Purpose of Screening

Screening is the process of identifying healthy people from within the population who have an increased chance of a medical condition or a disease.

The Screening Process

Most of the people within the group that meets the programme’s criteria will pass through the screening test (i.e. they have a low chance of having the condition been screened for). The people left will have a higher chance of having the condition and further investigations will be offered to these people. Confirmatory diagnostic tests will be required - however the individual will have to make a personal choice about whether to have further tests, treatment, advice or support.

Limitations

Ethics can present a challenge, as the programme tests apparently healthy individuals. It must be ensured that these people receive guidance to make an informed choice and must be given support. Expectations of the patient must be realistic about what the programme can do – screening does not guarantee protection or that the condition will not develop after testing. Also, all screening tests will produce some false positive and false negative results.

Purpose of Screening Programmes

Screening is designed to identify those people who have the early stages of a disease or an increased chance of developing a disease or condition. The purpose of screening includes:

- To save lives by treating disease in their early stages, thereby increasing the survival chances of the patient
- Improving the quality of the patient’s life through early identification
- Reducing the chance of developing the disease/halting disease progression by allowing the patient to make life changes
- Saving money for the NHS by treating in early stages rather than later, complicated stages
- To aid in meeting NHS targets for disease elimination/detection

Figure 1: Public Health England Guide to the Screening Process

Screening Programmes

Antenatal/Newborns

- Sickle cell and thalassaemia
- Foetal abnormality
- Infectious disease in pregnancy
- Newborn and infant physical examination
- Newborn blood spot
- Newborn hearing screening

Young person and adults

- Eye problems in diabetics
- AAA (abdominal aortic aneurysm)

Precancerous cell changes

- Breast (women)
- Cervical (women)
- Bowel (men and women)

The above screening programmes all have individual criterion that individuals must meet before they are eligible to participate in the screening process.