Optimise performance of healthcare equipment, medical devices, products and associated systems



#### **Overview**

This standard relates to optimising performance of equipment, medical devices, products and their associated systems. This may be achieved through calibration, routine preventative and corrective maintenance activities, safety checks, quality control testing and comparisons against reference standards and will be directed by the type and purpose of the item under test within the individual's own working context or by external contractors.

Individuals will be assessed against the standard within the scope of their normal work activity.

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 work within your level of competence, responsibility and accountability
- P2 apply appropriate health and safety measures and standard precautions for infection prevention and control relevant to the performance check, the type of equipment, medical device and /or associated systems within your work practice
- P3 perform tests using the appropriate protocols and procedures, reference materials and standards for measuring the required performance criteria in line with legislation and organisational requirements
- P4 compare results against expected measurement parameters to confirm operational status
- P5 check the validity and reliability of tests conducted and verify the operational effectiveness of the item under test
- P6 confirm that the item and associated systems under test are suitable and ready for intended use
- P7 take appropriate remedial action when performance parameters are below expectations and seek assistance if failure occurs on retesting
- P8 correctly identify any item or system that does not meet performance optimisation standards and take appropriate action to prevent inadvertent use
- P9 notify appropriate others of the performance tests, clearly stating the suitability of the equipment for use including the results from the range of performance parameters
- P10 complete and maintain records accurately, in a timely manner, in the required format and store in correct location in line with current legislation, guidelines, local policies and protocols

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# Knowledge and understanding

You need to know and understand:

- K1 your own level of competence, authority and specialist knowledge base
- K2 the range and capabilities, limitations and key properties of items and systems undergoing performance assessment within your area of responsibility
- K3 the range of issues affecting performance optimisation including location, environment, safety, consumables, risks and training requirements
- K4 the importance of measurement principles, procedures and the limitations of the performance checks used
- K5 how to apply appropriate health and safety measures, infection prevention and control and personal protective equipment relevant to the performance check and type of equipment and the environment used for testing
- K6 how to recognise factors which affect operational use and the importance of relevant reference materials, standards and procedures used in the performance testing and verification
- K7 how to access relevant data to assist with optimising performance and the selection of appropriate protocols and procedures, reference materials and standards for the testing and measuring performance parameters
- K8 the importance of checking for validity and reliability of performance tests conducted
- K9 the type, range and level of detail of data required to enable a decision on effective performance
- K10 where appropriate, the importance of comparing test data against reference ranges to confirm effective performance
- K11 the current national legislation, guidelines, local policies and protocols which affect your work practice
- K12 the policies and guidance that clarify your scope of practice, accountabilities and the working relationship between yourself and others

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## **Additional Information**

**External Links** 

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

Dimension: EF1 Systems, vehicles and equipment

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