

## SFHRT11

Advise on the suitability of existing, new and emerging technology and materials for routine custom made devices



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### Overview

This standard is concerned with keeping up to date with developments in technology and materials for routine custom made devices and advising colleagues, the prosthetist/orthotist/seating clinician and managers about the benefits and advantages of such technology and materials. Suitability refers to indications and contra-indications for use in custom made devices. Users of this standard will need to ensure that practice reflects up to date information and policies.

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### Performance criteria

*You must be able to:*

- P1 establish the needs of the enquirer in relation to existing, new and emerging technology and materials for routine custom made devices
- P2 convey relevant features and advantages of the technology and materials matched to the needs of the enquirer
- P3 provide information and advice in a suitable format using terms and references which comply with accepted conventions
- P4 provide clear, accurate and relevant information to answer any technical questions
- P5 provide information and advice within your competence and area of responsibility and refer the enquirer elsewhere when that competence is exceeded
- P6 actively listen to the enquirer's reactions to the advice and information provided and take steps to clarify and confirm that their needs have been met
- P7 ensure that any technical information provided conforms to health and safety and any other relevant legislation and guidelines
- P8 provide information and advice in accordance with organisational requirements, agreed timescales and working arrangements

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### Knowledge and understanding

*You need to know and understand:*

- K1 the reasons for maintaining records throughout the process and of clearly identifying the products during the manufacturing process
- K2 the organisational procedures and requirements for the recording of information about incoming work, work in progress and work delivered, and the purpose of this
- K3 quality audit systems, their purpose, nature and procedures, impact of the relevant regulatory body, currently the Medicine and Healthcare Regulatory Authority, on the recording of incoming work, the detailed design and manufacturing specification and the recording of materials and processes
- K4 the principles of quality assurance, processes and procedures for quality assurance in your workplace
- K5 the methods used for setting and calibrating equipment and of testing that this is correct
- K6 the effects of modifying manufacturers' components and products to meet production/usage requirements on the physical properties of the components/products and the legal implications
- K7 the relevant regulatory body, currently the Medicine and Healthcare Regulatory Authority, in monitoring the progress of devices through the production process
- K8 health and safety at work legislation and related procedures and liability, principles of, and how to apply legislation and regulations
- K9 the characteristics, properties and the processing of the following commonly used materials:
  - K9.1 metals;
  - K9.2 plastics: thermoforming, thermosetting, composites;
  - K9.3 wood;
  - K9.4 leather;
  - K9.5 plaster of Paris;
  - K9.6 adhesives;
  - K9.7 fabrics;
  - K9.8 foams;
  - K9.9 other materials
- K10 the following:
  - K10.1 hand tools: their selection, use and maintenance;
  - K10.2 measuring instruments: use and methods of application;
  - K10.3 machine tools: selection, installation, use and maintenance;
  - K10.4 welding processes and equipment for metals and plastics;
  - K10.5 sewing machines: selection, use and maintenance;

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- K10.6 general equipment: ovens, compressors, vacuum formers, fume and dust extraction apparatus;
- K10.7 workshop layout;
- K10.8 health and safety regulations and practice;
- K10.9 computers, including CAD/CAM
- K11 the musculo-skeletal system
- K12 anatomical terminology in relation to prosthetics/orthotics/special seating
- K13 the pathological conditions giving rise to prosthetic/orthotic/special seating provision and the relevant terminology
- K14 communication methods and techniques and how to achieve effective communication with enquirers

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## Additional Information

### External links

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: Core 1 Communication

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**Developed by** Skills for Health

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**Version number** 1

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**Date approved** June 2010

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**Indicative review date** June 2012

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**Validity** Current

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**Status** Original

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**Originating organisation** Skills for Health

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**Original URN** RT11

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**Relevant occupations** Health and Social Care; Healthcare and Related Personal Services

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**Suite** Rehabilitation Technical Services

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**Key words** prosthesis, orthoses, seating, materials, technology, development