Celebrating 20 years of screening

NHS
Cancer Screening Programmes

Breast and cervical screening: The first 20 years

Introduction by Rt Hon Alan Johnson MP

Its great to be able to celebrate the successes of the NHS Breast and Cervical Screening Programmes which, over the last 20 years, have helped millions in this country. This anniversary allows us to pay tribute to all those involved in making such a huge difference to women's lives.

During my time as Secretary of State for Health, I have seen the devastation a diagnosis of cancer can cause but I have also witnessed first hand the difference so many dedicated NHS staff make to those individuals' lives, from screening through to eventual diagnosis and treatment.

World class cancer services are central to our vision for the NHS. It is our aim that, in years to come, even more women and men will be given the opportunity to benefit from the early detection of cancer. At the end of 2007 we published the Cancer Reform Strategy which underlined our commitment to the future of cancer screening. We announced the extension of the programme to women eligible for breast screening to those aged 47 to 73 over time, and promised to ensure cervical screening results would be made available within 14 days. In addition the NHS Bowel Cancer Screening Programme will be extended from the current age range of 60-69, to invite men and women up to the age of 75 from 2010.

The achievements outlined in this booklet are testimony to what can be delivered in just two decades. There are of course many challenges which lie ahead of us. But the NHS Cancer Screening Programmes has laid firm foundations which, I believe will enable us to continue to improve a gold-standard service that is already a world leader.

Rt Hon Alan Johnson MP
Secretary of State for Health

Introduction by Julietta Patnick CBE

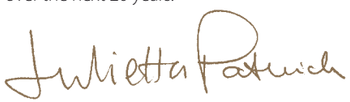
For over 20 years, I have worked with colleagues to develop the NHS Breast and Cervical Screening Programmes into services which today are estimated to save 1,400 lives every year through breast screening and 4,500 lives every year through cervical screening.

This has been in no small part due to the hard work and dedication of all the staff involved. The gratitude of those women and their families goes to all those who have played such an integral part in saving so many lives.

Thanks must also go to the cancer charities, many of whom have contributed to this booklet. They have worked tirelessly to highlight the importance of cancer screening and support individuals faced with a cancer diagnosis.

We are acutely aware of the many challenges we face in the future. The risk of breast cancer increases with age and we must ensure that all women understand this and seriously consider their invitation to participate in the programme, and continue to participate when beyond invitation age. We also need to ensure women understand that attending cervical screening is important. This is especially true among 25-35 year olds – a group of women where there is a concerning decline in those attending cervical screening. The arrival of the HPV vaccine for school-aged girls ties in with the beginnings of testing for HPV in the screening programme. Communicating messages about HPV and its relationship to cervical cancer is a new challenge for us. And finally, a challenge across both programmes is to increase the uptake of both breast and cervical screening among black and minority ethnic communities.

I am confident that the NHS cancer screening programmes will continue to play a central role in the prevention of and early detection of cancer in England. Their importance has been underlined with the introduction of the NHS Bowel Cancer Screening Programme. This has drawn experience from both the breast and cervical programmes. Its introduction will reduce the death toll from another form of cancer this time in men as well as women. I look forward to the progress we will make over the next 20 years.



Julietta Patnick CBE, Director,
NHS Cancer Screening Programmes

The story of breast and cervical screening

Sir Muir Gray, CBE MD

Introducing a national health screening programme which targets a specific part of the population, with apparently no symptoms of any disease, is a major challenge. In today's world, with recent announcements of the planned introduction of screening for vascular diseases, we have the benefit of other more established screening programmes from which we can learn. Two such programmes are the NHS Breast Screening Programme and the NHS Cervical Screening Programme, which became routine twenty years ago, and which we celebrate today.

In the late eighties, Professor Sir Patrick Forrest, eminent consultant breast surgeon from Edinburgh reported on the results of an expert committee which he chaired. It was established to determine the value of implementing routine breast screening among women. In his report presented to ministers, he concluded that: 'Screening by mammography can lead to prolongation of life for women aged 50 and over. There is a convincing case on clinical grounds for a change in UK policy on the provision of mammographic facilities and the screening of symptom-less women.'

He also reported that the necessary back-up services would need to be provided to assess the abnormalities detected at screening. This was the 'tipping-point'. In March 1987 the NHS Breast Screening Programme was established and it began inviting women in 1988.

The history of cervical screening is somewhat different however, because already in the mid 1960s, health services were providing women with regular smear tests. Yet the difficulty with this was that women at greatest risk were not necessarily being tested, and the follow up procedures for those who had been tested positive were inefficient.

In 1988, the Department of Health sought to resolve this and introduced more sound and systematic 'call and recall' procedures to ensure the maximum number of women possible were invited routinely to screening.

Both programmes are now overseen by local quality assurance teams and have regularly reviewed guidelines to monitor standards and to ensure that as technology develops, better screening practices are introduced.

Despite the obvious achievements of the past two decades, today's lifestyles and changing attitudes bring new challenges. As we strive for continuous improvement in screening, we need to focus our attention on ensuring the inclusion of marginalised women, for example, those for whom English is not their first language, or for those with learning or physical disabilities, who may need specialist help to participate in screening.

The breast and cervical screening programmes are real success stories. We owe a great deal to the thousands of health professionals around the country who were instrumental in setting them up and who today play a vital role in delivering two of the best screening programmes for women in the world.

Sir Muir Gray, CBE MD
Programme Director, National Screening Committee 1996-2007

Screening milestones

Breast

1985 Minister for Health Ken Clarke MP convenes the Forrest Committee chaired by Professor Sir Patrick Forrest to report on screening for breast cancer

1986 Forrest Report published and concludes that 'screening by mammography can lead to prolongation of life for women aged 50 and over'

1988 Breast screening programme begins inviting women in England aged 50–64 for screening once every three years

1989 Quality Assessment Reference Centres established in all regions

1991 Advice around 'breast self-examination' is replaced by 'breast awareness'

1995 Department of Health announces the introduction of two view mammography for the first screening round and creates a standardised range of optical density

1997 The quality assurance structure for the breast screening programme is revised and strengthened following the Exeter and the Kent & Canterbury reports

1998 The Chief Medical Officer and Chief Nursing Officer issue guidance that clinical breast examination is not a suitable technique for screening and should not be carried out

2000 NHS Cancer Plan announces the extension of two view mammography to all screens by 2003 and increases the upper age limit for screening from 64 to 70 by 2004

2007 Cancer Reform Strategy announces that breast screening will be extended to nine screening rounds and a guarantee that women will have their first screen by age 50. Roll out of direct digital mammography announced

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Cervical

1988 Computerised call and recall established and first external quality assessment schemes for laboratories

1994 Borderline guidelines introduced. National co-ordination introduced

1995 Evidence published based on national audit data that cervical screening reduces the incidence of and mortality from cervical cancer

1996 First overall Quality Assessment Guidelines for the Programme introduced. Reporting guidelines published and colposcopy programme management introduced

1997 The quality assurance structure for the cervical screening programme is revised and strengthened following the Exeter and the Kent & Canterbury reports

2000 Piloting of Liquid Based Cytology (LBC) and Human Papilloma Virus (HPV) triage begin

2003 Programme switches to LBC, standardises the frequency of screening and increases age of first invitation from 20 to 25

2007 Cancer Reform Strategy announces that all women will receive the results of their cervical screening test within two weeks by 2010

Case studies

Lynette Hopkins

When I was told I had breast cancer I was completely devastated. I had recently attended my first breast screening but the thought hadn't even crossed my mind that something might be wrong. I had only been retired from my job in banking for a few months before I was diagnosed. Nothing prepares you for the shock of being told you have cancer. I was looking forward to retirement but the news really turned my world upside down.

"Luckily the screening caught my cancer in its early stages. After surgery, an intense course of radiotherapy and months of nervous waiting I was finally declared disease free. The screening staff were really great and made the whole experience much more bearable. I just feel so fortunate that the cancer was noticed early."

Having been told I was cancer free I decided that I wanted to help other women who had been in my position who might be in need of support and friendship. I co-founded a support group for ladies in the Bristol area called "Bosom Buddies." We have had hundreds of women pass through over the last ten years and raised thousands for breast cancer projects. At "Bosom Buddies" we feel that the screening programme is vital to saving the lives of thousands of women every year.

Alison Davidson

I have attended regular cervical screening from the age of twenty but went for an additional smear test when my husband and I decided to try for a baby. I only realised something might actually be wrong when I returned from my wedding anniversary ski trip to find a letter asking me to see my doctor immediately. The doctor told me I had abnormal results and sent me for a colposcopy at the Royal Surrey Hospital. It was then I was diagnosed with cervical cancer.

When I went for surgery at the Royal Marsden Hospital I had the shock of my life. The doctors told me I was pregnant. The surgery went ahead despite concerns over the pregnancy and, fortunately, was successful. Following the birth of my son I had further surgery to remove lymph nodes. I have now been given the all clear and can get on with my life with my husband and young son. The screening programme made such a difference to my life but also my son's life. I am just so grateful the cancer was picked up when it was. Without the screening programme I may not have been able to watch him grow up.

Snober Bangu MBE

I was diagnosed with breast cancer eight years ago in the summer of 2000. When the doctor told me I had a malignant growth in my right breast I went numb with shock. I was in my fifties, fit and healthy and enjoying my job and life in general. Although the surgeon was very supportive and sympathetic the whole experience was still extremely hard, especially telling my children.

Luckily the cancer was caught quite early and I had a lumpectomy followed by six weeks of radiotherapy and five years on tamoxifen. I was fortunate enough to avoid having chemotherapy. The whole process was very fast and efficient; it was only ten days between diagnosis and my surgery. The operation was a success and I have been clear ever since. My experience was very traumatic but my speedy recovery was only possible because the cancer had been caught early. Regular screening detected my cancer long before I would have noticed a lump myself. Women in the UK must go for screening. This is a programme that really saves lives. It did mine.

Screening facts and figures

Breast

- The average uptake among women invited for breast screening is 75%
- About 5 million[1] women have been screened following their first invitation since the programme began in 1988
- Throughout the life of the programme a total of over 18 million mammograms have been taken
- Since the programme began over 100,000 cancers have been detected.[2] This equates to approximately 5,000 cancers per year, and over 100 cancers detected each week.
- Of these 100,000 cancers detected, about 80% were invasive cancers[3]
- The NHS Breast Screening Programme spends about £3000 for every year of life saved[4]
- The International Agency for Research on Cancer (IARC) research implies a reduction in breast cancer mortality of about 35% for women who are screened regularly.[5]

Cervical

- About 64 million screenings in the target age group have taken place in the past 20 years[6]
- In the past 20 years over 400,000 significant abnormalities[7] have been detected through the programme
- The average coverage achieved by the programme is 81%[8]
- Cervical screening saves an estimated 4500 lives each year[9]
- Cervical screening can prevent around 75% of cancer cases in women who attend regularly[10]

1 This figure includes figures for the period 1988-89 to 1990-91 which have been estimated for England from total UK figures
2 Numbers of cancers detected from 1988/9-1990/1 is an estimated figure due to insufficient data
3 Number of invasive cancers detected from 1988/9-1990/1 is an estimated figure due to insufficient data
4 Taken from 'Screening for breast cancer in England: past and future', February 2006, NHSBSP Publication No 61
5 Ibid
6 Target age group is 20-64 in the period 1988/9-2003/4 and 25-64 in the period 2004/5-2006/7
7 'Significant abnormality' means the detection of severe dyskaryosis or worse, which may or may not be cervical cancer
8 Average is calculated from 1994/5 when comparable figures are available
9 Peto, J. *et al.* The cervical cancer epidemic that screening has prevented in the UK. Lancet 364, 249-256 (2004)
10 P Sasieni, J Adams and J Cuzick, Benefits of cervical screening at different ages: evidence from the UK audit of screening histories, British Journal of Cancer, July 2003
* Statistics are sourced from the Department of Health and Information Centre statistical bulletins unless otherwise stated

The most recent developments in cancer screening

Bowel cancer

The NHS Bowel Cancer Screening Programme was launched in 2006 for those aged 60-69 and is the first ever screening programme to target both men and women. It is currently being rolled out across the country and will achieve nationwide coverage by the end of 2009.

The introduction of this screening programme is a major development. With bowel cancer representing the third most common cancer in the UK,it is the second leading cause of cancer deaths.Over 16,000 people die from it each year, but early detection through regular bowel screening reduces the risk of dying from bowel cancer by 16 per cent.

The faecal occult blood test (FOBt), which forms the initial test is carried out by individuals in their own homes and posted back to screening laboratories for processing. Around two in 100 people will receive an abnormal result and will be referred for further investigation. This is usually a colonoscopy.

Whilst individuals aged 70 or over are currently not called for screening they can request a test kit by contacting the programme. This, however, will change with the recent announcement made in the Cancer Reform Strategy launched in December 2007. In future people in England will also benefit from an extension to the age range for bowel screening as by 2010, those aged 70-75 will also be invited routinely as part of the programme. This will bring in an additional one million more men and women each year into the programme.

For further information on the NHS Bowel Cancer Screening Programme please visit:

www.cancerscreening.nhs.uk/bowel

Prostate cancer

Today in England, there is no national screening programme for prostate cancer. Instead we have a Prostate Cancer Risk Management Programme which aims to provide men who are concerned about their risk of developing prostate cancer with clear and balanced information.

All screening programmes are based on an assessment that more good than harm will be achieved through their implementation. Until there is clear clinical evidence to show real benefit can be gained from routine prostate screening, the NHS will not be inviting men who have no symptoms for prostate cancer screening.

The current Prostate Cancer Risk Management Programme provides information about the Prostate Specific Antigen (PSA) test and highlights the pathway that might be followed if PSA is raised. A raised PSA level can be a sign of prostate cancer, although in the majority of cases, is caused by something less serious such as an inflamed prostate. The current technique available to screen for prostate cancer has not yet been proven to reduce mortality, which means that it cannot yet be used as part of a national screening programme. Over diagnosis and over treatment impact on both the emotional and physical well-being of an individual.

Worldwide there are a number of studies underway researching the value of screening for prostate cancer. The NHS will monitor scientific progress to determine whether or not a national programme would be feasible in the future.

For further information on the NHS Prostate Cancer Screening Programme please visit:

www.cancerscreening.nhs.uk/prostate

Working in partnership

Harpal Kumar,

Chief Executive, Cancer Research UK

"Screening matters because we know it saves lives. The twentieth anniversary of the NHS Breast and Cervical Screening Programmes is a time for us to both celebrate the successes of the past and look forward to the exciting developments of the future.

"Breast and cervical screening have helped save the lives of thousands of women in Britain over the past two decades. The NHS should be justly proud of this and of having some of the most systematic screening programmes anywhere in the world. Thanks to ongoing research, major advances like digital mammography and liquid based cytology mean that these cancers can now be detected more accurately than ever before.

"Cancer Research UK is hugely supportive of the new bowel cancer screening programme, which has the potential to save even more lives. For the first time, men will be included in a national cancer screening programme and we look forward to seeing the programme realise its full potential as it is rolled out."

Samia al Qadhi,

Chief Executive, Breast Cancer Care

"Together with being breast aware throughout your life, attending screening is one of the most important health steps you can take. Countless women have benefited from the service over the past 20 years. Now the challenge is to build on this success and increase participation from women in all communities."

Kim Hardwick,

Senior Nurse, Cancerbackup

"Cancerbackup continues to recognise the vital role the NHS Cancer Screening Programmes plays in the prevention and early detection of a number of cancers saving thousands of lives each year. It is important for everyone to attend screening appointments when invited. In this way, more and more cancers can be prevented or caught early, greatly improving the chances of successful treatment and recovery. Screening programmes have dramatically reduced deaths from breast and cervical cancer and similar results are expected from the bowel cancer screening programme being rolled out across England over the next two years.

"Automatic invitations for screening programmes have upper age limits after which patients are not routinely invited back for further appointments, however Cancerbackup would encourage people to request to continue their screening after they have passed the age limit."

Pamela Morton,

Director, Jo's Trust

"The impact of the NHS Cervical Screening Programme's call and recall system introduced twenty years ago cannot be overstated; this system has been successful in saving thousands of women's lives and continues to do so. Congratulations!

"The development of vaccines that protect against the virus that causes 75% of all cervical cancers represent a new breakthrough in the prevention of cervical cancer so the challenge for the future will be to ensure that eligible women throughout the UK are aware and take up the benefits of NHS organised screening and vaccination programmes. Jo's Trust wishes the NHS Cancer Screening Programmes continued success in the future."

Jeremy Hughes,

Chief Executive, Breakthrough Breast Cancer

"Breakthrough Breast Cancer congratulates the NHS Breast Screening Programme on 20 successful years of providing a vital, life-saving service. Regular breast screening plays a key role in improving the survival chances for women with breast cancer because the earlier the disease is detected and treated the better the chance of a successful outcome.

"Breakthrough has been campaigning for continuous improvements to the NHS Breast Screening Programme for several years. Our Screening Saves Lives campaign most recently helped ensure additional resources are made available to the Programme to cope with future demands on the service. Breakthrough has also been campaigning for a review of how breast screening is organised for women over 70 and we are delighted by the government's announcement that the upper age limit for automatic invites to breast screening appointments is to be extended to include women up to the age of 73.

"Breakthrough looks forward to supporting the NHS Breast Screening Programme in achieving further improvements to ensure that all eligible women receive the best possible breast screening service."

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