CervicalCheck
THE NATIONAL CERVICAL SCREENING PROGRAMME

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Programme Report

1 September 2009 – 31 August 2010

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Introduction from the National Director, National Cancer Control Programme

The National Cancer Control Programme (NCCP) was established in 2007 to provide the necessary governance, integration, leadership, operational and core support services to create the essential framework for Cancer Control in Ireland. The NCCP is now responsible for all components of cancer control in Ireland, including cancer screening. In April 2010, the National Cancer Screening Service joined the National Cancer Control Programme.

As CervicalCheck has completed the first three-year screening round, I acknowledge the quality of the programme and the opportunity that it provides to women in Ireland to access this excellent service. The CervicalCheck programme is a highly effective screening model and strong performance is demonstrated in the programme statistics published in this report for the period September 2009 to August 2010 and indeed to date.

I wish to pay tribute to each member of the management and staff within the programme for the role they have played in building the different delivery components in recent years, including smeartaking services, cytology, colposcopy and histology.

I acknowledge their focus in delivering and maintaining a programme that is making a real difference to women's lives. Their achievements ensure that women in Ireland can access a quality-assured and world class cervical screening service and a chance, in some cases, to detect pre-cancerous cells and if so, to be treated in one of the 15 colposcopy clinics, where they will receive a standardised system of colposcopy care.

I wish to take this opportunity to thank all involved in developing a successful programme to date, including the women who participate and the medical community who provide an excellent service.

Dr Susan O'Reilly
National Director,
National Cancer Control Programme

Overview of the National Cancer Screening Service

The National Cancer Screening Service (NCSS) was established by the Minister for Health and Children in January 2007. The establishment followed the launch of 'A Strategy for Cancer Control in Ireland 2006' which advocates a comprehensive cancer control policy programme in Ireland by the Cancer Control Forum and the Department of Health and Children.

The strategy set out recommendations regarding prevention, screening, detection, treatment and management of cancer in Ireland, and recommended the establishment of the National Cancer Screening Service Board.

Governance of the former Irish Cervical Screening Programme (ICSP) Phase One was transferred to the Board of the NCSS on its establishment. The NCSS was responsible for the establishment of CervicalCheck – The National Cervical Screening Programme in September 2008.

On 31 March 2010 the Board of the NCSS was dissolved. On 1 April 2010 the NCSS joined the National Cancer Control Programme (NCCP), part of the Health Service Executive (HSE). The NCSS continues its work, operating as a business unit within the NCCP.

The functions of the NCSS are as follows:

- To carry out or arrange to carry out a national breast screening service for the early diagnosis and primary treatment of breast cancer in women.
- To carry out or arrange to carry out a national cervical screening service for the early diagnosis and primary treatment of cervical cancer in women.
- To advise on the benefits of carrying out other screening programmes where a population health benefit can be demonstrated.
- To advise the minister, from time to time, on health technologies, including vaccines, relating to the prevention of cervical cancer.
- To implement special measures to promote participation in its programmes by disadvantaged people.

The NCSS encompasses BreastCheck – The National Breast Screening Programme and CervicalCheck – The National Cervical Screening Programme.

The NCSS is currently developing Ireland's first national colorectal screening programme, for men and women aged 55-74. The NCSS is also developing a national diabetic retinopathy screening programme. Both programmes are scheduled for introduction in 2012.

Update from the Acting Director, National Cancer Screening Service

Majella Byrne
Acting Director
National Cancer Screening Service

On behalf of the National Cancer Screening Service, I am delighted to introduce this programme report of CervicalCheck – The National Cervical Screening Programme. This report provides screening statistics for the second year of the programme's operation, 1 September 2009 – 31 August 2010. In addition, the report provides an overview of activity and developments within CervicalCheck, up to the time of publication.

In 2007 in Ireland, there were 286 cases of cervical cancer and 83 deaths.

CervicalCheck became available to over 1.1 million eligible women aged 25-60 on 1 September 2008. The aim of CervicalCheck is to reduce the incidence and mortality rate of cervical cancer by detecting changes on the cells of the cervix before they become cancerous.

Over time, based on a target uptake of 80 per cent, a successful national, quality assured cervical screening programme, has the potential to significantly reduce incidence and mortality rates of cervical cancer in the screened population, by as much as 80 per cent.

Programme performance

Since its launch on 1 September 2008, CervicalCheck has proved successful, with on average 1,000 women availing of a free smear test per day. During its first year of operation, CervicalCheck operated an open access system of invitation, to ensure that the initial expected interest from women could be effectively accommodated. At that time, any woman who wanted to avail of a free smear test could arrange an appointment with a registered smeartaker of her choice. During its first year of operation, CervicalCheck provided free smear tests to 284,833 women.

As proven internationally, the next step was to introduce and establish an organised 'call, re-call' system of invitation. Further, following the first successful year of cervical screening it was essential that the programme focused on motivating those women who had not proactively attended for screening, by contacting them directly with an invitation for a free smear test, and encouraging them to attend.

On 1 September 2009, CervicalCheck moved to a 'call, re-call' system of invitation. Women needed a letter of invitation from CervicalCheck to avail of a free smear test with any of the over 4,600 smeartakers (doctors, practice nurses, Women's Health, Family Planning and Well Woman Clinics) registered with the programme. The move to 'call, re-call' ensured the programme could maximise uptake among eligible women aged 25 – 60, while managing demands on colposcopy services.

Following the move to a 'call, re-call' system of invitation, the second year of operation proved equally successful. During the reporting period (1 September 2009 – 31 August 2010) CervicalCheck provided 308,130 free smear tests to 279,877 women.

On 1 September 2010, CervicalCheck entered its third year of operation, the final year of the first three year screening round. To coincide, the programme moved to the third phase of encouraging participation among women with the introduction of direct programme entry (by smeartakers) of new eligible women, in addition to the ongoing issuing of call and re-call letters of invitation to women.

Direct programme entry was introduced to encourage all eligible women to participate in CervicalCheck, in particular those women considered 'harder-to-reach'. The move was in support of the aim of achieving 80 per cent coverage of the eligible population by the end of the second three-year screening round in 2014.

Smeartaking activity

CervicalCheck has registered over 4,600 smeartakers (general practitioners (GPs), practice nurses and other medical practitioners) in approximately 1,350 locations. From 1 September 2009 – 31 August 2010, the vast majority (93%) of women had their smear tests carried out in the primary care setting. Ninety one per cent of these women attended a GP practice. Almost eight per cent (7.99%) of women opted to have their smear test at a clinic other than a GP practice such as a Family Planning, Women's Health or Well Woman Clinic.

During the reporting period, CervicalCheck provided free smear tests to 279,877 women. In total, the programme processed 308,130 smear tests during the reporting period. Similar to last year, over 85 per cent of satisfactory smear test results in the period were found to be negative or normal. Of the remainder, 12.5 per cent showed low grade abnormalities and one per cent showed high grade abnormalities. As a result of an abnormal smear test or clinical indication, 16,811 women attended a colposcopy appointment for the first time. While the purpose of cervical screening is to detect changes on the cells of the cervix before they become cancerous, 145 women had a cervical cancer detected.

Programme developments

In December 2010, Dr Marian O'Reilly, the former head of cervical screening with the NCSS, retired. Dr O'Reilly was instrumental in the establishment of the former Irish Cervical Screening Programme Phase One and carried out pioneering work in Ireland around cervical screening, which helped lay the foundation for CervicalCheck – The National Cervical Screening Programme.

Following the retirement of Dr O'Reilly, a new management structure was established at CervicalCheck. John Gleeson was appointed programme manager and will oversee the continued delivery and development of the programme. Dr Gráinne Flannelly, former clinical director of colposcopy, was appointed clinical director of CervicalCheck. In this capacity, she provides clinical advice and support to the programme and management team. Dr Alan Smith provides support and advice to the programme on all public health and programme policy issues, in his role as medical director – screening policy, for the NCSS.

In May 2011, Tony O'Brien stepped down as director of the NCSS and associate director of the NCCP, to take up a new role with the HSE as director of clinical strategy and programmes and chief operating officer at the Special Delivery Unit, Department of Health. Tony was appointed director of BreastCheck in 2002 and led BreastCheck to nationwide expansion. He oversaw the establishment of the NCSS in January 2007 and the introduction of CervicalCheck to women nationwide in September 2008. Tony has been instrumental in ensuring women in Ireland are offered world class screening programmes, that operate in line with the highest international quality standards.

As deputy director, I took on the role of acting director of the NCSS in May 2011.

Conclusion

As CervicalCheck reaches the end of its first three-year screening round, I am immensely proud of the performance of the programme to date.

CervicalCheck has a challenging target of reaching 80 per cent of the eligible population of women aged 25-60, by the end of the second screening round in 2014. The programme is working hard towards achieving this.

Despite the positive response of women to the programme, complacency cannot be permitted. Cervical cancer is a preventable disease. Screening, combined with the introduction of the cervical cancer vaccine for schoolgirls, can make a considerable impact on the incidence and mortality rates of cervical cancer in Ireland.

Screening can only be effective when women continue to be screened regularly. A single smear test is not effective. A woman must return for a smear test every three to five years (depending on age) and continue returning until she reaches age 60.

CervicalCheck will continue to actively support both women and smeartakers, in significantly reducing the incidence and mortality of cervical cancer in Ireland.

Majella Byrne
Acting Director
National Cancer Screening Service

Message from the Programme Manager, CervicalCheck

John Gleeson
Programme Manager
CervicalCheck – The National Cervical Screening Programme

In its second year of operation, CervicalCheck continued to record high levels of screening, which matched the first successful year of operation. Such an achievement would not have been possible without the support of the smeartaking community.

CervicalCheck has registered over 4,600 smeartakers (GPs, practice nurses and medical practitioners) in approximately 1,350 primary care locations. CervicalCheck has worked closely with the medical community since the programme's development, through its implementation and delivery.

The programme has introduced a number of new developments, to further support and facilitate the medical community in its delivery of CervicalCheck.

In 2010 CervicalCheck introduced an online eligibility check, which enables smeartakers to quickly check if a woman is eligible for a CervicalCheck smear test (initial, repeat or re-call). The facility is available to all CervicalCheck-registered smeartakers though the programme website www.cervicalcheck.ie.

In autumn 2011, CervicalCheck will introduce two new online facilities for smeartakers – 'respond to failsafe' and a facilitated referral to colposcopy.

The 'respond to failsafe' facility will enable smeartakers to securely and promptly respond to requests from the programme for follow-up information on a woman. For smeartakers, the online facility will significantly reduce the amount of paperwork required, while providing better follow-up procedures for women who fail to attend a scheduled appointment.

In order to streamline the process and reduce the variations in waiting times, the programme will also implement a facilitated referral process to colposcopy. Based on the woman's location, waiting times and capacity at colposcopy services, CervicalCheck will recommend to a smeartaker to which colposcopy service a woman should be referred. For the woman, this process will ensure prompt access to colposcopy, while for the programme it will allow efficient management of capacity issues at individual colposcopy services.

The smeartaker training unit of CervicalCheck has responsibility for the co-ordination and delivery of all education and training initiatives for over 4,600 registered smeartakers on an ongoing basis.

The unit, led by Carol McNamara, national smeartaker training co-ordinator, facilitates learning through the delivery of accredited smeartaker training modules, in partnership with the Irish College of General Practitioners, the Royal College of Surgeons in Ireland, and the National University of Ireland, Galway. The unit also facilitates learning through the organisation of clinical updates and the development of related educational resources, including the recently updated 'Guide for Smeartakers' and a training DVD. The smeartaker training unit also facilitates information sessions for clerical and administrative practice staff.

CervicalCheck is committed to developing and providing access to resources for clinically responsible doctors and smeartakers, to facilitate competency and quality in all aspects of smeartaking.

The programme provides smeartaker training and clinical updates for experienced smeartakers and can facilitate training for those just starting out in practice. Taking a satisfactory smear test is an essential part of the programme. If a woman has a good experience of a CervicalCheck smear test, she is likely to return for her next smear test when called. During the reporting period, CervicalCheck processed 308,130 smear tests. Of these, just over one per cent (3,552) was considered unsatisfactory, which reflects the professionalism and skill of the smeartakers registered with CervicalCheck.

I would like to take this opportunity to pay tribute to each of the over 4,600 GPs, practice nurses and medical practitioners who support CervicalCheck daily, by delivering the programme to women nationwide. With their invaluable support, cervical screening in Ireland is delivered in an organised, and efficient manner. Working together to reduce the incidence of cervical cancer, I am confident that we can effectively change the cervical cancer landscape for women in Ireland.

John Gleeson
Programme Manager
CervicalCheck – The National Cervical Screening Programme

Message from the Clinical Director, CervicalCheck

Dr Gráinne Flannelly
Clinical Director
CervicalCheck – The National Cervical Screening Programme

Colposcopy services play a key role in cervical screening, by ensuring women with a screen-detected abnormality, are provided with the optimum care. The National Cancer Screening Service (NCSS) has made significant investments in 15 colposcopy services nationwide to increase capacity and support the needs of the CervicalCheck programme.

The 15 services that provide colposcopy support to the CervicalCheck programme are based in the following hospitals: The Adelaide & Meath National Children's Hospital, Dublin; St Finbarr's Hospital, Cork; Coombe Women & Infants University Hospital, Dublin; Louth County Hospital, University College Hospital, Galway; Kerry General Hospital, Letterkenny General Hospital, Limerick Regional Maternity Hospital, Mayo General Hospital, National Maternity Hospital, Dublin; Rotunda Hospital, Dublin; Sligo General Hospital, South Tipperary General Hospital, Waterford Regional Hospital and Wexford General Hospital.

Developments in colposcopy services

From 1 September 2009 – 31 August 2010, over 85 per cent of satisfactory smear tests taken were found to be negative, or normal. As the result of an abnormal smear test, or for clinical reasons, 16,811 women attended a colposcopy appointment for the first time, representing an increase of 6,717 women (67%) in comparison to the previous year. In addition, 30,884 women attended a follow-up appointment, compared to 9,200 women the previous year, representing an increase of 335 per cent.

Improving colposcopy services in Ireland has been a key priority for the CervicalCheck programme. The NCSS has set strict guidelines for referral to colposcopy, as outlined in the NCSS 'Guidelines for Quality Assurance in Cervical Screening' and the CervicalCheck Women's Charter (Appendix 1). The programme has a clear commitment to offer an appointment to women who need it, at a quality assured colposcopy service, within two weeks for urgent referrals, four weeks for high grade cell changes and eight weeks for low grade cell changes.

During the first and second year of operation, waiting times at some services were in excess of NCSS guidelines. As the programme nears the end of the third year of operation, I wish to acknowledge the significant progress that has been made, in ensuring timely access to colposcopy services for women. Average waiting times across the 15 colposcopy services have continued to improve and at time of publication (September 2011), waiting times at all 15 colposcopy services were within NCSS guidelines. This has ensured that women who need a colposcopy appointment are seen promptly, avoiding unnecessary anxiety, or delay in diagnosis.

Waiting times for access to a colposcopy service (September 2011):

- 1.5 weeks for urgent referrals (within the 2 week target).
- 3.4 weeks for high grade referrals (within the 4 week target).
- 6.6 weeks for low grade referrals (within the 8 week target).

The objective of any cervical screening programme is to detect and treat high grade abnormalities, which if left untreated, could progress to invasive cancer. During the reporting period, 7,546 treatments were performed at colposcopy, 95 per cent of which were performed as an outpatient under local anaesthetic. Invasive cancer was diagnosed in 145 women and pre-cancerous abnormalities were detected in 5,518 women. These figures represent a further significant increase on the previous year.

CervicalCheck is now in its third year of contractual agreement with the 15 colposcopy services, and defined clinical governance and management systems have been established. The NCSS has worked closely with all 15 colposcopy services, to ensure continuous improvement and adherence to NCSS guidelines. The colposcopy service is provided by clinicians who are certified by the British Society for Colposcopy and Cervical Pathology (BSCCP). In this report, national data is presented against quality key performance parameters for colposcopy, setting a framework for measuring improvement.

I wish to acknowledge the support of both the clinical and administration teams at each of the 15 colposcopy services that support CervicalCheck. Their commitment to a high standard of colposcopy service has ensured that women who require a colposcopy are guaranteed timely access to a standardised level of quality assured care. The results presented in this report could not have been achieved without the persistence and dedication of the staff at each of the 15 services.

Dr Gráinne Flannelly
Clinical Director
CervicalCheck – The National Cervical Screening Programme

Programme Updates

Smeartaking in primary care settings

The first contract for the provision of CervicalCheck smeartaking services in a primary care setting (GPs and clinics) ended on 31 July 2011. A second three-year contract was issued to more than 2,000 contracted GPs and clinics, commencing on 1 August 2011. The terms of the contract are largely unchanged. In total, over 4,600 doctors and nurses are today registered as CervicalCheck smeartakers, to provide smeartaking services to the programme.

Cytology services

Following completion of a public tender process in April 2010, the National Cancer Screening Service (NCSS) extended the existing contract with Quest Diagnostics Inc. for a further two years. In addition, Sonic Healthcare (Ireland) Ltd., through MedLab Pathology Ltd., was awarded a two year contract to provide cytology laboratory services for CervicalCheck.

Smear tests taken in Ireland as part of the CervicalCheck programme are streamed regionally by territory, so that individual smeartakers deal with only one of the two contracted laboratories. The smear test samples are sent for analysis to the contracted laboratory, where each sample is screened and then reported.

The public procurement process ensures that women in Ireland continue to receive a cervical cytology laboratory service that operates in line with the highest international standards, while maximising value for the Irish taxpayer.

Positive predictive values (PPV) for CervicalCheck

The positive predictive value (PPV) is considered a measure of the likelihood that a woman with a positive test truly has a pre-cancerous cervical abnormality. It is one of the most important diagnostic measures of a screening programme as it reflects the probability that a positive test has detected the underlying condition being tested.

During the reporting period, CervicalCheck recorded 77 per cent PPV for high grade abnormalities. While the PPV is lower than that reported in the previous year, the data available for analysis during the reporting period was more detailed and robust, thereby offering a more accurate representation of the PPV for CervicalCheck.

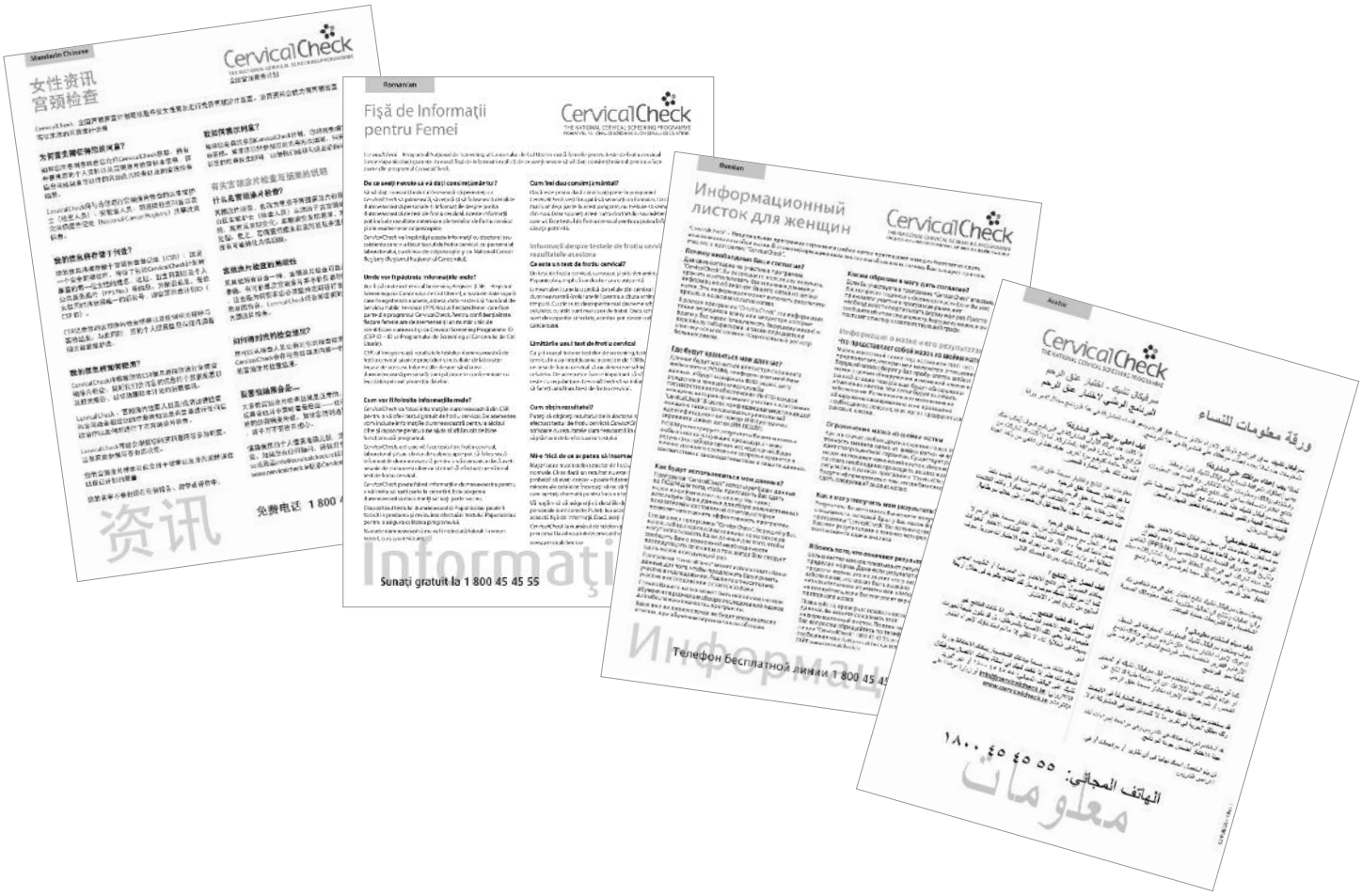
HPV testing

Persistent infection with human papillomavirus (HPV) can result in the development of cervical cancer. The presence of certain sub-types of HPV has been linked to underlying high grade cervical intraepithelial neoplasia (CIN). The introduction of tests for these viruses, as part of the cervical screening process, has been evaluated in recent years.

The NCSS has examined the possible benefits of HPV testing for the CervicalCheck programme and recommended the introduction of HPV testing for post-treatment surveillance at colposcopy. This will commence later in 2011.

The introduction of HPV testing will result in a HPV test carried out at six months and 18 months post-treatment at colposcopy. The outcome of HPV testing should help to identify women who are at increased risk of developing high grade cell changes or cervical cancer. In the majority of cases, this will reduce the need for 10 annual follow-up smear tests for women who are post-treatment. HPV tests as part of the CervicalCheck programme will be carried out in colposcopy clinics only. The HPV test, like all other tests as part of the CervicalCheck programme will be free of charge to women.

HPV testing as a primary screening tool will become important in the future, when much of the eligible population will have been vaccinated against the HPV virus.

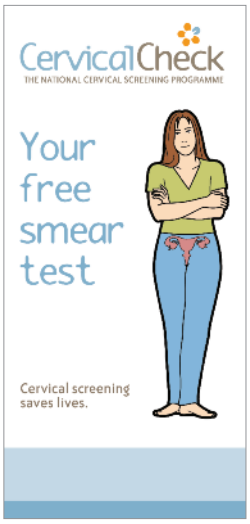


European Cervical Cancer Prevention Week

The fifth annual European Cervical Cancer Prevention Week (ECCPW) took place from 22-29 January 2011. As in 2009 and 2010, the NCSS partnered with the Irish Family Planning Association (IFPA), to distribute Pearl of Wisdom badges and help ensure maximum promotion of cervical cancer awareness. In total 20,000 badges were distributed to women nationally. The NCSS screening promotion team linked with family resource centres locally to organise information and awareness-raising sessions for women.

'Information Sheet for Women' now available in 11 languages

The 'Information Sheet for Women' which is offered to all women who attend for a CervicalCheck smear test, has been translated into Arabic, Chinese (Mandarin), French, German, Irish, Latvian, Lithuanian, Polish, Romanian, Russian and Spanish. The sheet provides information on the screening process to ensure women can make a fully informed choice before signing their consent to have a smear test. They can be downloaded by women and health professionals from the CervicalCheck website www.cervicalcheck.ie.



CervicalCheck leaflet finalist in Crystal Clear Awards

Selected from over 100 entries, the CervicalCheck pictorial-led leaflet was shortlisted as a finalist in the Best Health Promotion category of the 2011 Crystal Clear Health Literacy Awards. The awards are designed to recognise and reward excellence in health literacy in the healthcare sector. Health literacy is increasingly being recognised as an important issue and is a person's ability to understand basic health information, having the knowledge to understand their options and make informed decisions about their own health. The CervicalCheck pictorial-led leaflet was developed to ensure all women (regardless of their literacy level or spoken language) could understand how to access a free smear test.

CervicalCheck wins another advertising award

The concept developed for the CervicalCheck advertising campaign won a bronze award at the Irish Advertising Practitioners of Ireland (IAPI) Advertising Effectiveness Awards 2010. CervicalCheck was one of six finalists (of 100 submissions) to be shortlisted in the category of Public Service, Social Welfare and Education. The awards are based on proven impact on behavioural attitude and promote the role of advertising as an effective and efficient tool in the communications process. No gold or silver awards were awarded in the category. In addition to the IAPI award, since launched in February 2009, the advertising and marketing campaign developed to promote CervicalCheck has received four other Irish and international awards for its effectiveness and creativity.

NCSS access team established

The NCSS access team was established to ensure eligible women with disabilities can access screening programmes. The role of the team is to support the NCSS in its compliance with the Disability Act 2005. Access officers are the point of contact for women who need guidance and assistance to access screening. In 2010 the team carried out a series of training workshops in all NCSS locations as part of the ongoing commitment to disability. The BreastCheck and CervicalCheck websites have been audited and an extensive project to update them is being undertaken to ensure they are as accessible as possible to all.

Northern Ireland Department of Health increases cervical screening age to 25

The Northern Ireland Department of Health, Social Services and Public Safety has raised the cervical screening age from 20 to 25. Women aged 25 – 49 will also now have the opportunity to be screened more frequently as the screening interval will be reduced from five years to three years. The change is in line with the recommendation from the national Advisory Committee on Cervical Screening (ACCS) in England, where screening from age 25 was introduced in 2004. Following the tragic death of Jade Goody in 2009, the ACCS undertook a further review of the research evidence and concluded that the age to start screening should remain at 25. The International Agency for Research on Cancer (IARC), part of the World Health Organisation, also recommended that screening should start at age 25.

NCSS shortlisted for health innovation award

The NCSS was recently shortlisted as a finalist in the Biomnis Healthcare Awards 2011. The NCSS was nominated for an award in the Public-Private Healthcare Collaboration category, which recognises healthcare partners whose collaborations impact positively on healthcare service delivery and patient care. The NCSS was recognised for the public-private collaborations effectively used across the CervicalCheck programme.

Programme Statistics

1 September 2009 – 31 August 2010

Introduction to the statistics

CervicalCheck became available to women nationwide on 1 September 2008. The figures reported in this section relate to the period 1 September 2009 – 31 August 2010. During the reporting period, the programme operated a 'call, re-call' system of invitation. Women needed a letter of invitation from CervicalCheck to avail of a free smear test. This differs to the first year of operation (CervicalCheck Programme Report, 1 September 2008 – 31 August 2009) where there was an open access system of invitation, to accommodate the expected initial demand for the programme.

During the reporting period the response to the programme has been very positive, with almost 280,000 women attending for screening. Quality assurance underpins every aspect of the CervicalCheck programme. The programme is measured against performance parameters as outlined in the NCSS 'Guidelines for Quality Assurance in Cervical Screening'. Certain performance parameters, including coverage, cannot be measured before the first round of screening (three years) has been completed.

During the second year of operation, 279,877 women received a CervicalCheck smear test (Table 1). Higher proportions of women were in the younger age groups, broadly consistent with the age profile of the eligible population.

Table 1: Number of women screened by age group

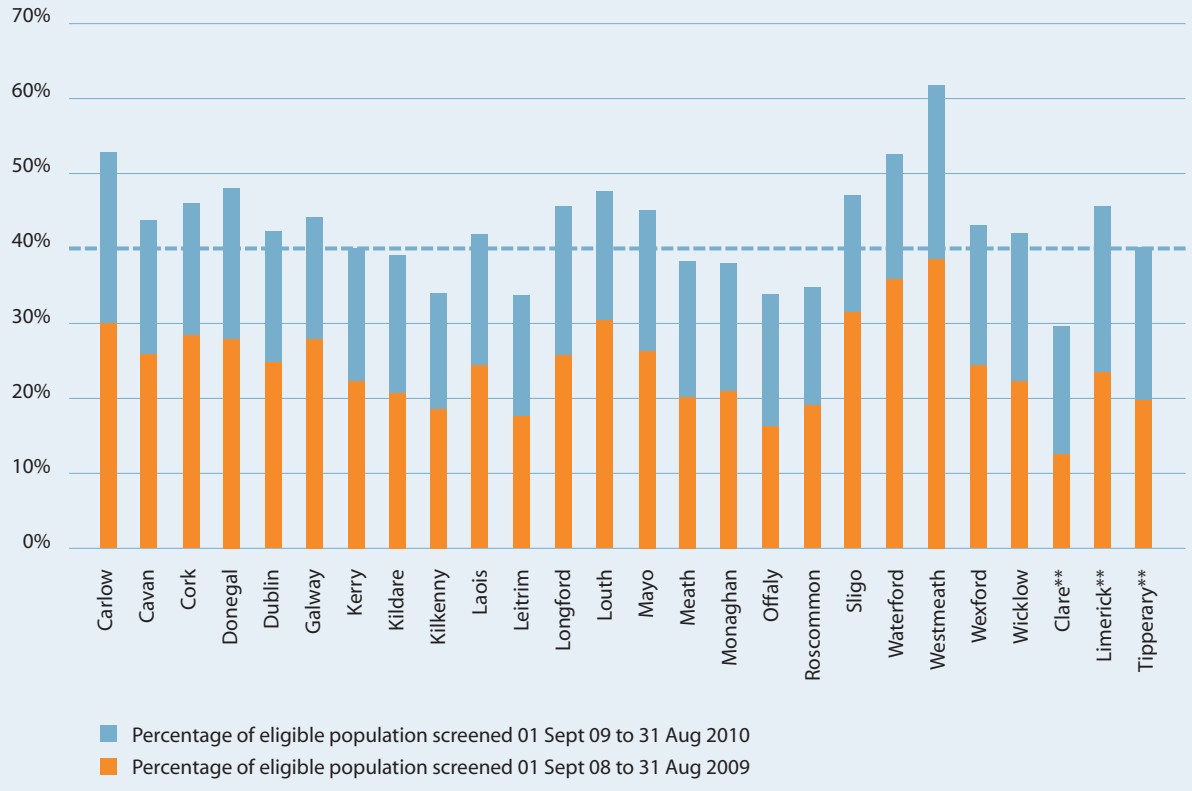
Age group	Number of women screened	%
< 25*	3,347	1.20
25-29	44,040	15.74
30-34	45,449	16.24
35-39	43,972	15.71
40-44	41,662	14.89
45-49	37,613	13.44
50-54	30,464	10.88
55-60	25,108	8.97
60	4,222	1.51
≥ 61*	4,000	1.43
Total	**279,877**	**100**

* Based on evidence to date, there is no additional public health benefit in starting population screening below the age of 25. Screening in women under the age of 25 may lead to many women receiving unnecessary treatment for lesions that would never have developed into invasive cancer. Certain exemptions apply where some women over the age of 60 and under the age of 25 are considered eligible. Such exemptions may include women of any age who are post colposcopy, women over the age of 60 who have never had a smear test and women aged 20 and over who are on renal dialysis, have HIV infection, are post organ transplant or who have had a previous abnormal smear test result and are within the recommended follow-up period.

The geographical spread of screening activity, based on the location of the GP practice or clinic, against the eligible population of each county is shown in Figure 1 and Figure 2. Counties Limerick, Clare and north Tipperary were the counties where the Irish Cervical Screening Programme (ICSP) Phase One was in operation from October 2000 to August 2008. Many women in these counties had availed of free smear tests as part of the ICSP, prior to 1 September 2008. In addition, as county data is based on location of GP practice or clinic, rather than a woman's address, if women crossed county borders to avail of a smear test, this would be reflected by some skew in the data.

The overall percentage of eligible population screened in two years was 44.2 per cent nationwide. The target coverage after a complete round of screening is >60 per cent and 80 per cent after the second round of screening (2014). After two years this would equate to a coverage target in excess of 40 per cent. It therefore appears that CervicalCheck is on target to achieve its coverage aim in this regard. It is important to note that this coverage is based on an eligible population derived from the most recently available Census data from 2006. In the interim, there have been significant social changes and migration both into and out of Ireland. It is anticipated that the estimates used are likely to change when detailed age/sex Census 2011 figures are published.

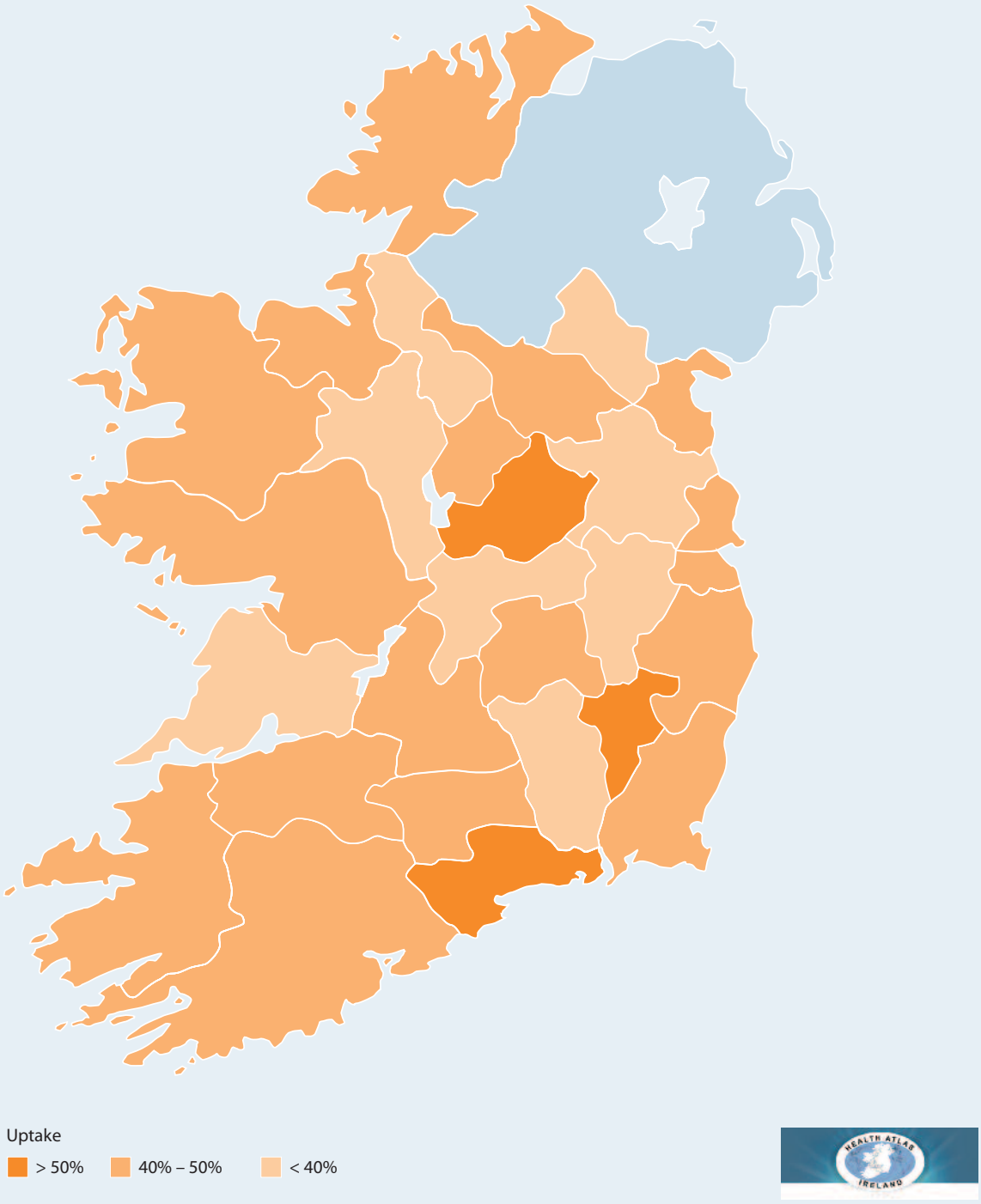
Figure 1: Percentage of eligible women screened where location is based on GP/clinic location from 1 September 2008 to 31 August 2010 *



* Population based on Census 2006 numbers extrapolated to 2010

** ICSP Phase One Region

Figure 2: Map showing percentage of eligible women screened by location (based on GP/clinic location) from 1 September 2008 to 31 August 2010



Data analysed using Health Atlas Ireland. Population based on Census 2006 numbers extrapolated to 2010.

Table 2: Percentage of women attending for a smear test by clinic

Primary care setting					
GP practices (%)	Clinics (%)	Colposcopy (%)	Gynaecology (%)	STI/GUM (%)	Total
85.04	7.99	5.56	1.31	0.1	100%

Most women (93.03%) had their smear test carried out in a primary care setting. Of these, 91.4 per cent attended a GP practice (Table 2). For the remainder of women, the first CervicalCheck smear test occurred in a colposcopy clinic, public gynaecology service or STI/GUM clinic.

Laboratory turnaround time

One of the criteria for selection of laboratory for the provision of cytology services was the capacity and ability to process smear tests within a 10 day turnaround, to facilitate the provision of results to women within four weeks. Table 3 shows how the laboratories performed during the reporting period. Overall, 98.4 per cent of test results were received by the programme within two weeks. There has been a sustained improvement in this measurement since the first year of the programme.

Table 3: Laboratory turnaround time – time from receipt of sample at laboratory to results returned to the programme

Performance parameter	2009/10	Target
% results returned within two weeks of receipt of sample at laboratory	98.4%	>90%

CervicalCheck Women's Charter

The CervicalCheck Women's Charter includes the commitment that 'your result and any treatment recommendation will be provided to you and your nominated smeartaker by the programme within four weeks'. When the programme is notified that a woman's smear test result is available, women are issued a letter from CervicalCheck to notify them that their result is available from their smeartaker.

By the end of August 2010 just over 51 per cent of women were receiving a letter from the programme within four weeks (over 96 per cent within six weeks) of their smear test date (Table 4). Ongoing monitoring and actions were taken to progressively improve this response time, working with smeartakers on the submission of samples and within the programme office. As a result, steady improvements were made during the reporting period.

Table 4: Percentage of women sent results letter within four or six weeks of smear test date

Time from smear test to letter printed date	1 Sep 09 to 28 Feb 10	1 Mar 10 to 31 Aug 10	Total
Within 4 weeks	44.36%	51.13%	48.95%
Within 6 weeks	88.07%	96.76%	94.00%

Cytology

Cytology findings reported in Table 5 and Table 6 are based on smear test results received by the programme in the period 1 September 2009 – 31 August 2010, rather than the smear test date. Of the 308,130 smear tests results received, a small number was unsatisfactory (Table 5). The outcomes of the remaining 304,578 satisfactory smear tests are reported in Table 6.

Table 5: Cytology findings for smear test results

Smear tests	Cytology findings			
Total number of smear tests processed	Unsatisfactory/inadequate smear test		Satisfactory/adequate smear test	
N	N	%	N	%
308,130	3,552	1.15	304,578	98.85

Over 85 per cent of satisfactory smear test results in the period were found to be negative or normal. Of the remainder, 12.5 per cent showed low grade abnormalities and 1.7 per cent showed high grade abnormalities (moderate dyskaryosis, severe dyskaryosis, query invasive squamous carcinoma or query glandular neoplasia). The somewhat high rate of low grade abnormalities may represent a relatively unscreened population at the start of the screening programme. It should be noted that some of the women screened during the reporting period were undergoing repeat or follow-up smear tests, following an initial screening test provided in the previous year.

The outcome of satisfactory smear tests taken resulted in 12,964 women (4.5%) being referred to colposcopy.

Table 6: Cytology results excluding unsatisfactory smear tests

Cytology results	N	%
NAD (no abnormality detected)	261,314	85.80
ASC-US	27,913	9.16
ASC-H	7	0.00
LSIL	10,289	3.38
HSIL (moderate)	1,737	0.57
HSIL (severe)	1,303	0.43
Query invasive squamous carcinoma	23	0.01
AGC	1,949	0.64
AGC (atypical glandular cells-favour neoplastic)	4	0.00
Query glandular neoplasia AIS/adenocarcinoma	39	0.01
Total satisfactory smear tests	304,578	100

Colposcopy

Cervical screening programmes aim to reduce the incidence and mortality of cervical cancer through the detection and treatment of pre-cancerous abnormalities. Access to high quality colposcopy services, with timely diagnosis and treatment, were identified as a priority for the CervicalCheck programme. Fifteen colposcopy services nationwide work with the programme. Each service has an agreed individualised service plan, delivered by dedicated multidisciplinary teams. Information is collected electronically at each service. This data forms the basis for this section of the report.

Table 7: Outcome of appointments at colposcopy clinics

	First visits		Follow-ups		Unknown		Total	
	N	%	N	%	N	%	N	%
Attended	16,811	66.8	30,884	53.3	250	52.0	47,945	57.4
Cancelled	5,724	22.7	18,196	31.4	160	33.3	24,080	28.8
DNA*	2,158	8.6	8,135	14.0	71	14.8	10,364	12.4
Missing	469	1.9	695	1.2	0	0	1,164	1.4
Total	25,162	100	57,910	100	481	100	83,553	100

*DNA refers to a woman who did not attend the appointment offered to her and who gave no advance notification of her non-attendance.

During the reporting period, 16,811 women attended colposcopy for the first time, representing an increase of 6,717 (67%) on the previous year. It is important to note the number of women referred, and the number of women who attended colposcopy will not be the same in any given time period. This is due to factors including the time between the date of a woman's referral and the date of her colposcopy appointment, in addition to women who have been referred to colposcopy following a non-CervicalCheck smear test and who join the programme at colposcopy stage.

Follow-up appointments are provided to both women who have had a treatment and women with low grade abnormalities who are under surveillance. In addition to the 16,811 women who attended colposcopy for the first time during the reporting period, there were 30,884 women attended for a follow up appointment, in comparison to 9,200 during the previous year.

Of the 16,811 new attendances at colposcopy, information on the age of the woman was available for 16,124 (95.9%). The average age at referral to colposcopy was 33.8 years. The majority of women who attended were aged between 25 and 45 years, with 7.4 per cent aged less than 25 years and 9.1 per cent aged over 50.

According to the 'Guidelines for Quality Assurance in Cervical Screening', the standards for the CervicalCheck programme, the rate of defaulted appointments where no prior notice was given (DNA) should be kept to a minimum and maintained below 15 per cent. The recorded rate for the reporting period was 12.4 per cent which met this standard (Table 8).

Table 8: Rate of defaulted appointments for colposcopy measured against colposcopy standards

Performance parameter	2009/10	Target
The percentage of women who do not attend and who do not notify the clinic should be maintained at a low level to maximise the efficiency of the clinic and to avoid the loss of women to follow-up	12.4%	<15%

The rate of DNA appointments is presented according to the type of visit and the age of the woman (Table 9). The DNA rate is higher for return visits than for first visits. In general, younger women were more likely to default than older women.

Table 9: DNA rates for appointments offered to women by age group

Age in years at first offered appointment	Number of first appointments	First visit DNA rate (%)	Number of follow-up appointments	Follow-up visit DNA rate (%)
< 25	1,970	13.6	8,354	19.3
25 - 29	6,615	9.6	16,936	15.2
30 - 34	5,112	8.7	12,021	13.5
35 - 39	3,496	7.8	7,359	12.6
40 - 44	2,569	5.8	4,857	11.6
45 - 49	1,847	5.1	3,064	10.2
50 - 54	1,140	6.2	1,636	8.1
55 - 59	580	5.9	789	7.9
60	82	11.0	110	9.1
61+	266	8.3	398	8.0
Missing	1,485	10.8	2,386	11.6
Total	25,162	8.6	57,910	14.0

Reasons for referral

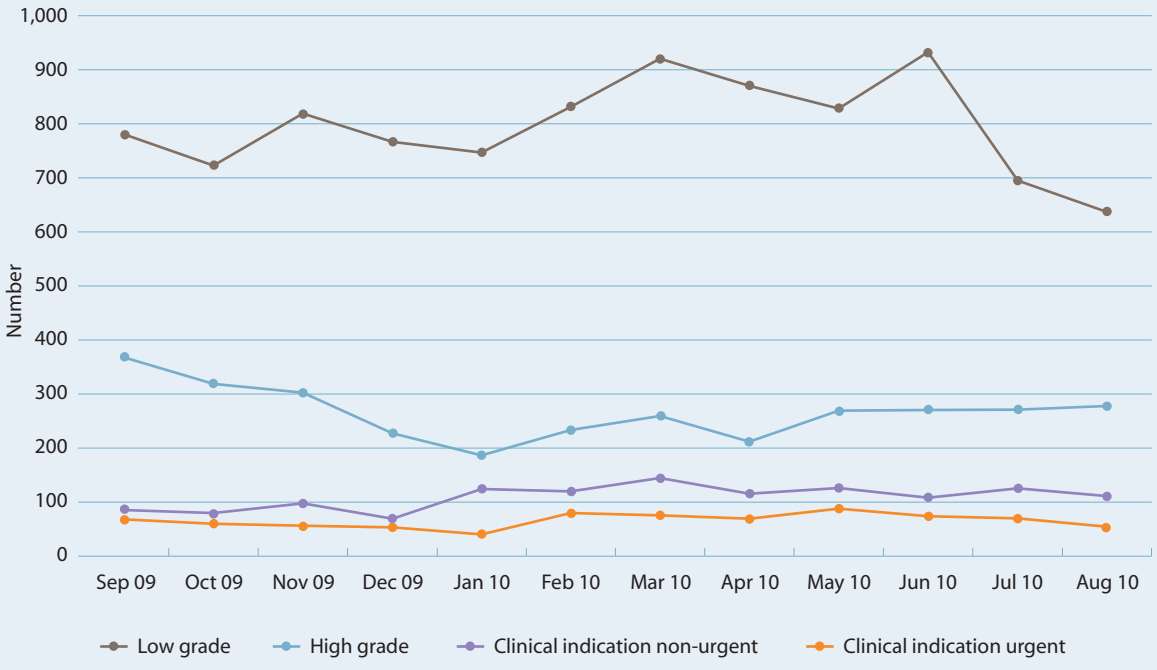
Women were referred to colposcopy on the basis of an abnormal smear test result, or for clinical reasons, such as symptoms of abnormal vaginal bleeding or a suspicion of an anatomical abnormality of the cervix.

Of the 16,811 women who attended colposcopy services for the first time during the reporting period, consent was available for the CervicalCheck programme for 16,678 women (99%). The reasons for referral to colposcopy for these women are presented in Table 10. Eighty six per cent were referred on the basis of an abnormal smear test result and 12.5 per cent were referred for clinical reasons. Figure 3 illustrates the reason for referral according to the month. The numbers of new referrals attending colposcopy remained consistently high throughout the year.

Table 10: Reason for referral to colposcopy

Reason for referral to colposcopy	New referrals for whom consent is available	
	N	%
Abnormal smear test result	14,341	86.0
Clinical indication – non urgent	1,302	7.8
Clinical indication – urgent	783	4.7
Reason not recorded	252	1.5
Total	16,678	100

Figure 3: Reason for referral for women attending colposcopy services



Of the 14,341 women who presented with an abnormal smear test result, 3,152 (22%) were referred following detection of a high-grade abnormality (Table 11). The detection of a low-grade smear test result (LSIL or ASCUS) was the reason for referral in 9,552 (67%) women and a smear test showing AGUS (borderline glandular abnormalities) was the reason for referral in 1,377 cases (9.6%).

These figures were proportionately higher than those for the previous year of the programme, where the comparable figures were 4,583 (54%) for LSIL or ASCUS and 297 (3.5%) for AGUS (borderline glandular abnormalities). This change reflects greater capacity at colposcopy with increased access for women with low grade cytological abnormalities, in addition to increased numbers of repeated low grade abnormalities following a low grade result the previous year.

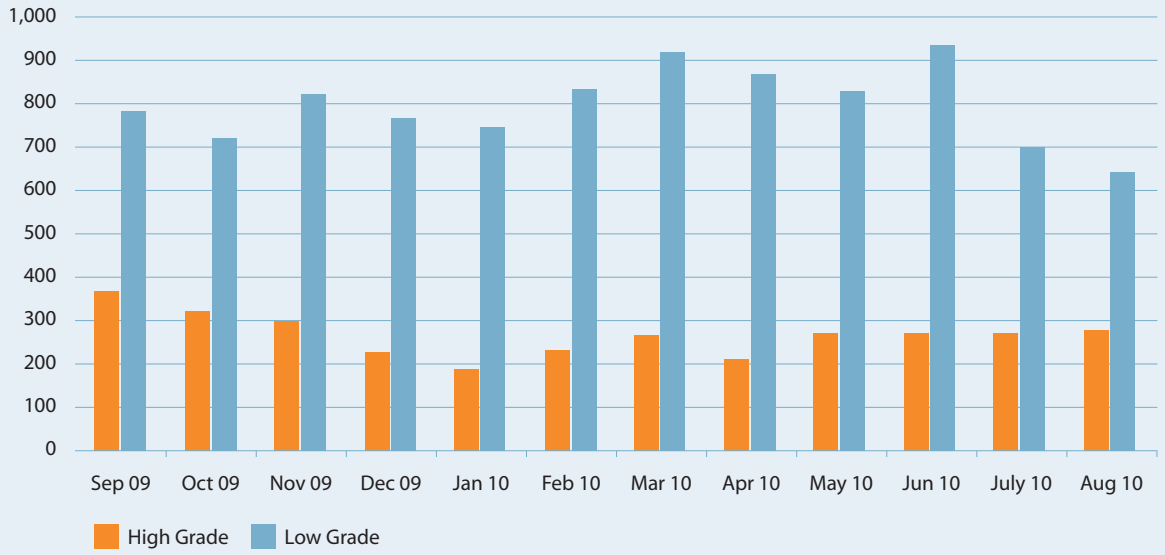
The numbers of women referred with persistently unsatisfactory or inadequate results (65) remained consistently low.

Table 11: Reason for referral to colposcopy as a result of an abnormal smear test result

Referral smear abnormality	New referrals for whom consent is available	
	N	%
Query glandular neoplasia AIS/adenocarcinoma	39	0.3
AGUS/borderline glandular	1,377	9.6
ASC-H*	62	0.4
ASCUS**	4,906	34.2
HSIL (moderate)*	1,751	12.2
HSIL (severe)*	1,307	9.1
LSIL**	4,646	32.4
Possible invasion*	32	0.2
Unsatisfactory/inadequate	65	0.5
Not recorded	156	1.1
Total	14,341	100

* High grade ** Low grade

Figure 4: Number of new attendances at colposcopy as a result of an abnormal smear test result by grade of referral smear



Waiting times

One of the key challenges faced by the CervicalCheck programme during the first two years of operation was the provision of access to colposcopy in a timely fashion for women. Long waiting times were already a feature at colposcopy services before the introduction of the CervicalCheck programme. During the second year of the programme, services were actively engaged in a process to significantly increase capacity but despite this, increased demand resulted in waiting times which continued to exceed expected targets during this time. These targets state that 90 per cent of women with high grade cytological abnormalities should wait less than four weeks and 90 per cent of women with low grade cytological abnormalities should wait less than eight weeks for an appointment. Continuing progress is being made to ensure compliance.

For the reporting period (1 September 2009 to 31 August 2010), information on waiting times was available for 15,260 of the new attendances at colposcopy. Overall for women with valid data, 49 per cent experienced waiting times of longer than eight weeks and in 27 per cent of cases, the wait was longer than 12 weeks (Tables 12, 13 and 14).

Table 12: Waiting times for colposcopy measured against colposcopy standards

Performance parameter	2009/10	Target
All women referred to colposcopy should be offered an appointment within eight weeks of date the letter was received in the clinic	51%	>90%
All women referred to colposcopy with a smear suggestive of CIN 2 or CIN 3 should be offered an appointment within four weeks of date the letter was received in the clinic	40%	>90%
All women referred to colposcopy with a suspicion of invasive cancer on a smear should be offered an appointment within two weeks of date the letter was received in the clinic	90%	>90%
All women referred to colposcopy with a smear suggestive of glandular neoplasia should be offered an appointment within four weeks of referral	75%	>90%

Table 13: Waiting times for women referred to colposcopy grouped by reason for referral

Time to first offered appointment	Abnormal smear test		Clinical indication – non urgent		Clinical indication – urgent		Reason not recorded		Total	
	N	%	N	%	N	%	N	%	N	%
Less than 2 weeks	1,266	8.8	161	12.4	180	23.0	3	1.2	1,610	9.7
Between 2 and 4 weeks	2,036	14.2	181	13.9	197	25.2	0	0	2,414	14.5
Between 4 and 8 weeks	3,855	26.9	360	27.6	220	28.1	3	1.2	4,438	26.6
Between 8 and 12 weeks	2,147	15.0	154	11.8	64	8.2	1	0.4	2,366	14.2
Greater than 12 weeks	4,178	29.1	187	14.4	63	8.0	4	1.6	4,432	26.6
Missing	859	6.0	259	19.9	59	7.6	241	95.7	1,418	8.5
Total	14,341	100	1,302	100	783	100	252	100	16,678	100

Table 14: Waiting times for women referred to colposcopy grouped by referral smear test grade

Time to first offered appointment	High grade*		Low grade**		Not recorded		Total	
	N	%	N	%	N	%	N	%
Less than 2 weeks	492	15.4	769	7.0	5	3.2	1,266	8.8
Between 2 and 4 weeks	737	23.1	1,290	11.7	9	5.8	2,036	14.2
Between 4 and 8 weeks	1,035	32.4	2,783	25.3	37	23.7	3,855	26.9
Between 8 and 12 weeks	384	12.0	1,740	15.8	23	14.7	2,147	15.0
Greater than 12 weeks	306	9.6	3,810	34.7	62	39.7	4,178	29.1
Missing	237	7.4	602	5.4	20	12.8	859	6.0
Total	3,191	100	10,994	100	156	100	14,341	100

* High grade referral smear tests include cytology outcomes of AGC, CIN grade not specified, HSIL and possible invasion.

** Low grade referral smear tests include cytology outcomes of ASC-US, LSIL, AGUS/borderline glandular and inadequate/unsatisfactory.

Biopsy rate

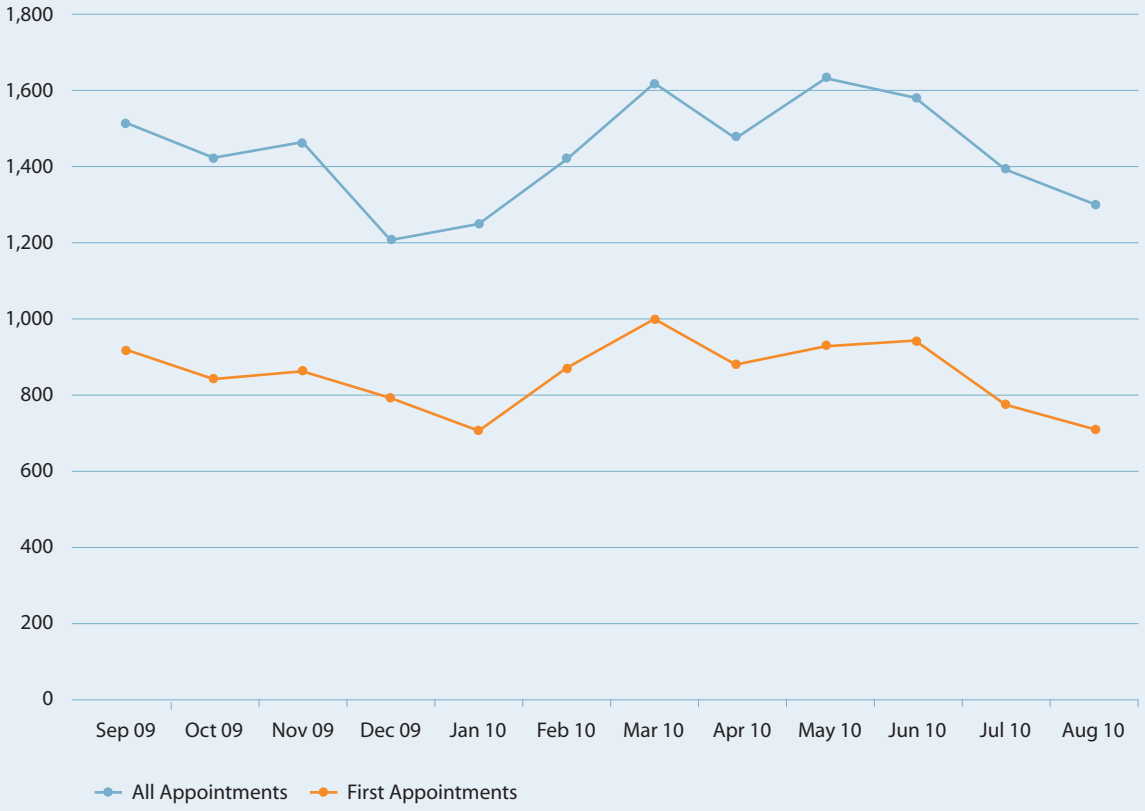
The role of colposcopy is to facilitate diagnosis and treatment of women with abnormal smear test results. Where an abnormality is suspected at colposcopy it is good practice to perform a biopsy, where possible, to confirm the diagnosis. There are two main types of biopsy performed – diagnostic and excisional. A diagnostic biopsy involves sampling a portion of the abnormal area only. An excisional biopsy removes the abnormal area in its entirety.

During the reporting period, 10,386 diagnostic biopsies and 6,739 excisional biopsies were performed. Miscellaneous other biopsies were recorded in 124 cases. The numbers of biopsies per month remained consistently high during the year reflecting the increased number of appointments available. The initial colposcopy visit determines the presence or absence of an atypical Transformation Zone. A biopsy was performed in 80 per cent of cases where the Transformation Zone was documented as atypical, and in 100 per cent of cases where an invasive cancer was suspected.

Table 15: Biopsy rates measured against colposcopy standards

Performance parameter	2009/10	Target
A biopsy should be performed in the presence of an atypical Transformation Zone and a smear test which suggests underlying CIN	80%	>95%
If there is a suspicion of invasive disease a biopsy must be performed immediately	100%	>90%

Figure 5: Number of women undergoing biopsy at colposcopy services by month



The biopsy rates according to the grade of the referral smear test and reasons for referral are presented in Tables 16 and 17. Eighty two per cent of women presenting with a high grade cytological abnormality had a biopsy performed at the first visit, compared with 59 per cent of women presenting with a low grade cytological abnormality. Sixty two per cent of women presenting with AGUS (borderline glandular abnormalities) had a biopsy at the first visit which included an excisional biopsy in 16.4 per cent of cases. This reflects the continued difficulty of managing this relatively new group of women, particularly if the colposcopic appearance is normal or unsatisfactory.

Table 16: Biopsies performed during the first visit to colposcopy according to the referral smear test

Grade of cytology result of referral smear test	Biopsy performed									
	Diagnostic biopsy		Excisional biopsy		No biopsy taken		Other – type not specified		Total	
	N	%	N	%	N	%	N	%	N	%
AGUS/borderline glandular	630	45.8	226	16.4	494	35.9	27	2.0	1,377	100
High grade	1,360	42.6	1,260	39.5	559	17.5	12	0.4	3,191	100
Low grade	4,927	51.6	690	7.2	3,905	40.9	30	0.3	9,552	100
Not recorded	60	38.5	18	11.5	76	48.7	2	1.3	156	100
Unsatisfactory/ inadequate	21	32.3	2	3.1	42	64.6	0	0	65	100
Total	6,998	48.8	2,196	15.3	5,076	35.4	71	0.5	14,341	100

Table 17: Biopsies performed during the first visit to colposcopy services grouped by reason for referral

Reason for referral to colposcopy service	Biopsy performed									
	Diagnostic biopsy		Excisional biopsy		No biopsy taken		Other – type not specified		Total	
	N	%	N	%	N	%	N	%	N	%
Abnormal smear test result	6,998	48.8	2,196	15.3	5,076	35.4	71	0.5	14,341	100
Clinical indication – non urgent	337	25.9	111	8.5	839	64.4	15	1.2	1,302	100
Clinical indication – urgent	259	33.1	68	8.7	448	57.2	8	1.0	783	100
Reason not recorded	28	11.1	100	39.7	124	49.2	0	0	252	100
Total	7,622	45.7	2,475	14.8	6,487	38.9	94	0.6	16,678	100

Treatment at colposcopy

Effective treatment of high grade CIN and adenocarcinoma in situ with subsequent reduction of the risk of invasive cancer, is vital to the success of any cervical screening programme. This treatment should be effective, safe and acceptable. It should aim to eradicate all CIN from the cervix and should be tailored to the circumstances of the individual woman.

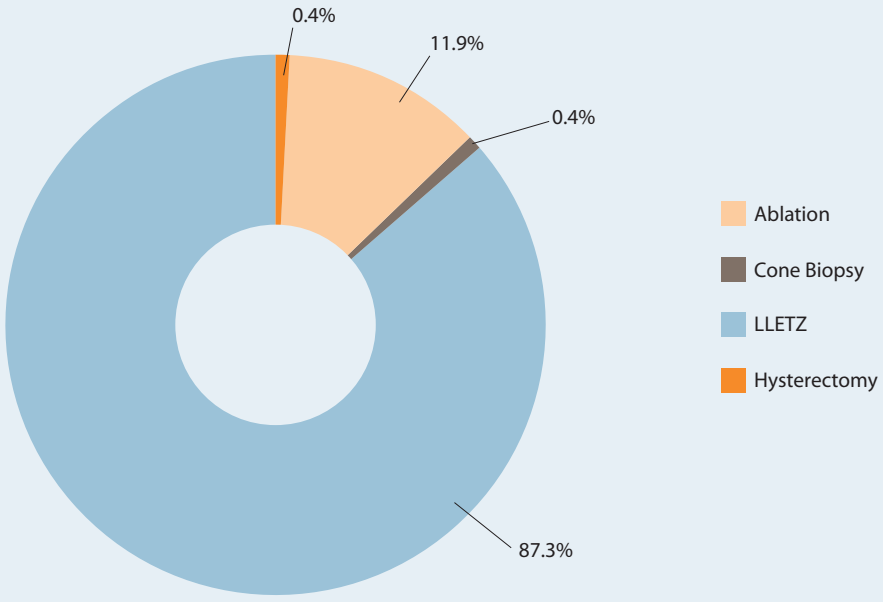
According to the 'Guidelines for Quality Assurance in Cervical Screening', the standards for the CervicalCheck programme, treatments should be performed as an outpatient procedure under local anaesthetic in more than 80 per cent of cases. During the reporting period, treatment was performed as an outpatient using local anaesthetic in 95 per cent of cases, surpassing this target (Table 18).

During the reporting period, 7,546 treatments were recorded at colposcopy (consented women only) (Figure 6). Large loop excision of the Transformation Zone (LLETZ) was performed in 6,591 cases. Ablative treatment was used in 893 cases. Thirty two knife cone biopsies and 30 hysterectomies were performed. Of the total treatments, 6,950 were performed following an abnormal smear test.

Table 18: The outcome of use of local anaesthetic measured against colposcopy standards

Performance parameter	2009/10	Target
The majority of women should have treatment performed as an outpatient under local anaesthetic	95.2%	>80%

Figure 6: Treatment at colposcopy



The increased capacity of colposcopy services resulted in consistently high numbers of treatments per month as the year progressed (Figure 7). Women with high grade abnormalities were prioritised for referral to colposcopy at the start of the programme, which resulted in a relatively increased proportion of women with low grade cytology attending colposcopy with time. This would explain the apparent reduction in treatment at the first visit (select and treat) in the latter part of the year.

Figure 7: Number of women undergoing treatment at colposcopy services by month

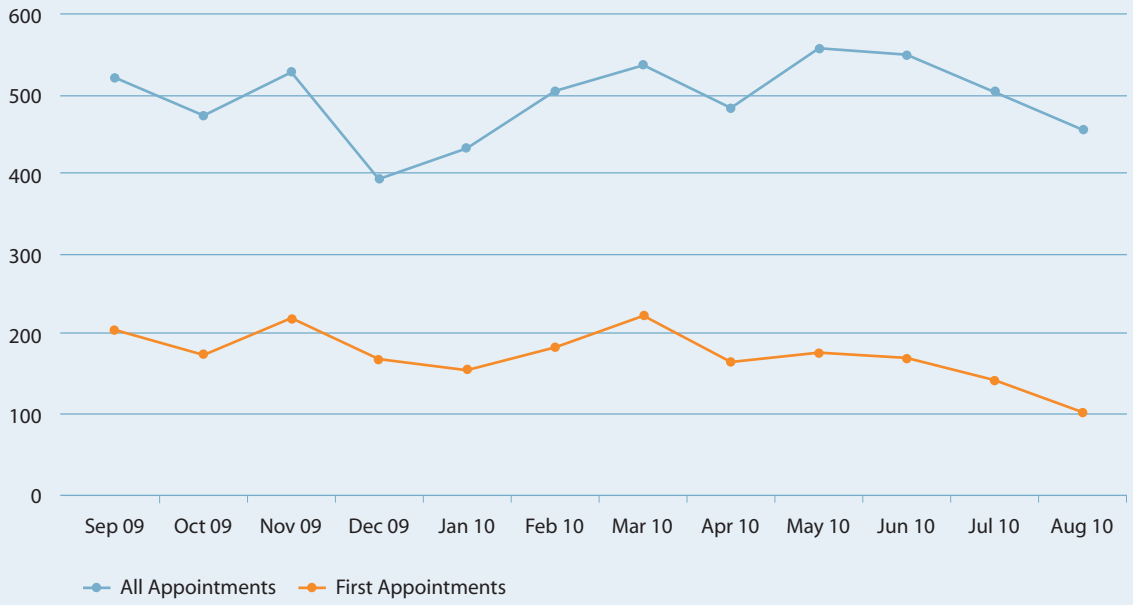


Table 19: Treatment at first visit to colposcopy

Reason for referral to colposcopy	No treatment on first visit		Treatment on first visit		Total number of women attended	
	N	%	N	%	N	%
Clinical indication – non urgent	1,157	88.9	145	11.1	1,302	100
Clinical indication – urgent	681	87.0	102	13.0	783	100
Referral reason not recorded	144	57.1	108	42.9	252	100
AGUS/borderline glandular	1,168	84.8	209	15.2	1,377	100
High grade	2,266	71.0	925	29.0	3,191	100
Low grade	8,911	93.3	641	6.7	9,552	100
Unsatisfactory/inadequate	62	95.4	3	4.6	65	100
Result of abnormal smear test not recorded	133	85.3	23	14.7	156	100
Total	14,522	87.1	2,156	12.9	16,678	100

One of the principles of screening is the avoidance of over-treatment. This is of particular relevance to cervical screening as treatment has the potential to have an adverse effect on future pregnancies. In this regard, treatment at the first visit for women who present with low grade abnormalities should be avoided and kept below 10 per cent. During the reporting period, this figure was within the target at 6.7 per cent.

It is generally accepted that most of the women who undergo excisional procedures should have CIN on the excised specimen. This is particularly true if the procedure is performed at the first visit to colposcopy. During the reporting period, 85 per cent of women treated at the first visit had CIN on histology. This figure should be closely monitored as the programme evolves.

Table 20: The performance of colposcopy treatment parameters measured against colposcopy standards

Performance parameter	2009/10	Target
Treatment at first visit should not be performed on women who present with low grade cytological change even if there is a colposcopic suspicion of high grade disease (except in special circumstances)	6.7%	<10%
Women treated by excisional treatments at first visit should have CIN on histology	85%	>90%
Women treated by excisional treatments at any visit should have CIN on histology	86%	>80%

Colposcopy plays an important role in the evaluation of women with suspected cervical abnormalities. It allows the identification of the site of the abnormality as well as an estimation of the grade of abnormality including the presence or absence of features suggestive of invasive cancer. As a procedure used alone however, it has diagnostic limitations with documented lack of correlation between the colposcopic and histological diagnosis. During the reporting period, the predictive value of a colposcopic impression of high grade disease was 73 per cent, which is in excess of the CervicalCheck standard (>65%).

Table 21: The positive predictive value of colposcopy measured against colposcopy standards

Performance parameter	2009/10	Target
Compliance between colposcopic impression of high grade disease and histologically proven high grade CIN	73%	>65%

Histology

The objective of any screening programme is the detection and treatment of high grade CIN and the yield of these abnormalities is one of the hallmarks of a successful programme. The histology is presented by month in Figure 8. The yield of high grade abnormalities remained consistently high as the year progressed, again reflecting the sustained high levels of activity in the colposcopy services.

The histology results for consented women attending colposcopy during the reporting period according to the referral smear test result is shown in Table 22. Invasive cancer was diagnosed in 145 women, 5,369 women had CIN 2/CIN 3 and 149 women had adenocarcinoma in situ. No CIN was detected in 3,670 women.

Figure 8: Detection of CIN and cancer by month

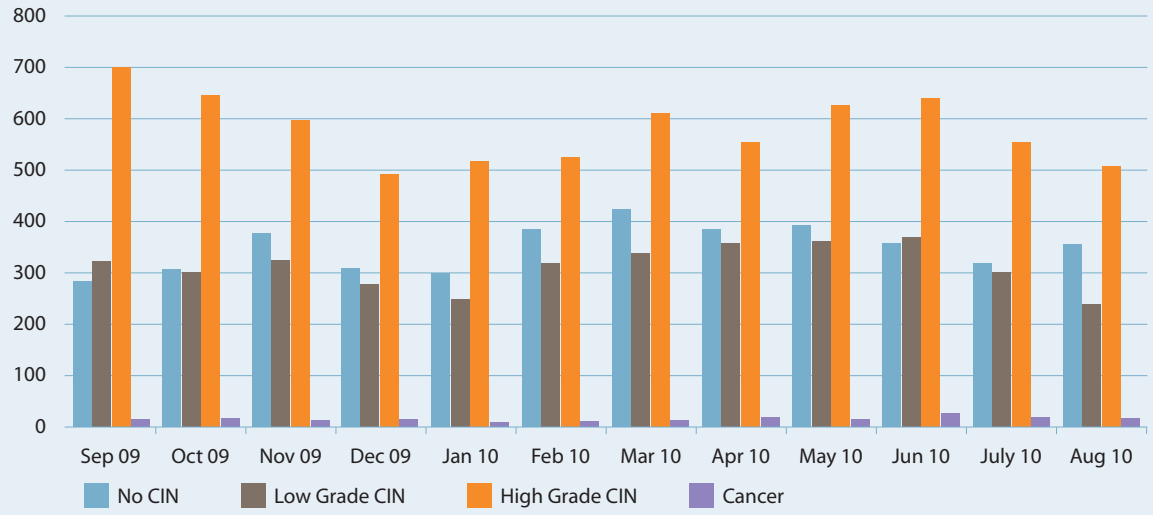


Table 22: Histology results for women presenting to colposcopy

	No CIN / No HPV (normal)		HPV/ cervicitis only		CIN 1		CIN 2		CIN 3		Adenocarcinoma in situ / CGIN		Cancer (including micro-invasive)	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%
AGC	6	15.4	0	0.0	4	10.3	3	7.7	9	23.1	10	25.6	7	17.9
AGUS / Borderline Glandular	477	47.2	51	5.0	225	22.3	105	10.4	82	8.1	51	5.0	20	2.0
ASC-H	9	17.0	1	1.9	4	7.5	11	20.8	27	50.9	1	1.9	0	0.0
ASCUS	1,018	29.7	186	5.4	1,027	29.9	532	15.5	632	18.4	22	0.6	14	0.4
HSIL	514	13.4	73	1.9	512	13.3	654	17.0	1,952	50.8	50	1.3	87	2.3
LSIL	1,084	27.5	149	3.8	1,398	35.5	757	19.2	535	13.6	13	0.3	4	0.1
Query Invasive	1	3.7	0	0.0	1	3.7	0	0.0	15	55.6	0	0.0	10	37.0
Unsatisfactory/ Inadequate	15	32.6	6	13.0	17	37.0	6	13.0	2	4.3	0	0.0	0	0.0
Not Recorded	78	50.0	2	1.3	24	15.4	21	13.5	26	16.7	2	1.3	3	1.9
Total	3,202	25.5	468	3.7	3,212	25.6	2,089	16.7	3,280	26.1	149	1.2	145	1.2

Positive predictive values (PPV) for CervicalCheck programme smear tests

The positive predictive value (PPV) represents the proportion of test-positive women who are truly positive. It can be considered a measure of the likelihood that a woman with a positive test truly has a pre-cancerous cervical abnormality. It is one of the most important diagnostic measures of a screening programme as it reflects the probability that a positive test has detected the underlying condition being tested. A biopsy was recorded following a programme smear test in 7,595 women attending colposcopy. Overall CIN 1 or higher was documented in 74 per cent of cases.

If the smear test showed a high grade abnormality, a histological result showed CIN 2 or higher in 77 per cent of cases. If the smear test demonstrated a low grade abnormality (LSIL, ASCUS, AGUS) the histology result demonstrated CIN 1 or higher in 68 per cent of cases.

Table 23: Positive predictive values for CervicalCheck programme smear tests

PPV of high grade smear test	77%
PPV of low grade smear test	68%

Glossary

Ablation

Treatment which involves the destruction of the cervical abnormalities using a variety of techniques. It does not allow for histological examination of the whole abnormal area and strict criteria must be followed therefore to minimise the risk of inadvertent treatment of hidden microinvasive cancer.

Abnormal/not normal smear test

A smear test which shows cells which are not typically normal or where pre-cancerous or cancerous cells are identified.

Adenocarcinoma

A cancer affecting the cervix, but involving the columnar (endocervical) cells rather than the squamous cells. The columnar cells are involved in glandular activity.

Adenocarcinoma in situ

A pre-cancer affecting the cervix, but involving the columnar (endocervical) cells rather than the squamous cells.

Adequate smear test result

A smear test which is deemed satisfactory for evaluation by the laboratory.

AGC

Atypical glandular cells.

AGUS

Atypical glandular cells of undetermined significance.

ASC-H

Atypical squamous cells for which a high-grade lesion cannot be excluded.

ASC-US

Atypical squamous cells of undetermined significance.

Atypical Transformation Zone

The term used when changes are detected by colposcopy in the Transformation Zone. These changes can include a variety of patterns including: leukoplakia, acetowhite epithelium and abnormal vascular patterns.

Biopsy

The removal of a sample of tissue from the body for examination using a microscope.

Cervical cancer

Cancer of the cervix. Cancer cells have spread beyond the natural basement membrane boundary of the cervical skin. Cervical cancer can be of squamous origin (approximately 85%) or glandular origin (approximately 15%).

Cervical intraepithelial neoplasia (CIN)

CIN is not cancer but is the histological term referring to the abnormal growth of pre-cancerous cells in the surface layers of the cervix. It describes varying degrees of abnormality of the cells within and confined to the epithelium. There are three grades of CIN: CIN 1, CIN 2 or CIN 3.

Cervical screening

A process which involves the application of a screening test at regular intervals to a defined population of women to detect pre-cancerous changes.

Cervical cytology

A microscopic examination of a single layer of cells scraped from the surface of the cervix.

Colposcopy

An examination of the cervix using a specialised optic instrument (colposcope) that provides magnification to allow direct observation and study of vaginal and cervical epithelium. It identifies lesions on the cervix which can be biopsied and treated.

Cone biopsy

A surgical removal of a cone-shaped section of the cervix to remove abnormal cells.

Coverage

The proportion of women aged 25-60 years who have had a screening result recorded on the screening register over a complete screening round.

Diagnosis

A process aimed at the clarification of cervical abnormalities to inform decision-making regarding treatment.

Dyskaryosis

Term used in cytology to describe nuclear abnormalities in cervical cells.

Eligible for screening

Women aged 25-60 years for whom CervicalCheck recommends and funds screening according to national policy.

Excisional treatment

Treatment which involves the removal of the abnormality in its entirety thereby allowing histological examination of the entire Transformation Zone.

HSIL

High grade squamous intraepithelial (moderate and severe) lesion encompassing moderate (CIN 2) and severe dysplasia (CIN 3/CIS).

Histology

The microscopic study of the structure and composition of body tissue.

Human papillomavirus (HPV)

A group of wart viruses of which a high proportion are sexually transmitted. Over 100 different types of HPV have been identified and each is known by number. Types 6 and 11 are associated with genital warts and types 16 and 18 are associated with high grade lesions.

Hysterectomy

The surgical removal of the uterus (womb) – called total if it includes the cervix or subtotal/partial if the cervix is not entirely removed.

Incidence

The number of new cases of a disease or happening that occurs in a given period in a specified population

Informed consent

The giving of all the necessary information by the smeartaker to the woman in order that she fully understands the smear test procedure and possible results so that she can make an educated decision to participate in the programme. For the CervicalCheck informed consent process, the necessary information covers participation in the programme, the transfer of data to third parties, limitations of screening, results, associated tests and treatment.

Invasive cancer

Abnormal cells, not limited to the outer layer of the epithelial but which breach the basement membrane to invade the underlying stroma (layer of tissue).

Key performance indicators (KPIs)

A metric used to help an organisation define and measure progress toward organisational goals or standards.

Large loop excision of the Transformation Zone (LLETZ)

Large loop excision of the Transformation Zone is a diagnostic and/or treatment method to remove the cervical areas of abnormality. The procedure involves removal of the entire Transformation Zone using a thin wire electrode charged with electric current to provide a sample for examination by the pathologist.

Lesions

A zone of tissue with impaired function as a result of damage by disease or wounding.

Liquid based cytology (LBC)

The placement of harvested cells into a special transport solution for sending to the laboratory, where the slide is made ready for examination.

LSIL

Low grade squamous intraepithelial lesion encompassing HPV infection or mild dysplasia (CIN 1).

Microinvasive cancer

This represents early stage cervical cancer where the abnormal cells breach the basement membrane and invade to not greater than 5mm in depth and not more than 7mm in width.

Mortality

The number of deaths from a specified disease during a defined period of time in a given population.

NAD

No abnormality detected (normal).

Positive predictive value (PPV)

The proportion of test-positive women who are truly positive. It can be considered a measure of the likelihood that a woman with a positive test truly has a pre-cancerous cervical abnormality.

Primary care setting

First contact care that is not hospital or specialist care - general practice, Well Woman and Family Planning Clinics.

Quality assurance

A programme for the systematic monitoring and evaluation of the various aspects of the National Cervical Screening Programme to ensure that standards of quality are being met.

Screening programme

An organised approach to screening a defined population to determine the likelihood of a specific disease within the population with the aim of reducing the risk of the disease and improving the quality of life through early diagnosis.

Select and treat

A process whereby women with suspected high grade disease are selectively treated at the first visit to colposcopy.

Smear test

A screening test where cells from the surface of the cervix are sampled, preserved immediately and sent to the laboratory for cytological analysis.

Smeartakers

A doctor or nurse who takes smear tests.

Specimen

A sample of tissue removed from the body for microscopic examination.

Squamous

A type of multi-layers cells, which line the vagina and outer layer of the cervix.

Squamous cell carcinoma/cancer

The most common form of cervical cancer involving the squamous cells.

Standard

A minimum requirement against which performance can be measured.

Transformation Zone (TZ)

The region of the cervix where the columnar cells of the inner cervix have or are changing to outer squamous cells. The process of change is called metaplasia. It is the area most at risk of abnormal change.

Treatment

A process aimed at the eradication of cervical abnormalities thus restoring normal cytology and reducing the chance of subsequent cancer by 90 per cent.

Unsatisfactory colposcopy

A term used to describe the inability to visualise the whole of the Transformation Zone colposcopically.

Unsatisfactory/inadequate smear test result

An 'inadequate' or 'unsatisfactory' smear test that cannot be assessed by the cytology laboratory.

Appendix 1: CervicalCheck Women's Charter

CervicalCheck
THE NATIONAL CERVICAL SCREENING PROGRAMME

WOMEN'S CHARTER

Screening commitment:

- CervicalCheck – The National Cervical Screening Programme offers a free complete quality assured programme of care
- You choose your smeartaker from a wide range of eligible service providers registered with the Programme
- You may change your preferred provider for subsequent Programme screening
- All Programme staff will respect your privacy, dignity, religion, race and cultural beliefs
- Your screening records will be treated in the strictest confidence
- You will always have the opportunity to make your views known and to have them taken into account
- Once you become known to the Programme you will be invited every three years for screening while you are aged 25 to 44 and every five years while you are aged 45 to 60
- Your smear test will be screened in an accredited quality assured laboratory
- Your result and any treatment recommendation will be provided to you and your nominated smeartaker by the Programme within four weeks.

We aim:

- To ensure pleasant and comfortable surroundings during screening.

If you require further treatment, we aim:

- To ensure that you will be offered an appointment at a quality assured colposcopy clinic *(within four weeks for high grade cell changes and within eight weeks for low grade cell changes).*

Tell us what you think:

- Your views are important to us in monitoring the effectiveness of our services and in identifying areas where we can improve
- You have a right to make your opinion known about the care you received
- If you feel we have not met the standards of this Charter, let us know by telling the people providing your care or in writing to the Programme
- We would also like to hear from you if you feel you have received a good service. It helps us to know that we are providing the right kind of service – one that satisfies you
- Finally, if you have any suggestions on how our service can be improved, we would be pleased to see whether we can adopt them to further improve the way we care for you.

Ways you can help us:

- Please make your appointment with a registered smeartaker on receipt of your invitation letter from the Programme
- Please bring your PPS number with you to your appointment
- Please read any information we send you
- Please try to be well informed about your health.

Let us know:

- If you change your address
- What you think – your views are important.

Freephone 1800 45 45 55
www.cervicalcheck.ie

CervicalCheck
THE NATIONAL CERVICAL SCREENING PROGRAMME

National Cancer Screening Service

The National Cancer Screening Service encompasses BreastCheck – The National Breast Screening Programme and CervicalCheck – The National Cervical Screening Programme.

CS/PUB/CC-5 Rev 3

National
Cancer Screening
Service

National Cancer
Control Programme

The National Cancer Screening Service is part of the Health Service Executive National Cancer Control Programme. It encompasses BreastCheck – The National Breast Screening Programme and CervicalCheck – The National Cervical Screening Programme.

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