SFHR7
Check parameters for individual patient treatment for basic calculations and standard plans

Overview

This standard covers the checking of treatment parameters, which may include isodose distributions, for individual patients, this applies to the use of megavoltage, orthovoltage, superficial x-rays, electrons and brachytherapy (sealed sources). Basic calculations and plans may be checked by a suitably competent person working to protocols established by a Medical Physics Expert.

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

SFHR7

Check parameters for individual patient treatment for basic calculations and standard plans

Performance criteria

You must be able to:

- P1 assess relevant clinical information, patient measurements, set up data and images for consistency and completeness
- P2 check the planning target volume and critical structures to ensure that they have been adequately and accurately defined
- P3 review the treatment plan to ensure that there are no limitations or inconsistencies that would compromise adequate treatment
- P4 use alternative data and systems to recalculate and validate dosimetry and investigate any discrepancies outside pre-determined tolerances
- P5 amend the plan where required for accuracy and completeness
- P6 review any deviations from the protocols and take appropriate action
- P7 record, collate and check for accuracy and reproducibility all relevant data, then transfer it according to local protocols
- P8 recognise where help/advice is required and seek this from appropriate sources

SFHR7

Check parameters for individual patient treatment for basic calculations and standard plans

Knowledge and understanding

You need to know and understand:

K1 relevant departmental protocols and policies and their application
K2 the roles and responsibilities of other team members
K3 relevant pathology and regional functional and sectional anatomy
K4 the capabilities and limitations of treatment machines
K5 the utilisation of images and other patient related data in treatment planning, including virtual simulation
K6 relevant principles of radiation physics relating to calculation of dose distributions including local application of dosimetry methodology
K7 relevant treatment planning algorithms and their limitations
K8 the use of treatment planning systems
K9 relevant acceptable dose limits to the planning target volume and to organs at risk for disease sites
K10 the data required for treatment calculation
K11 how to critically appraise treatment plans against planning/patient information
K12 the range and extent of independent checks required
K13 verification methods and techniques and how to apply them

SFHR7
Check parameters for individual patient treatment for basic calculations and standard plans

Additional Information

External links

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

Dimension: HWB7 Interventions and treatments

SFHR7

Check parameters for individual patient treatment for basic calculations and standard plans

Developed by	Skills for Health
Version number	1
Date approved	June 2010
Indicative review date	June 2012
Validity	Current
Status	Original
Originating organisation	Skills for Health
Original URN	R7
Relevant occupations	Health, Public Services and Care; Medicine and Dentistry; Nursing and Subjects and Vocations Allied; Healthcare and Related Personal Services
Suite	Radiotherapy
Key words	radiotherapy, cancer