD Focus (please provide the codes of the module(s) this scenario addresses)	**Core module (professional practise)** SCC110		**Essential module** SPE339c1 SPEC340c2						
GSP Domains covered (enter X to indicate all that apply)	**GSP 1**	X	**GSP 2**	X	**GSP 3**	X	**GSP 4**		**GSP 5**
CBD Scenario description	Please could you choose a pressure measurement device or motion analysis system which you use regularly in your practice. 1) Please explain its underlying scientific principles and how it is used. and 2) If you were to write a Standard Operating Procedure for its use, what key elements would you include?								
CBD Scenario model answer/ assessor guidance Detailed guidance that will be available for the assessors. Include guidance on what kinds of behaviours, actions, comments should secure a pass. What should the assessor expect to see? Assessors will be asked	The trainee will be asked to choose a pressure measurement device or motion analysis system used in their routine specialist practice. They will be asked to give a simple description of the underlying science and how the device is used in practice. The trainee will then be asked to outline the key elements in a Standard Operating Procedure for the piece of equipment they have chosen. To pass the trainee will need to give a clear, concise, and accurate account of the underlying science. The trainee should cover the following areas: 1. Calibration (formal maintenance/daily checks)								

to plan questions in advance including links to trainee's IACC submission.	2. Quality control (checks/artefacts) 3. Risk mitigation 4. Infection control 5. Appropriate language/detail 6. Document and version control (If prompts are needed then use the following questions) How do you make sure the device is giving the correct measurement? How do you ensure the patient is kept safe? A good trainee will cover at least 3 of the above unprompted. If not covered unprompted, the assessor should ensure the trainee understands the processes involved in obtaining a good result (1 or 2) and keeping the patient safe (3 or 4). Prompt questions should be asked if necessary. A strong trainee will also show an understanding of 5 and 6.
Trainee instructions Please include any specific information to be provided to the trainee as part of the CBD scenario	

Criteria being assessed by this CBD scenario

Aspect	**Please indicate if this criterion is being assessed**
1. Understands the clinical context of the scenario, including priority setting and testing strategies	X
2. Understands scientific principles of scenario	X
3. Can discuss the relevant procedures involved in the scenario and associated health and safety issues	X
4. Understands and applies the appropriate test validation, IQC, EQA, relevant professional/clinical guidelines	X
5. Understands and applies associated IT/bioinformatics and other appropriate resources	
6. Is able to interpret and report patient results and provide appropriate clinical advice	
7. Can discuss the significance of patient results within the clinical context of the referral	
8. Understands the ethical, legal and social implications of the scenario	

9. Is aware of the importance of audit and can use this tool effectively	
10. Output meets accepted laboratory/professional standards	
11. Demonstrates awareness of the limits of responsibility and when to seek advice	
12. Consideration of patient/professionalism	
13. Overall ability to perform	