Carry out non-routine modifications to custom made devices



Overview

This standard is concerned with responding to feedback from the service user to make non-routine changes, as required, for improvement to the cosmesis, comfort and function of the device. 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 confirm that the device and supporting documentation are for the same service user
- P2 effectively clean, and decontaminate if necessary, the returned device and identify from the instructions the modifications that are required
- P3 check the returned device for loosening or movement of joints which may have occurred during the initial fitting and make any adjustments which are necessary
- P4 carry out the non-routine modifications required to meet the prescription and ensure that they do not conflict with the manufacturers specification
- P5 identify and report any work required that indicates an anomaly in the provision of the rehabilitation technical service
- P6 check the modified device to ensure that it:
 - P6.1 complies with the prescription and design
 - P6.2 is clean
 - P6.3 is free of defects
- P7 use working methods and systems throughout the process which:
 - P7.1 promote health and safety
 - P7.2 reduce the risk of infection and contamination
 - P7.3 are consistent with the assessed risks
- P8 clearly and accurately identify the device with the service user's unique reference and date of modification
- P9 make complete, accurate and up-to-date records relating to modification of the device and store records in the correct location consistent with relevant legislation
- P10 package the device safely for despatch and return it to the relevant person at the agreed time

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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;
 - K10.6 general equipment: ovens, compressors, vacuum formers, fume and dust extraction apparatus;

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K10.7 workshop layout;

K10.8 health and safety regulations and practice;

K10.9 computers, including CAD/CAM

- K11 the roles and responsibilities of the interdisciplinary team
- K12 ethical considerations in rehabilitation technical services
- K13 prosthetics/orthotics/special seating care systems in the UK
- K14 the musculo-skeletal system
- K15 anatomical terminology in relation to prosthetics/orthotics/special seating
- K16 the anatomical planes and reference points of the body
- K17 the following in order to fabricate prosthetic/orthotic devices:
 - K17.1 the interaction of anatomical joints and prosthetic/orthotic joints in relation to centre of joint rotation, ground reaction forces, alignment and forces applied to tissue
- K18 or
 - K18.1 the relationship of the pelvis, spine and knee, including tissue mechanics, in order to fabricate special seating systems
- K19 the following elementary mathematics and their application in relation to rehabilitation technical services:

K19.1 arithmetic:

K19.2 geometry;

K20 use of calculators and mathematical tables

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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: HWB9 Equipment to meet health and wellbeing needs

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