
Overview

This standard is concerned with the use of mobile x ray equipment to produce conventional radiographic images for diagnostic and procedural guidance purposes in a temporary controlled area. This standard includes the use of mobile image intensifier equipment. Key people are those involved in the individual's care and others involved in provision of services. This standard also acknowledges that many of these individuals may not be able to identify themselves or cooperate with the procedure. Users of this standard will need to ensure that practice reflects up to date information and policies.

Performance criteria

- You must be able to:*
1. apply standard precautions for infection control and other appropriate health and safety measures
 2. ascertain the location of the individual and obtain information on any special circumstances regarding the individual from the staff responsible for the individual
 3. ensure all necessary preparations have been made by the individual and staff before starting the procedure
 4. ensure the environment is conducive to maintaining the privacy and dignity of the individual
 5. check the identification details before commencing the procedure in accordance with local policies and procedures
 6. identify yourself to other members of staff present during the examination
 7. establish the individual's capacity to understand and co-operate with the procedure with the help of key people if necessary
 8. confirm that valid consent has been given for the procedure in accordance with national and local guidelines
 9. respect the individual's privacy, dignity, beliefs and decisions
 10. clearly explain the procedure and possible outcomes, including risk, benefits and limitations
 11. check individuals of child-bearing potential for pregnancy or possible pregnancy, if appropriate to the examination, and take action in accordance with local protocols
 12. confirm the status of key people before the examination and, where their presence is required, adhere to local guidelines
 13. assess the ease of access to the individual and the location of any key people in order to create a temporary controlled area
 14. safely move the mobile imaging equipment to where it is required together with all additional equipment
 15. position the individual and adjust their clothing according to the protocols for the examination to be performed in a manner which allows an optimal outcome to be achieved while:
 - 15.1 recognising the individual's need to retain their dignity and self respect
 - 15.2 ensuring their comfort as far as possible
 - 15.3 preventing the appearance of artefacts
 16. correctly align the equipment according to the examination technique, with anatomical legends correctly placed, where appropriate
 17. use automatic exposure controls or apply, check and adjust manual exposure factors, collimation and radiation protection devices to

minimise exposure to the individual whilst optimising diagnostic image quality

18. check the area around the individual prior to making the exposure to ensure that only essential, protected persons remain within the temporary controlled area

19. give a verbal warning prior to the exposure being made

20. seek confirmation that the individual is ready before the exposure is made

21. maintain communication with the individual and/or key people to facilitate their understanding and co-operation throughout the examination

22. observe the individual's condition and well-being at all times and take appropriate action should any adverse events occur

23. ensure safe and appropriate care for the individual on completion of the imaging episode

24. record, collate and prepare appropriate information, documentation, radiation doses and images for transfer or storage according to local protocols

25. verify that the images have arrived/been stored according to local protocols

26. recognise where help or advice is required and obtain this from appropriate sources

27. advise that the temporary controlled area has been removed

28. inform the individual and/or key people of the results procedure according to local protocols where relevant

Knowledge and understanding

You need to know and understand:

1. legal, organisational and policy requirements relevant to your role, the role of others in your organisation and the activities being carried out
2. the relevant national and local standards, guidelines, policies and procedures that are available and how and when they should be accessed
3. the importance of respecting individuals' culture, privacy, dignity, wishes, beliefs and decisions
4. the limitations of your own knowledge and experience and the importance of operating within your scope of practice
5. the roles and responsibilities of other team members
6. the importance of confirming valid consent has been given in line with national and local guidelines
7. clinical appropriateness of the examination request and the action to take when the request is not appropriate
8. the gross anatomy of the area being examined
9. physiological and pathological processes relevant to the area being examined
10. anatomical landmarks on the body that are relevant to radiographic imaging
11. common pathologies and normal variants of the area being examined
12. the medical terminology relevant to the examination including abbreviations
13. positioning terminology including abbreviations
14. when additional views are required to aid diagnosis and to enhance the examination
15. manifestations of individual's physical and emotional status
16. clinical conditions and surgical processes/procedures which require imaging using mobile radiographic equipment
17. production, interactions and properties of x-rays
18. the process involved in the formation of radiographic images
19. the harmful effects of radiation to the human body and use of radiation protection equipment
20. ways in which images can be captured, processed and permanently stored
21. how to adapt communication styles, ask questions, and listen

- carefully in ways which are appropriate for the needs of the individual and/or key people
22. methods of communicating difficult and complex information to individuals and/or key people
 23. the importance of providing individuals and/or key people with opportunities to ask questions and increase their understanding
 24. the information that should be given to individuals and/or key people before, during and on completion of the examination
 25. methods of assessing and recording radiation dose
 26. the inter-relationship between Kilo Volt Peak (kVp) and Milliamperage (mA) and Time (seconds)
 27. variables affecting exposure factors and how to manipulate exposure factors for the examination and the individual as appropriate
 28. automatic exposure controls where available and their use
 29. the technical and diagnostic quality requirements of the image
 30. recognition of artefacts and their impact
 31. the importance of timely equipment fault recognition and local procedures for reporting these
 32. equipment capabilities, limitations and routine maintenance including the quality control processes required by the operator
 33. types of imaging equipment, images, image receptor systems that are suitable for imaging the different parts of the body
 34. the mechanical and drive controls of a mobile machine
 35. how to wear, store and maintain radiation protection equipment
 36. how and when to set up a temporary controlled area
 37. the positioning of the individual relevant to the examination
 38. orientation and appropriate use of anatomical legends
 39. procedures relating to recording, collating and preparing appropriate information, documentation, radiation doses and images for transfer or storage according to local protocols
 40. how to keep full, accurate and clear records in line with organisational procedures

SFHCI.A6

Produce conventional radiographic images for diagnostic purposes using mobile imaging equipment



External Links

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

SFHCI.A6

Produce conventional radiographic images for diagnostic purposes using mobile imaging equipment



Developed by Skills for Health

Version Number 2

Date Approved February 2019

Indicative Review Date February 2024

Validity Current

Status Original

Originating Organisation Skills for Health

Original URN SFHCI.A6

Relevant Occupations Health Professionals

Suite Clinical Imaging

Keywords radiography; x-ray; diagnostic; clinical; images; mobile; controlled; area
