OH4 Contribute to the production of dental images

OVERVIEW

This standard is intended for those who contribute to the process of producing dental images for diagnostic and quality assurance purposes. You will need to prepare the equipment and materials for dental radiography, as well as protect yourself, oral health care team members and the public from the hazards associated with ionising radiation. You will need to know about the various dental radiographic films and digital systems. This standard is not designed to apply to cephalometric projections.

Further training is needed for those oral health workers who actually take dental radiographs consistent with the requirements of the Ionising Radiation (Medical Exposures) Regulations 2000.

This standard is applicable for any member of the oral health care team who has the responsibility for processing and supporting the production of dental radiographs.

Users of this standard will need to ensure that practice reflects up to date information and policies.

Version No 1

KNOWLEDGE AND UNDERSTANDING

You will need to know and understand:

1. Ionising radiations - their nature and uses
2. The hazards associated with ionising radiations including the effects which they may have on general health and the likely effect of different doses of radiation on people
3. The risks associated with ionising radiations in general and the relative risks associated with dental radiographs
4. The purpose, method of use and function of protective wear and the reason for their use during assessment
5. Standard precautions and quality standards of infection control and your role in maintaining them
6. The practical protective measures which can be used to minimise risks to patients, self, the oral healthcare team and the public
7. Why the radiation dose should be as low as possible
8. Methods for monitoring the ionising radiations which staff receive (e.g. Personal Radiation Monitors) and the purpose of these
9. Your role in relation to current legislation to protect persons undergoing medical examination and treatment (such as the Ionising Radiation Act, the Ionising Radiation (Medical Exposures) Regulations (including Local Rules), Control of Substances Hazardous to Health, Health and Safety at Work Act)
10. The organisations practices and policies relating to ionising radiations and the taking of radiographs
11. The purpose of quality assuring dental radiographs and the relationship of this to radiation protection
12. The organisations quality assurance policy for processing dental radiographs and your role in relation to this
13. The role of the Radiation Protection Supervisor and Radiation Protection Advisor in the organisation, their responsibilities and contribution to radiation protection
14. The dental imaging process (including digital and film)
15. The nature of dental imaging and their uses
16. The different sizes and types of radiographic film, how they are used and how to select the right one
17. Methods for cleaning the different equipment used, the reasons for doing this and the potential risks of not so doing
18. Methods of confirming the correct functioning of equipment
19. Action to take in case of equipment failure
20. The purpose and use of intensifying screens in dental radiography
21. The purpose of the different chemicals used in processing
22. Correct, safe methods of storage and disposal of the different chemicals
23. The reasons for storing films away from ionising radiations, the reasons for rotating film stock and why film stock which has deteriorated should not be used
24. The concerns which patients may have regarding dental imaging and methods of supporting patients during the taking of dental images
25. The reasons for protecting the processing environment from accidental intrusion including the use of safe lights
26. Methods of handling the different films so as to maintain their quality
27. Correct methods of processing both extra and intra oral films and the reasons for these
28. Methods of mounting dental radiographs and the consequences of not so doing
29. The organisations policy for the filing of dental radiographs and the records which should be attached to them
30. Process defects (including fogging, density, contrast, and handling marks) and criteria for determining whether a radiographic image is of an acceptable quality
31. Methods of communicating information clearly and effectively
32. Methods of modifying information and communication methods for different individuals including patients from different social and ethnic backgrounds, children (including those with special needs), and the elderly

**PERFORMANCE CRITERIA**

You must be able to do the following:
1. apply standard precautions for infection control and take other appropriate health and safety measures
2. select the correct type of resources for the procedure being undertaken and make them available for the operator
3. confirm imaging equipment is fully functioning and ready for use
4. ask patients to remove any items which may interfere with the radiographic image, and offer appropriate explanations
5. offer the patient appropriate support and refer any questions which are beyond your role to an appropriate member of the team
6. maintain health and safety throughout the imaging procedure
7. use resources in a manner which maintains the quality of the image
8. carry out imaging stages in the correct sequence and for the appropriate duration
9. contribute to the production of a dental image that is fit for purpose
10. keep accurate records of quality assurance checks
11. store or save images produced according to the organisations established procedures

**ADDITIONAL INFORMATION**

This National Occupational Standard was developed by Skills for Health.

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004):

Dimension: HWB6 Assessment and treatment planning