

OH4.2012 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 legislation, regulation and current national guidance. This standard is applicable for members of the oral health care team who have 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 2

KNOWLEDGE AND UNDERSTANDING

You will need to know and understand:

- 1.the use of ionising radiation
- 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.standard precautions and quality standards of infection prevention and control, including personal protective equipment and your role in maintaining them
- 5.the practical protective measures which can be used to minimise risks to patients, self, the oral healthcare team and the public
- 6.why the radiation dose should be as low as reasonably practicable
- 7.methods for monitoring the ionising radiations which staff receive and the purpose of these
- 8.recognised forms of valid consent and their application before any treatment is undertaken
- 9.your role in relation to current legislation, regulation and national guidance to protect persons undergoing medical examination and treatment
- 10.the organisation's practices and policies relating to ionising radiations and the taking of radiographs
- 11.health and safety regulations and national policies and procedures

- 12.the purpose of quality assuring dental radiographs and the relationship of this to radiation protection
- 13.current best practice in dental radiograph quality assurance process
- 14.the role of the employer, referrer, practitioner, operator, radiation protection supervisor and medical physics expert (radiation protection advisor) in the organisation and their responsibilities and contribution to radiation protection
- 15.how dental images are created using radiographic film and the use of digital radiography
- 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.the 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 radiation; 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 organisation's 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.how to modify information and communication methods for individuals, including patients with special needs, patients from diverse social and ethnic backgrounds, children and the elderly and where necessary, provide representation for them
- 33.the importance of keeping full contemporaneous records and the legislation and guidelines relating to patients' records and confidentiality

PERFORMANCE CRITERIA

You must be able to:

- 1.apply standard precautions for infection prevention and control
- 2.take other appropriate health and safety measures during the production of radiographic images
- 3.select the correct type of resources for the procedure being undertaken and make them available for the operator
- 4.confirm imaging equipment is fully functioning and ready for use

5. ask patients to remove any items which may interfere with the radiographic image, and offer appropriate explanations
6. offer the patient appropriate support and refer any questions which are beyond your role to an appropriate member of the team
7. maintain health and safety throughout the imaging procedure
8. use resources in a manner which maintains the quality of the image
9. carry out imaging stages in the correct sequence and for the appropriate duration
10. contribute to the production of a dental image that is fit for purpose
11. dispose of waste, spillage promptly and in a safe manner and place
12. keep accurate records of quality assurance checks
13. store or save images produced according to the organisation's established procedures

ADDITIONAL INFORMATION

This standard links with the following dimension within the NHS Knowledge and Skills Framework (October 2004): Dimension: HWB6 Assessment and treatment planning