National School of Healthcare Science

NHS England

IACC 2023 Case-based discussion (CBD) scenario

Specialty:	Radiation Safety

CBD Scenario

CBD Scenario Title	Critical examination of a cardiac intervention suite									
CBD Scenario Aim	Discuss the tests required in a critical examination of complex equipment and show understanding of impact on staff and patient safety									
CBD Focus (please provide the codes of the module(s) this scenario addresses)	*SPE155c2: 15*									
GSP Domains covered (enter X to indicate all that apply)	**GSP 1**	x	**GSP 2**	x	**GSP 3**		**GSP 4**		**GSP 5**	
CBD Scenario description	An interventional cardiac x-ray system has been installed into a newly built room. Discuss what you might include as part of a critical examination of the facility and the equipment and why, and who you need to interact with. As part of your critical examination you identify that the radiation warning light has been wired up incorrectly so that the red 'DO NOT ENTER' section of the warning lights does not illuminate when x-rays are being produced. What do you do?									
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	Key points part 1: • Critical examinations are to establish that the safety features and warning devices for both staff and patient operate correctly. • If carrying out on their behalf, ensure liaison with the installer to ensure operation and function of safety and warning devices clear. • Operator and public protection is present and to specification (e.g. lead glass screen is present and correct mmPb) – check by inspection/transmission measurement/dose rate measurements. Correct selection of detectors.									

to plan questions in advance including links to trainee's IACC submission.	• Warning devices are operational (e.g. exposure warning lights in room and at entrances, signage, sounds) – check by inspection. • Any safety features operate correctly (e.g. emergency stops and interlocks) – check by operation. • Equipment operates as expected for patient safety (i.e. passes all Imaging and safety QA tests, filtration, collimation) – check by performance testing. • Communicate results to the installer and users. Key points part 2: 1. Inform staff that installation has failed CE – include in report (confirm with RPA first) 2. Don't put the room into clinical use 3. Get the wiring rectified and retest
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	
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	
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	x
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	x
12. Consideration of patient/professionalism	
13. Overall ability to perform	