

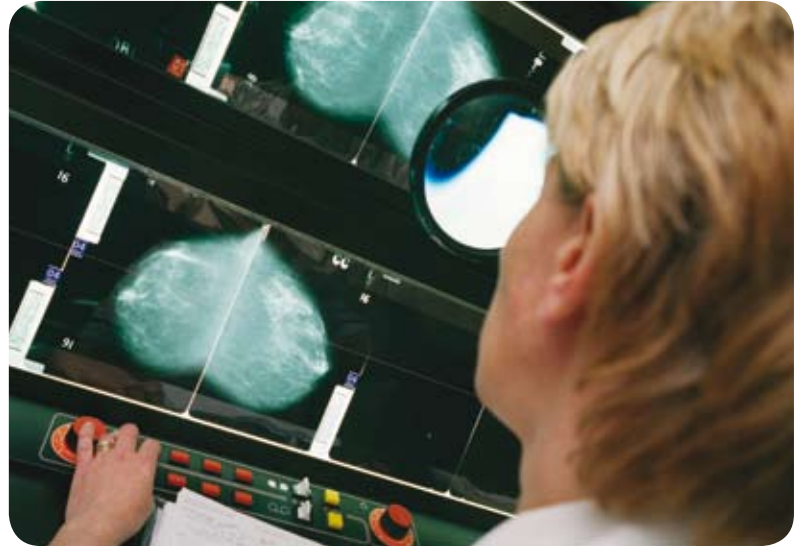


Screening Case Study

Detecting serious conditions early gives the opportunity to start effective treatment or intervention before the disease or condition progresses. The NIHR HTA programme's research portfolio has played an integral role in the development of UK screening services over the past decade...

Background

The NHS has a number of national screening programmes in place that are proving successful for the early identification of diseases and conditions including breast cancer, bowel cancer, cervical cancer, cystic fibrosis, sickle cell & thalassaemias, Down's syndrome, and chlamydia.



In 1996 the National Screening Committee (NSC) was created to assess proposed new screening programmes against a criteria based on the internationally recognised Wilson and Junger principles covering the condition, the test, the treatment options, and effectiveness and acceptability of the screening programme. The NSC advises government health ministers on all aspects of screening policy.

Since its introduction, the NSC has frequently based its advice to ministers on HTA reports. The evidence to support or refute particular screening programmes is often limited because of the complex issues involved and sometimes by the rarity of the conditions being screened for. The NSC relies heavily upon providers of independent scientific research, particularly the HTA programme, to inform much of its advice. Indeed, the NSC website states that the work of the HTA programme provides the single most important and largest influence on its work. www.nsc.nhs.uk/uk_nsc/uk_nsc_ind.htm

Adding to the evidence base

By 2007 the HTA programme, part of the National Institute for Health Research (NIHR), has invested more than £13 million in 64 screening-related research projects, 44 of which have been published in its monograph series (12% of the 360 titles it has published to date), and 20 of which are ongoing. HTA research into screening covers four broad categories: antenatal and neonatal screening, screening young children, screening for cancers, and screening in other priority disease areas such as sexually transmitted infections (STIs), diabetes and heart disease. Several of the HTA programme's screening projects have been commissioned directly in support of the National Screening Committee.

HTA reports have informed crucial policy decisions in health areas such as sickle cell and thalassaemias, cystic fibrosis, chlamydia, Down's syndrome and vascular risk, where national screening programmes are now in place or being developed. HTA research has been important in helping the NSC to decide when screening should and should not be offered, as well as informing wider decisions about the best tests and procedures that screening systems should use. HTA studies have also helped to establish what areas need further investigation, as well as clarifying how research should be carried out to best meet the information needs of the Committee.

Antenatal and neonatal screening

Half of the HTA programme's portfolio of research into screening focuses on antenatal and neonatal screening and screening young children, reflecting the importance of these areas in national screening arrangements. The programme has commissioned 31 research projects in this area, including seven clinical trials. Research includes

continued from front cover.....

investigations of the effectiveness of screening for a number of genetic and chromosomal disorders such as Down's syndrome, Fragile X syndrome and sickle cell and thalassaemias, as well as hearing impairments, congenital heart disease and metabolic disorders. Research has also investigated the role of screening to prevent pre-term birth and antenatal screening to prevent group B streptococcus infection in early infancy.

Key research

1997: HTA programme funds a critical review of the role of neonatal hearing screening (Vol 1.10). Following the report the NSC recommends the introduction of universal screening using auto-acoustic technology to replace the existing distraction test.

1999: HTA report (Vol 3.11) finds that there is a case for developing screening programmes for sickle cell and thalassaemias. The national programme of screening for these diseases was introduced on the basis of the report.

2001: The NSC recommends that all pregnant women, irrespective of age, should be offered second trimester serum screening for Down's syndrome. Informed by evidence from HTA reports published in 1998 and 2000 (Vol 2.1 & Vol 4.16).

2003: NSC formulates its current policy for screening all women for Down's syndrome based on the HTA-funded Serum, Urine and Ultrasound Screening Study (SURUSS) (Vol 7.11).

Screening for cancers

The HTA research portfolio includes 13 projects commissioned to investigate screening for cancers, including three major clinical trials. In particular, the HTA programme has funded significant research projects related to screening for cervical cancer and prostate cancer, and these are playing an important role informing the development of the national screening programmes.

Key research

1997: Two HTA reports (Vol 1.2 & 1.3) into strategies of screening for prostate cancer inform the NSC decision that a national screening programme should not be introduced. A 1999 feasibility study (Vol 7.14) investigates different ways of recruiting patients to trials in the area, informing the development of the £20 million ProtecT trial (project ref. 96/20/99). ProtecT has now recruited over 1,200 patients, more than any other trial in the area.

1998: HTA research suggests there may be a role for HPV testing as part of the NHS Cervical Screening Programme (Vol 3.14) and a major clinical trial is subsequently funded (2001). The findings of the ARTISTIC trial will be published in mid-2008, informing ongoing NSC policy discussions.

2000: HTA research (Vol 4.18) makes the case for liquid-based cytology in cervical screening and the technique is subsequently integrated into the Cervical Screening Programme.

2005: HTA programme funds a clinical trial to investigate the use of automated image analysis for cervical screening samples (project ref. 03/04/02), building on the findings of an earlier review (Vol 9.13).



Screening in other priority disease areas

Research commissioned by the HTA programme has helped to expand the evidence base and inform policy in a number of other priority health areas including sexually transmitted infections and cardiovascular disease.

Key research

2003: The findings of an HTA study (Vol 7.31) into a new strategy for lowering blood pressure to prevent myocardial infarction and stroke are adopted by the Diabetes, Heart Disease and Stroke Prevention Project, and a Vascular Risk Management Programme is now being established.

2007: The Chlamydia Screening Studies project helps answer some of the biggest questions about screening for chlamydia infection in the UK, informing the development of the national screening programme (Vol 11.7). *All volume references relate to the Health Technology Assessment monograph series.*

A longer version of this document detailing the HTA programme's screening research portfolio in full is available to view or download via the HTA website, www.hta.ac.uk/casestudy

Written, designed and edited by Ruth Allen, NCCHTA Communications Team

NCCHTA, Mailpoint 728, Boldrewood, University of Southampton, Southampton SO16 7PX

tel: +44 (0)23 8059 5586 fax: +44 (0)23 8059 5639 email: hta@hta.ac.uk web: www.hta.ac.uk NHSweb: www.hta.nhsweb.uk