Use genomic information in clinical decision-making



Overview

This standard is about using genomic information when making clinical decisions about the management of an individual's healthcare. Genomic information may be generated from the person's own genome or that of a fetus, tumour cell or infective organism. Genomic information can be used to diagnose a genetic condition, type of cancer or infection; to monitor disease response; to personalise treatment and to make predictions about disease susceptibility. Genetic technologies, which are used to generate genomic information, may involve the direct analysis of genetic material (nucleic acid (DNA/RNA), chromosomes) or genomic biomarkers. The analysis may be on a single gene, multiple genes or encompass the whole genome. This standard includes interpreting genomic information in order to determine a category of risk and to inform clinical management choices. This can include information from laboratory tests, direct to consumer tests or point of care tests. This is a standard which may be generally applicable to healthcare staff in a wide variety of roles. 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 accurately interpret any test reports presented to you within the limitations of your own role, knowledge, skills and experience
- P2 access specialist advice to assist you with the interpretation of test reports as required
- P3 access reliable up-to-date guidance, support and information to assist you in the clinical management of individuals appropriate to your area of practice
- P4 use genomic information to inform clinical decision making appropriate to your role including commencing or changing treatment
- ensure that any advice about genomic information you give is within the limits of your role, responsibility, knowledge and experience
- P6 communicate appropriate genomic information to other healthcare staff in the referral pathway as required and agreed with individuals in your care

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Knowledge and understanding

You need to know and understand:

- K1 common genetic and genomic terminology and its meaning, including common notation used in reports of genomic tests
- K2 that genomic information can relate to the person's own genome or that of a fetus, a tumour cell or an infective organism
- K3 the types of normal and pathogenic variation found in the human genome
- K4 that environmental or lifestyle factors may interact with the genome in the development of conditions
- K5 the range of technologies available to generate genomic information
- K6 the clinical utility and reliability of tests including direct to consumer tests
- K7 how test results can include findings ranging from clinically significant to insignificant or where the clinical effect is currently not known
- K8 that test results may generate incidental findings, some of which may be clinically significant and may have possible implications for family members
- K9 how the clinical and research evidence which underpins the interpretation of genomic tests is gathered and how this information can be population specific
- K10 that test results generated using genetic technologies may need to be used in conjunction with other information to confirm a clinical condition
- K11 where and how to access reliable guidance, support and information to help you interpret and communicate the genetic data
- K12 how genomic information can inform clinical decision-making:
 - K12.1 in relation to the prescribing of a drug
 - K12.2 as a guide to prognosis
 - K12.3 for risk stratification
 - K12.4 in relation to treatment choices
- K13 effective communication skills and strategies consistent with levels of understanding, background, culture and preferred ways of communicating of individuals in your care

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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: HWB6 Assessment and treatment planning

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