CervicalCheck
AN CLÁR NÁISIÚNTA SCAGTHÁSTÁLA CEIRBHEACS
THE NATIONAL CERVICAL SCREENING PROGRAMME

CervicalCheck Programme Report 2023-2024

An tSeirbhís Náisiúnta Scagthástála
National Screening Service

CervicalCheck Charter: Our commitment to you

Our charter tells you what you can expect when you use our screening and colposcopy services. It shows you how you can help us make our services work better for you and for others. We worked with women who use our screening services, our staff and our partners to develop this charter.

Taking part

- We offer free screening every 3 or 5 years to women and people with a cervix aged 25 to 65.
- You can book your test at any clinic or GP practice registered with us for cervical screening.
- We work to make our services easy to access. Let us know if we meet your needs and if not, how we can make it better for you.
- We know that some people find it difficult to come for cervical screening. You can talk to your doctor or nurse about this or call us on 1800 45 45 55.
- We'll let you know if you need a free, follow-up hospital appointment at a colposcopy clinic.
- We ask sample takers and colposcopists to make sure you have privacy during your appointment. You can have a support person with you.

Communication and information

- We will send you a letter in the post when you are due your next screening test. You can also check online to find out when your next test is due. You don't need a letter to book a test.
- We will send you information when we invite you for screening, and when we send your results, to help you make an informed choice.
- We will send you and your doctor your test results and information about any next steps within 4 weeks of your screening appointment.
- We will invite you to colposcopy within 8 weeks of you receiving your test results, if you need further tests.
- Please let us know if you change your address. You can use our website to update your name and address, register for cervical screening or check when your test is due. You can also call us on 1800 45 45 55.

Responsibility

- We are part of the HSE's National Screening Service and provide regular reports on how we are doing.
- We will let you know if we find we have made a mistake, and we will do everything we can to prevent it from happening again to you or anyone else.
- We welcome your feedback. If you want to tell us about your experience with cervical screening, you can call us on Freephone 1800 45 45 55 or email us on info@cervicalcheck.ie.
- We will keep your feedback and consider it when making improvements to our programme.

Safe and effective services

- We have guidelines and standards for each part of the screening process that we track to ensure we are providing an excellent service.
- We make improvements to our programme to ensure we continue to save lives and improve people's health.
- We update our websites regularly with information for you about our service.

Respect and privacy

- We will listen to you, respect you and treat you with kindness.
- We support, educate and train our staff to treat everyone fairly, and to respect everyone's background and cultural identity.
- We will keep your personal information (name, address, date of birth, PPSN) safe and secure on our database.

Improving health

- We use the best available screening test. It screens for the HPV virus.
- We will give you information about the symptoms of cervical cancer. A small number of women who have regular cervical screening will develop cervical cancer, even after a normal screening result.
- You can ask us to review your screening history if you are diagnosed with cervical cancer.

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www.hse.ie/cervicalcheck

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Introduction

CervicalCheck, Ireland's national cervical screening programme, began in 2008. The main aim of cervical screening is to prevent cervical cancer by finding and treating changes to the cells in the cervix before they develop into cancer. Cervical screening can also find cervical cancer at an early stage, before symptoms start, when it can be easier to treat.

In 2020 we changed from cytology-based screening to primary HPV testing, with follow-up cytology for those who need it. This was in response to evidence that HPV screening is better at detecting cervical abnormalities before they develop into cancer. HPV cervical screening, together with HPV vaccination and timely treatment, will make cervical cancer rare in Ireland by 2040.

CervicalCheck provides cervical screening for women* and people with a cervix, who are aged 25 to 65 and do not have symptoms of cervical cancer. We invite women aged 25 to 29 every 3 years, and those aged 30 to 65 every 5 years.

Most people will get some type of HPV during their lives. For most people, the virus goes away on its own and does not cause any harm. The body's immune system can clear it in 1 to 2 years. Some types of HPV have a higher risk of causing cervical cancer.

When HPV is detected, the laboratory will test the sample by examining the cervical cells. When cervical cell abnormalities are detected on cytology testing, women are referred to colposcopy for assessment. When HPV is detected and cytology testing is normal, we invite women to have a repeat cervical screening test in 12 months. If HPV is still present, women are also referred to colposcopy for assessment.

Colposcopy is the diagnostic and treatment arm of cervical screening. It enables a woman to have a more detailed examination of the cervix. After colposcopy, she is either discharged, offered further investigation such as cervical biopsies, or offered a colposcopy treatment, depending on her assessment.

The data presented in this report relates to women who took part in screening in CervicalCheck between 01 April 2023 and 31 December 2024.

*When we refer to 'women' in this report, we use this as shorthand to describe all those who share women's biological realities.

Message from the Clinical Director and Programme Manager

We are pleased to share this report on our CervicalCheck programme, part of the HSE National Screening Service, and to reflect on our progress during April to December 2023 and January to December 2024. Future programme data will be reported in a calendar year format from January to December. Data sources include the cervical screening register (CSR), extracts from the colposcopy electronic health records (Irisoft and Mediscan) and the Central Statistics office (CSO).

At the heart of this work are the women who take part in screening, and our staff and screening partners who support them every day. During the 9-month period in 2023 (1 April to 31 December) and the calendar year of 2024 (January to December), 379,732 women had a cervical screening test. This shows a significant level of engagement and confidence in the programme, and we are grateful to everyone who took part.

The report shows that screening coverage over 5 years remains high, particularly among women aged 25 to 34. It is lower among women aged 60 to 65, a group included in the programme since 2020. We are continuing to focus on improving access, awareness and equity so that everyone who can benefit from screening feels informed, supported and encouraged to attend. Cervical screening is a vital part of cancer prevention. By detecting HPV and identifying abnormal cell changes early, we can prevent most cancers from developing, and find others at a stage when they are easier to treat. Each year, staff in HSE colposcopy clinics treat between 6,000 and 7,000 women by removing abnormal cells, helping to reduce their risk of cervical cancer. The move to primary HPV screening has strengthened our screening programme by increasing our ability to detect cervical abnormalities. However, HPV screening also leads to more false positives. As expected, HPV screening led to more referrals to colposcopy, rising from 5.6% to 8.8% of the screened population between 2020 and 2024. We closely monitor this to ensure women receive the right care and to reduce the number of unnecessary investigations.

Screening also plays an important role in detecting cervical cancer at an early stage, often before symptoms develop. On average, 100 to 150 women are diagnosed with cervical cancer each year in colposcopy clinics, with most diagnosed at an early stage where treatment can be provided quickly and effectively. In the 21-month period from April 2023 to December 2024, cervical screening identified 208 cases of cervical cancer. Behind each of these numbers is

a person, and our focus remains on ensuring that every woman receives timely results, clear information, and compassionate care.

Quality assurance underpins everything we do. Our programme is guided by robust standards. This report outlines how we continued to perform well against these standards, achieving the majority of our targets during 2023 and 2024. The Screening Training Unit continued to support high standards in sample taking and professional education with the launch of its Education Strategy in 2023, while collaboration with laboratories and colposcopy services ensured
consistent and safe care, in line with the best practice internationally.

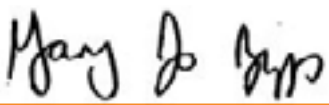
Alongside maintaining high standards, we focused on strengthening equity, quality and person-centred care, while continuing to make improvements in how screening is delivered. A key priority for us was improving access and participation, particularly for groups less likely to attend screening. This included progressing a framework to improve equity, expanding community engagement initiatives, increasing the availability of translated and accessible information, and focusing on improving uptake among women aged over 60.

We also made progress in digital and system development. This included work on the new CervicalCheck population screening register (CARA), expansion of electronic referrals to colposcopy, and improved use of data to support decision-making and service planning. In terms of clinical and programme innovation, in 2023 we published our research exploring women's attitudes to self-sampling and its potential to increase screening participation amongst those less likely to attend traditional screening. In 2024 we began to explore triage approaches to better target those most at risk and reduce unnecessary follow-up procedures.

Communications and stakeholder engagement remained a key area of focus. National campaigns, proactive media engagement, and the first CervicalCheck conference in 2024 all contributed to raising awareness, strengthening partnerships, and supporting participation in cervical screening. In November 2024 we joined our HSE and community partners to launch the HSE's national roadmap to eliminate cervical cancer in Ireland by 2040, providing a clear long-term direction for our work.

Overall, these initiatives reflect a dynamic programme that is committed to building equity, experience, and having a measurable impact, while maintaining a strong foundation of quality and safety. As we look ahead, our focus remains on continuing to improve participation, reducing inequities, and strengthening partnerships at local, national and international level. We would like to sincerely thank our dedicated staff, our clinical and community partners, and the women who take part in screening. Your collective effort enables us in CervicalCheck to deliver a high-quality, trusted programme to over 1.4 million eligible women across Ireland.

Professor Nóirín Russell
Clinical Director



Mary-Jo Biggs
Programme Manager

Glossary

AGC	Atypical glandular cells
ASC-H	Atypical squamous cells for which a high-grade lesion cannot be excluded
ASCUS	Atypical squamous cells of undetermined significance
cGIN/AIS	Cervical glandular intra-epithelial neoplasia/Adenocarcinoma in situ. These terms describe pre-cancer involving the columnar glandular (endocervical) cells rather than the squamous cells of the cervix
CIN	Cervical intra-epithelial neoplasia, which describes abnormal pre-cancerous changes of the squamous cells of the cervix
CIN1 (low-grade)	One-third of the thickness of the cervical surface layer is affected by abnormal cells
CIN2 (high-grade)	2-thirds of the thickness of the cervical surface layer is affected by abnormal cells
CIN3 (high-grade)	Full thickness of the cervical surface layer is affected by abnormal cells
Clinically responsible doctor (CRD)	The clinician with overall responsibility for patient care during a screening appointment
Cone biopsy	A treatment for cervical abnormalities that involves excision of cervical tissue under general anaesthetic using a scalpel
Coverage (5-year coverage)	Coverage is the proportion of eligible women living in Ireland aged 25 to 65 who have had a cervical screening test (within the last 5 years). In this report, the calculation of 5-year coverage has changed to allow a woman who attends within 6 months of her invitation to be counted as screened
DNA	Did not attend

Failsafe	Processes that the programme follows to help ensure women receive colposcopy or follow-up screening appointments when these are recommended
HPV	Human papillomavirus
HSIL	High-grade squamous intraepithelial (moderate and severe) lesion
Total hysterectomy	A surgical procedure that involves removal of the uterine body and the cervix
LSIL	Low-grade squamous intraepithelial lesion
LTFU	Lost to follow up – where a woman does not attend her follow-up appointment even after failsafe measures have been taken
NSS	National Screening Service
PPV	Positive predictive value is a measure of the ratio of true positives to all positive (abnormal) results – it indicates the chance of having an abnormality if a person is told they have a positive (abnormal) result. It is dependent on the sensitivity, specificity and prevalence of the condition in the population
Reflex cytology	The use of cytology testing after a positive HPV test to triage patients who need immediate referral for colposcopy
Referral value	The referral value is a measure of how many women have a cervical biopsy while attending colposcopy in order to find 1 person with high-grade cell changes (CIN2+) or cervical cancer
Trachelectomy	A surgical procedure that involves removal of the entire cervix under general anaesthetic
Transformation zone	The area of the cervix where the squamous epithelium and glandular epithelium meet. This is the most common zone to find cervical abnormalities
Unique women	An individual (unique) woman may attend for more than 1 screening test and more than 1 colposcopy appointment during the time period of a report. When we refer to number of screening tests or cervical biopsies, this may differ from number of unique women who had a screening test or a cervical biopsy performed
Early repeat	A test repeated after a 12-month interval for women who have HPV detected at their initial screening test but no abnormalities found in their cytology test

Executive summary

Cervical screening overview

- 379,732 women screened.
- 75.8% population coverage for a 5-year period.
  - Coverage is highest in women aged 25-34.
  - Coverage is lowest amongst those aged 60-65.
  - 8,749 women diagnosed and treated for high-grade pre-cancerous cells (CIN2 and CIN3).
  - 208 women diagnosed and treated for cervical cancer.

Delivery of results

- 97.4% of women got their results within 4 weeks of their test being taken.

Screening results (overall)

- 379,732 women screened.
- 11.9% of all women screened tested positive for HPV.
- Of the women who tested positive for HPV:
  - 43.4% had normal cytology.
  - 49.9% had low-grade cytology.
  - 6.7% had high-grade cytology.
- Women who test positive for HPV but have normal cytology results are invited for an early repeat HPV test after 12 months. Of these women, 88% attended their repeat test within 15 months of getting their invitation.

Early repeat HPV test

- 17,280 women had a repeat HPV test performed at 12 months.
- 52.8% tested positive for HPV at their 12-month repeat test.
- Of the women who tested positive for HPV.
  - 49.7% had normal cytology.
  - 45.8% had low-grade cytology.
  - 4.5% had high-grade cytology.

We refer all women to colposcopy if HPV is found at their 12-month follow-up test, even if their cytology results are normal.

Referral to colposcopy

During the reporting period, 379,732 women attended cervical screening. Of these, 31,623 women, or 8.3%, were referred for colposcopy.

Colposcopy activity overview

- 97,056 colposcopy clinic appointments:
  - 45,080 were new referrals.
  - 51,976 were returns (including 39,175 referrals due to an abnormal bleeding result; and 5,905 were referrals due to a clinical concern).
- 100% of women referred with a suspicion of cancerous cells were seen within 2 weeks.
- 86.7% of women referred with HPV positive/high-grade cytology were seen within 4 weeks.
- 83.3% of women referred with HPV positive/low-grade cytology were seen within 8 weeks.

The referral value measures how many women are biopsied at colposcopy to find 1 person with high-grade cell changes (CIN2+) or cervical cancer. The referral value was 3.75. This means that for every 3.75 women who had a cervical biopsy at colposcopy, 1 was found to have high-grade cell changes (CIN2+).

Histology for entire period

A tissue sample (histological biopsy) was taken in 46% of colposcopy appointments.

The results of these biopsies were:

- 23% no evidence of CIN
- 52% low-grade CIN (CIN1)
- 24% high-grade CIN (CIN2+)
- 1% cervical cancer.

Treatment at colposcopy

Most treatments carried out in colposcopy are for changes in the transformation zone of the cervix that could develop into cancer if left untreated. 99% of women who need treatment have it as an outpatient under local anaesthetic.

Treatment type breakdown:

- 74.2% were large loop excisions of the transformation zone (LLETZ).
- 20.2% were thermal ablation of the transformation zone.
- 4.5% were treatments for non-CIN conditions.
- 1.1% treatments were carried out under general anaesthetic (hysterectomies, cone biopsies and trachelectomies).

Highlights & infographic

Highlights from 21 months of cervical screening 1 April 2023 to 31 December 2024

Ireland's free cervical screening programme for women and people with a cervix aged 25 to 65. Cervical screening is a test for HPV first.

When people are invited

Ages 25 to 29
Every 3 years

Ages 30 to 65
Every 5 years

CervicalCheck programme at a glance

1.4 million eligible women in Ireland

6,000 registered sample takers

2 laboratories

15 colposcopy clinics

Screening participation

379,732 women screened

Period	Number screened
1 Apr - 31 Dec 2023	171,672
1 Jan- 31 Dec 2024	208,060

Coverage

75.8%
women screened within the previous 5 years

Highest coverage
- Ages 25-29: 93%
- Ages 30-34: 91%

Lowest coverage
- Ages 60-65: 49%

HPV test results

88.1% tested negative for HPV

11.9% tested positive for HPV

Among those who tested HPV positive:
- **43.4%** Normal cytology
- **49.9%** Low-grade cell changes
- **6.7%** High-grade cell changes

Colposcopy and treatment

8.3% of women screened were referred for colposcoy

97,056 Colposcopy appointments

8,749 women diagnosed and treated for high-grade pre-cancerous cell changes (CIN2+)

208 women diagnosed and treated for cervical cancer

Programme activities

- Published the CervicalCheck Education Strategy
- Invited over 100,000 women aged 60-69 to attend HPV screening
- Increased accessible and translated information
- Expanded community engagement to improve equity in screening
- Held the first national CervicalCheck conference

Research developments

New research showed early evidence of the protective effect of HPV vaccination in women at the time of their first cervical screening test.

Research explored the potential role of HPV self-sampling in Ireland including:
- women's views and preferences
- sample takers' views and preferences

Together towards cervical cancer elimination

Ireland's goal:

Eliminate cervical cancer by 2040

CervicalCheck joined partners across Ireland to launch the national roadmap for cervical cancer elimination.

Screening activity overall

Screening tests are performed in several locations. During the time period of this report, 342,532 (90.2%) screening tests were taken in primary care; 31,658 (8.3%) were taken in colposcopy clinics; and 5,542 (1.5%) were taken in secondary care clinics (e.g gynaecology, gynae-oncology and sexual health clinics). Table 1 shows the number of women we screened in each age group during the 9-month reporting period in 2023 (April to December) and the 12-month reporting period in 2024 (January to December) in all locations. In total, 171,672 screening tests were carried out in the 2023 period, and 208,060 were carried out in 2024.

A small number of women attended who were outside the eligible age group. This includes women <25 who may take part in screening under specific circumstances, and women aged ≥66 presenting for the first time, as well as those attending colposcopy and post-colposcopy surveillance. In 2023, we offered an exit HPV test to over 100,000 women between the ages of 60 and 69 when it was shown that a single HPV test in older women could reduce the risk of developing cervical cancer in later life. These women had their final cervical screening test with the programme before 2020, the year when HPV screening was introduced and the upper age range for screening was extended to 65.

Table 1. Number of unique women who had a CervicalCheck screening test (all locations) by age cohort from 1 April to 31 December 2023 and 1 January to 31 December 2024

Age group	2023 (01 April- 31 December)		2024 (01 January-31 December)	
	N	%	N	%
<25	207*	0.1%	263*	0.1%
25 - 29	31,261	18.2%	43,110	20.7%
30 - 34	22,247	13.0%	36,371	17.5%
35 - 39	18,529	10.8%	23,845	11.5%
40 - 44	16,793	9.8%	21,210	10.2%
45 - 49	12,838	7.5%	16,278	7.8%
50 - 54	23,037	13.4%	25,046	12.0%
55 - 59	21,193	12.3%	19,647	9.4%
60	3,751	2.2%	3,352	1.6%
61-65	13,679	8.0%	12,007	5.8%
>65	8,137**	4.7%	6,931**	3.3%
Total	**171,672**	**100.0%**	**208,060**	**100.0%**

**Cervical screening under the age of 25 is associated with more harms than benefits. Screening in this age group can lead to treatment of cell changes that would not turn into cancer. Changes in the cervix in younger women almost always return to normal without treatment. Treatment can have side effects including an increased chance of premature birth in later pregnancies. Exceptions in this age group may include women living with HIV.*

*** Screening after the age of 65 is associated with more harms than benefits. Exceptions may include women attending for the first time for HPV screening, women attending for post-colposcopy follow-up and those who are being followed up after a previous abnormal result.*

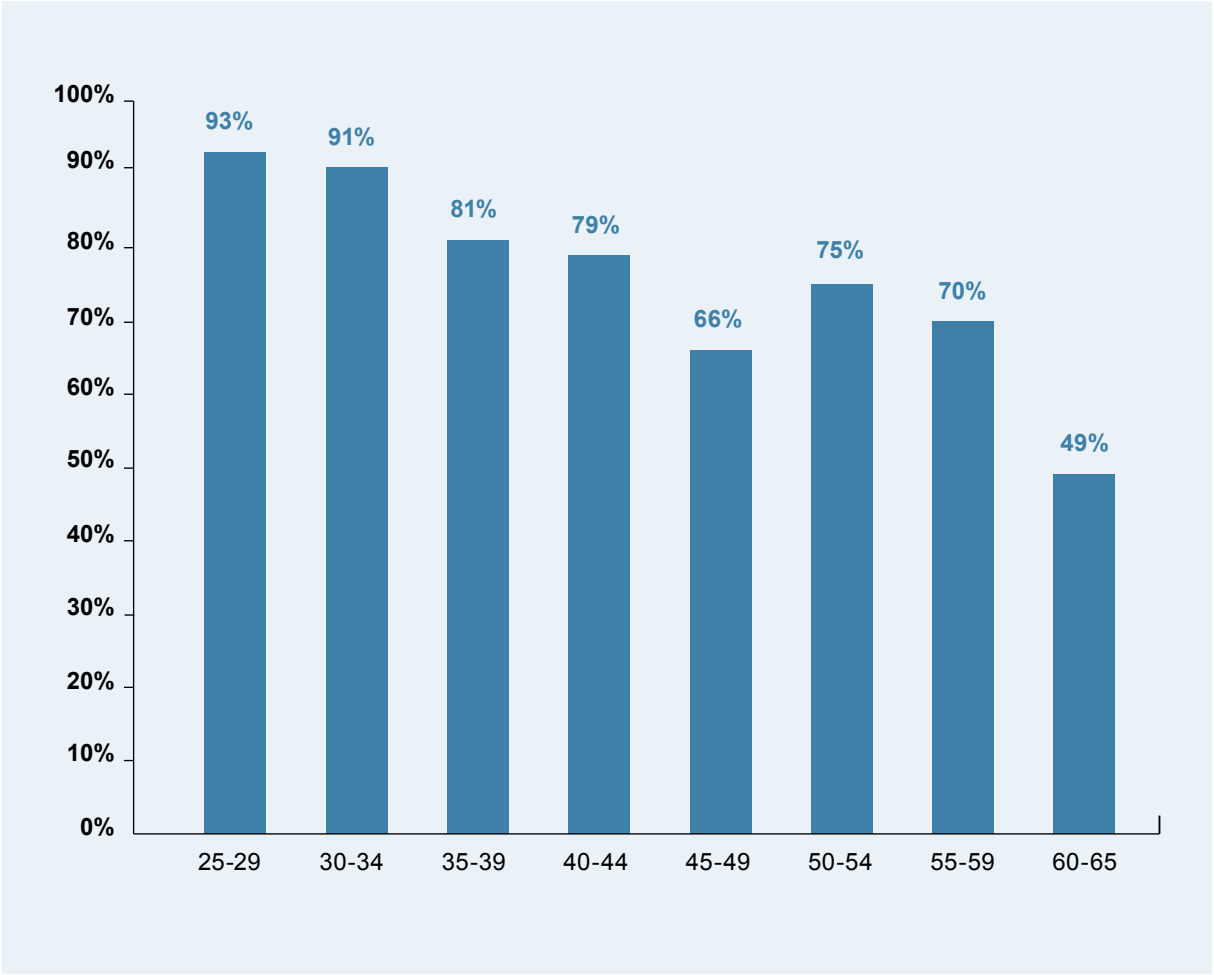
Programme coverage

CervicalCheck QA standard	Definition	Target
Standard 2.1	Women within the defined screening population should have at least 1 satisfactory screening test within a screening interval	80%

Coverage is a key performance indicator for any national screening programme. It represents the proportion of the eligible population* screened within the last 5 years. Our programme QA standard for cervical screening coverage is 80%. In this report, we changed how we calculate 5-year screening coverage to align with other international programmes. Women who attend screening within 6 months of receiving their invitation are considered as screened and are now included in the 5-year coverage figures. The 5-year population coverage as of the end of December 2024 was 75.8%.

Ireland's eligible female population for cervical screening is 1.4 million. This has increased in recent years because we extended the screening age from 60 to 65 in 2020, which increased our eligible population by approximately 150,000.[1] Additionally, the eligible population has increased by nearly 95,000 from 2022 to 2023 due to inward migration.[1] We use this data to estimate the eligible population when calculating coverage. Figure 1 shows coverage of eligible women by age group.

Figure 1. 5-year coverage of eligible women by age group



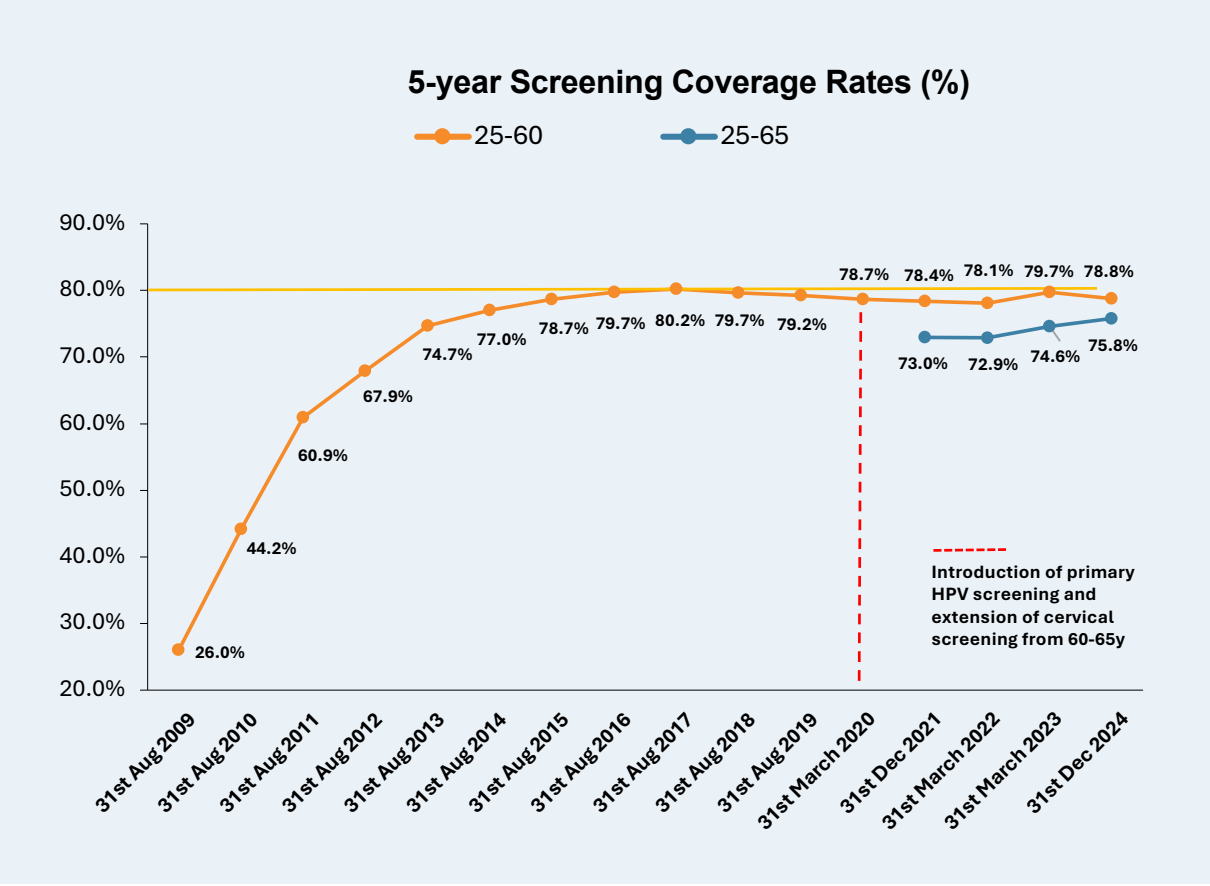
**The eligible population is the number of women aged 25-65 in Ireland according to the Central Statistics Office return figures for 2022 and population estimates for 2023 (available from Methodology Irish Population Estimates from Administrative Data Sources, - Central Statistics Office), adjusted for those women who have had a total hysterectomy with complete removal of the cervix. The number of women with a hysterectomy is based on the number of surgeries performed in HSE hospitals, according to the HIPE office.*

Women aged 25 to 29 years are invited at 3-yearly intervals. The 3-year coverage calculation includes women who attend screening within 6 months of invitation. The 3-year coverage specifically for women aged 25 to 29 years at the end of December 2024 was 72.6%.

Screening coverage over time

The proportion of the eligible population aged 25 to 60 and 25 to 65 years who had a cervical screening test between 2009 and 2024 is shown in Figure 2. The 5-year coverage for cervical screening has continued to increase over time. The last 2 data points are based on the updated method of 5-year coverage calculation. This considers a woman to be screened if she attends within 6 months of her screening test being due.

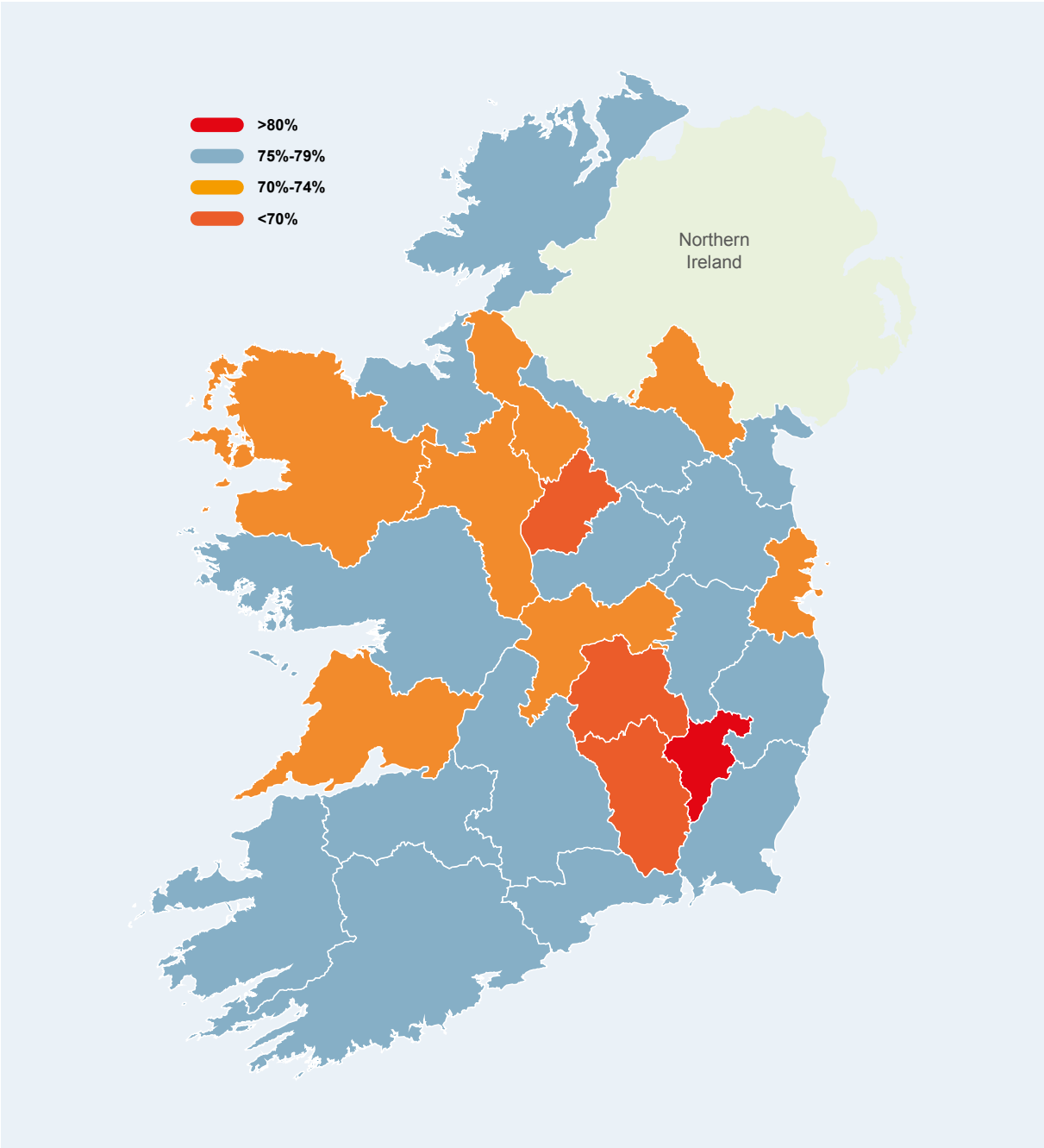
Figure 2. CervicalCheck coverage over time (2009-2024)



Geographical coverage

The geographical spread of screening coverage by county is shown in Figure 3. Coverage calculations are based on population estimates from Census 2022 (as detailed in Figure 1). They do not take into account estimates of hysterectomy status as this data is not available at county level. Coverage varies across counties from 65% to 82% (Figure 3).

Figure 3. 5-year coverage (%) for women aged 25 to 65 based on county of residence



Laboratory activity and outcomes

Laboratory turnaround time and delivery of results

CervicalCheck QA standard	Results turnaround time	Target
Standard 4-8	Cervical screening results must be authorised, released and transmitted to CervicalCheck within the target turnaround time from sample receipt in the laboratory collection point.	95% within 10 working days.

Our quality assurance standards require that >95% screening results are authorised and sent to our programme within 10 working days of the laboratory receiving the sample. This helps ensure women and their doctors receive results as quickly as possible. It is an important quality measure for our programme and supports a positive experience for the women who choose screening. Table 2 shows the turnaround times (time between receipt of sample at laboratory to results being received by our programme) during the 9-month reporting period in 2023 and the 12-month reporting period in 2024.

CervicalCheck QA standard	Programme response time	Target
Standard 2-10	Letters should be issued from the programme to women advising them of the result and next recommended step in the screening programme	90% within 4 weeks from the date of their screening test.

As per our quality assurance standards, the programme should issue the result to >90% women within 4 weeks of the test being taken. The programme response time is shown in Table 2. For the 9-month period in 2023, 95.6% of women received their screening test results within 4 weeks. For the 12-month period in 2024, 98.9% of women received their results letters within 4 weeks.

Table 2. Turnaround times and programme response times 2023 and 2024

Performance Parameter	2023 (April – Dec)	2024 (Jan – Dec)	QA Standard
Overall			
% results returned to the programme within 10 working days of receipt of sample at laboratory	85.7%	96.0%	>95%
% of women who received results within 4 weeks	95.6%	98.9%	>90%

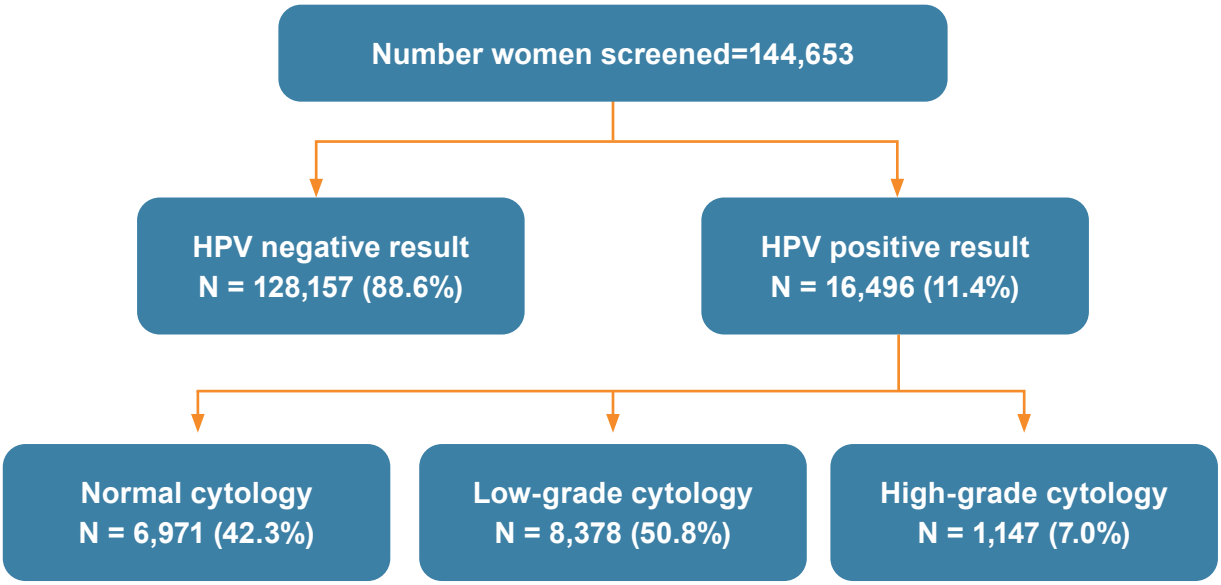
Primary screening results* for women aged 25 to 65 years (2023-2024)

We test every screening sample for HPV. If HPV is detected, then the sample is checked for cell changes using cytology testing.

Of the 144,653 women screened April to December 2023, 88.6% of women had a negative HPV test. The HPV detected rate was 11.4%. Approximately 42% of women with a HPV positive test result had no cytological abnormalities detected; 51% had low-grade abnormalities detected; and 7.0% had high-grade abnormalities detected (Figure 4).

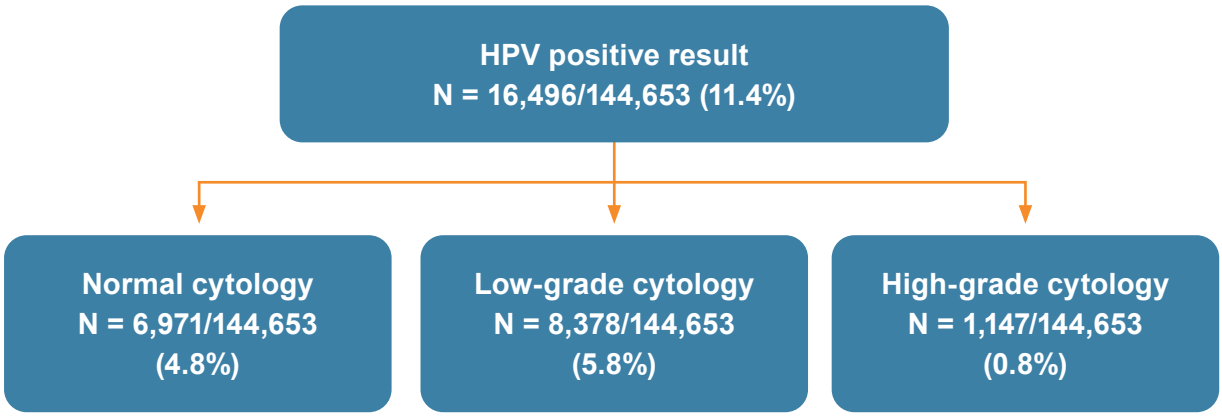
Of the 144,653 women screened, 4.8% of women had a HPV positive test result with no cytological abnormalities detected; 5.8% had a HPV positive test with low-grade abnormalities detected; and 0.8% had a HPV positive test with high-grade abnormalities detected (Figure 5). This is in line with internationally published reference ranges.[2]

Figure 4. Primary screening results* (HPV & cytology) for April to December 2023



ages 25 to 65 years only and excludes unsatisfactory results

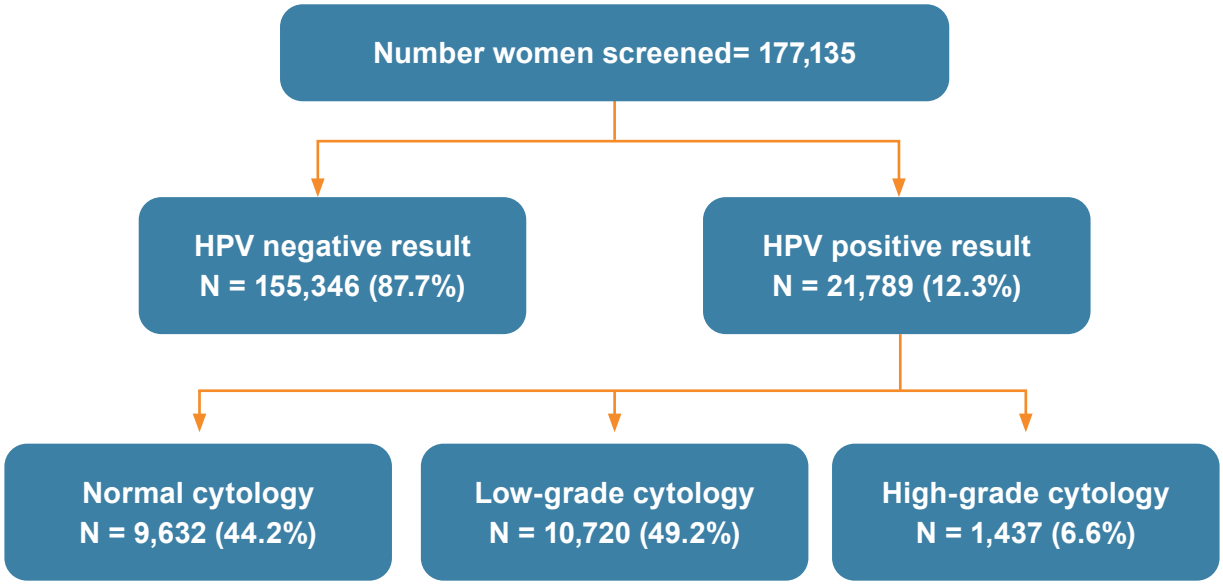
Figure 5. Cytology findings in HPV positive women in the screened population April to December 2023



Of the 177,135 women screened in 2024, 87.7% women had a negative HPV test and 12.3% had a HPV positive result. Approximately 44% of women with a HPV positive result had no cytological abnormalities detected; 50% had low-grade abnormalities detected; and 6.6% had high-grade abnormalities detected (Figure 6).

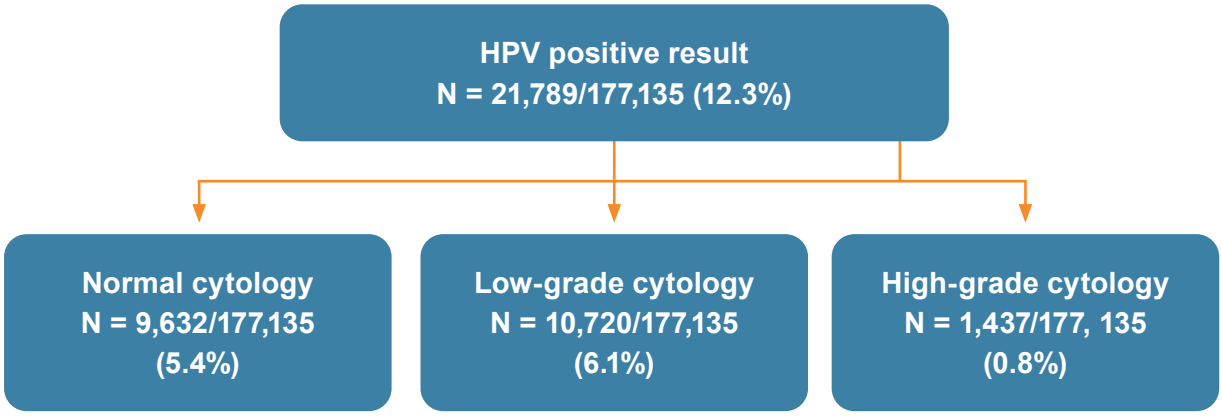
Of the 177,135 women screened in 2024, 5.4% of women had a HPV positive test result with no cytological abnormalities detected; 6.1% had a HPV positive test with low-grade abnormalities detected; and 0.8% had a HPV positive test with high-grade abnormalities detected (Figure 7).

Figure 6. Primary screening results* (HPV & cytology) in January to December 2024



ages 25 to 65 years only and excludes unsatisfactory results. Primary screening results do not contain women who attended for their 12-month follow-up repeat HPV screening test.

Figure 7. Cytology findings in HPV positive women in the screened population January- December 2024



Women who test positive for HPV and have an abnormal cytology test result are referred immediately to colposcopy for further examination. Women who test positive for HPV but have a normal cytology result are invited for an early repeat HPV test after 12 months. If this second HPV test is positive, they are referred to colposcopy even if the cytology is normal.

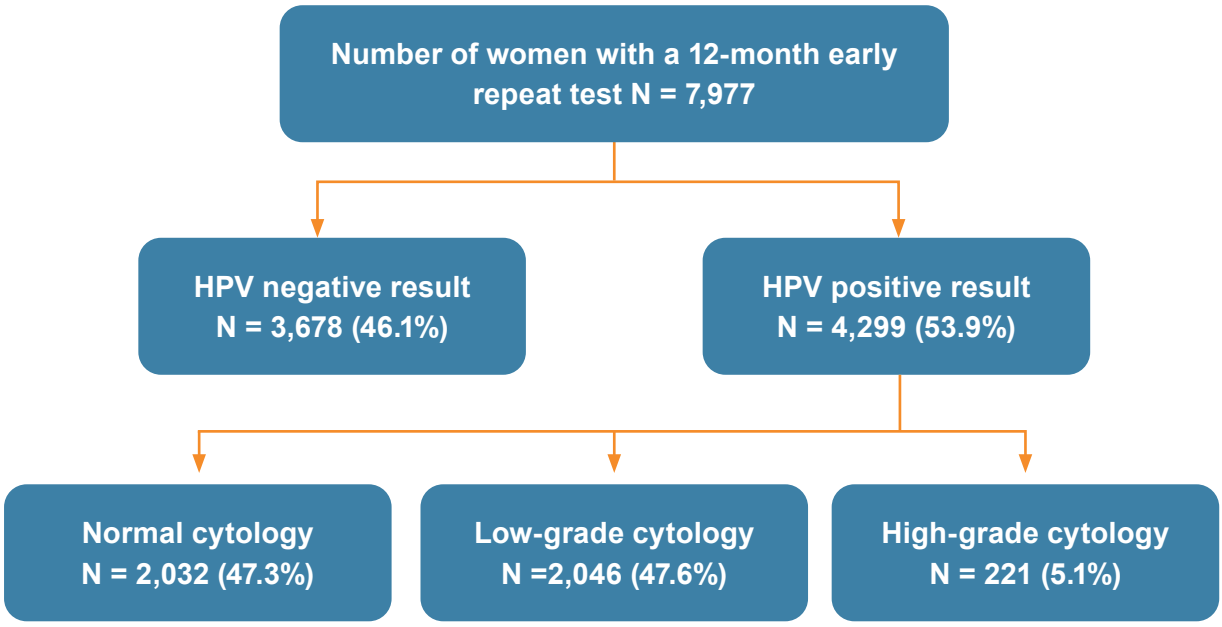
12-month follow up HPV test (early repeat)

Figures 8 and 9 show screening results for women who attended for a 12-month follow-up (early repeat test) in 2023 (01 April to 31 December) and 2024 (01 January to 31 December). Of these women, 88% of those invited for an early repeat HPV test attended within 15 months of invitation. In 2023 and 2024, 46.1% and 48.0% respectively of repeat HPV tests were negative. These women returned to routine screening intervals.

In 2023, 54% of women were HPV positive at 12 months. Of these, 47% had normal cytology results, 48% had low-grade cytology results and 5% had high-grade cytology results (Figure 8).

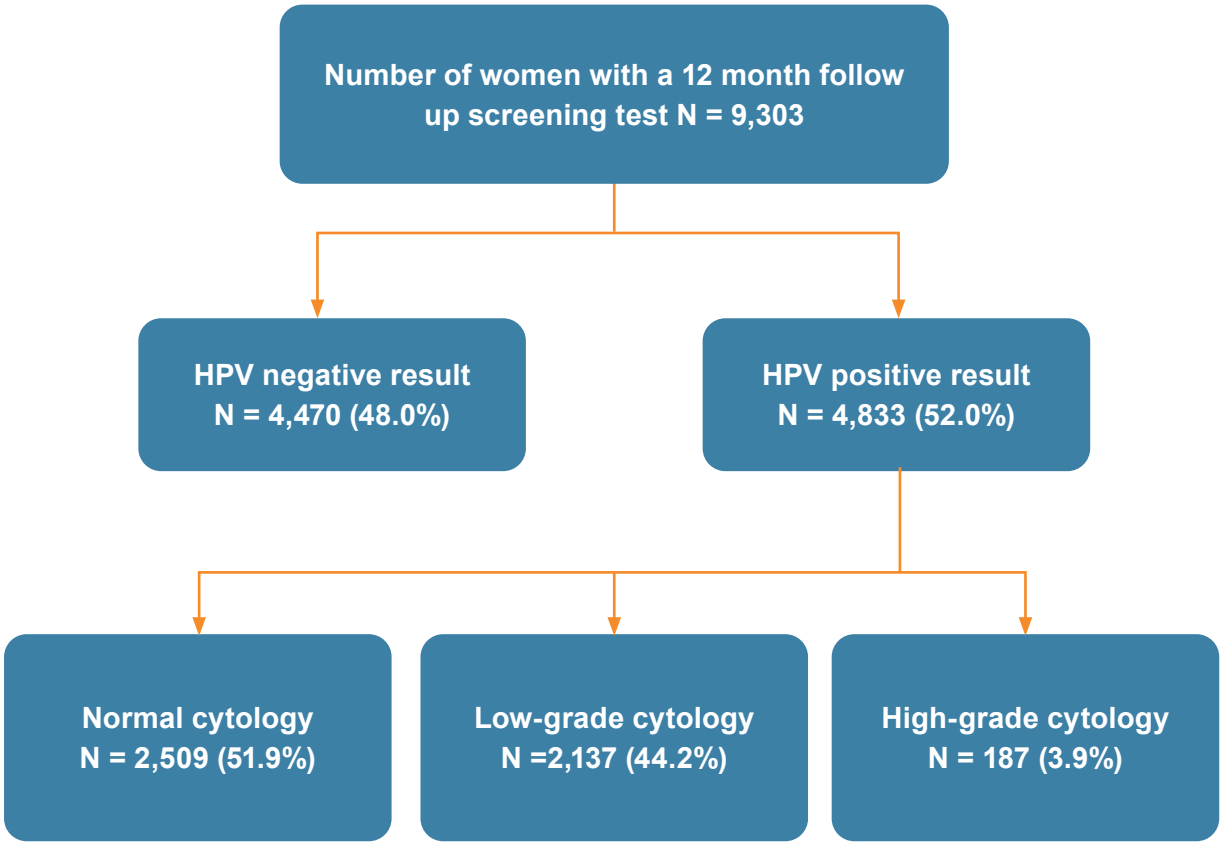
In 2024, 52% of women were HPV positive at 12 months. Of these, 52% had normal cytology results, 44% had low-grade cytology results, and 4% had high-grade cytology results (Figure 9).

Figure 8. Follow-up screening result* in early repeat cohort at 12 months (2023)



**ages 25 to 65 years only and excludes unsatisfactory results*

Figure 9. Follow-up screening result* in early repeat cohort at 12 months (2024)



**ages 25 to 65 years only and excludes unsatisfactory results*

Referral to colposcopy

Table 3 shows our rates of referral to colposcopy in 2023 (April to December) and in 2024 (January to December). The referral to colposcopy rate is defined as the number of women referred to colposcopy divided by the number of screening tests performed during a given time period. In the 9-month reporting period in 2023, a total of 14,127 women were referred to colposcopy following an abnormal screening result. The colposcopy referral rate was 8.5%. In the 12-month reporting period in 2024, 17,496 women were referred to colposcopy following an abnormal screening test result. The colposcopy referral rate was 8.8%.

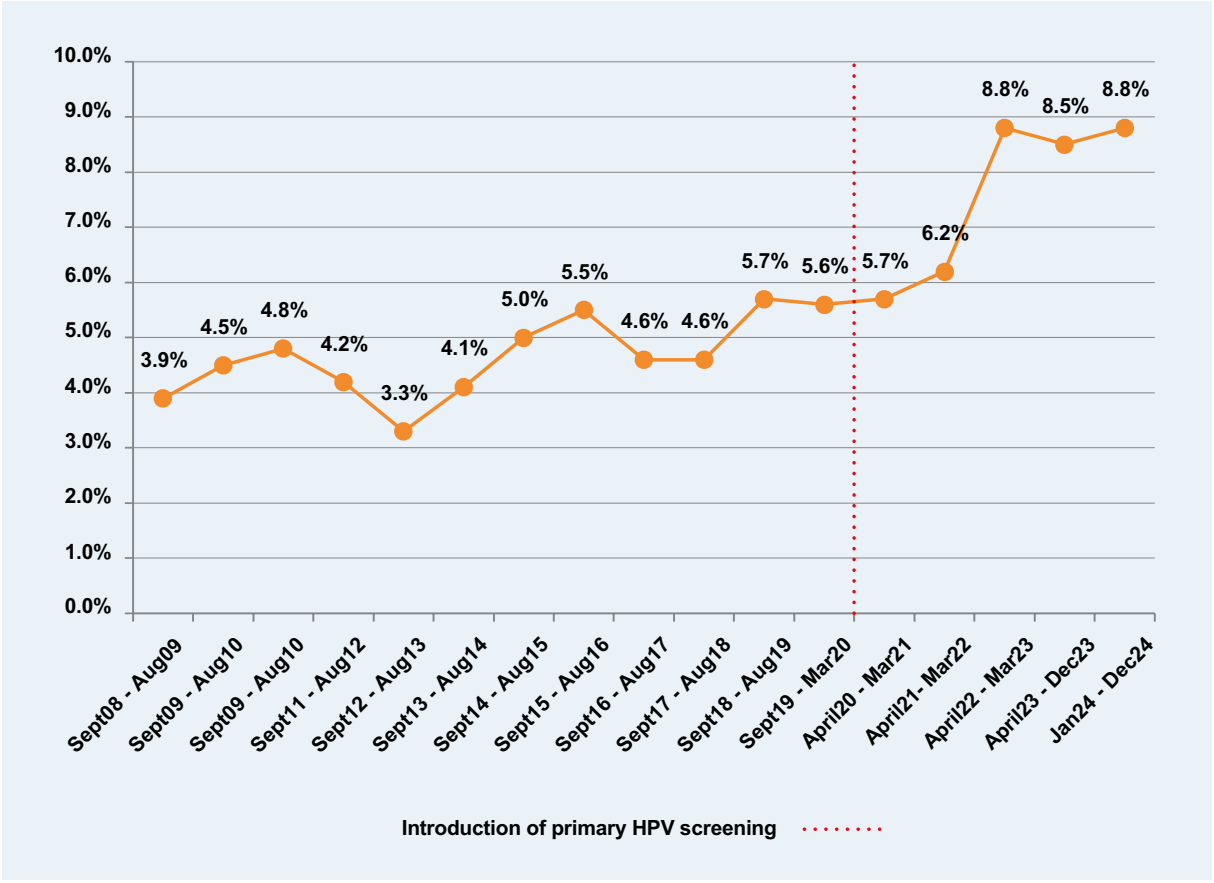
An abnormal screening result can be either a HPV positive test with abnormal cytology or 2 consecutive HPV positive tests with normal cytology. Both of these lead to a referral for colposcopy. The move to primary HPV screening has strengthened our screening programme by increasing our ability to detect cervical abnormalities but we also know that HPV screening leads to more false positives. As expected, HPV screening led to more referrals to colposcopy, rising from 5.6% to 8.8% of the screened population between 2020 and 2024. This is due to both the increased sensitivity of HPV screening and the practice of referring all women with 2 consecutive HPV tests for a colposcopy regardless of cytology result.

Table 3. Referral to colposcopy in 2023/2024

Time period	Number and percentage of screening tests performed in primary screening locations resulting in a new referral to colposcopy
2023 (April – December)	14,127 (8.5%)
2024 (January – December)	17,496 (8.8%)

Figure 10 shows the referral to colposcopy rates since the beginning of our programme in 2008 until the end of 2024. In 2008 the referral rate was 3.9%. Referral rates have fluctuated over time and in response to programme policy changes. Future evidence-based changes to triage strategies are expected to reduce the number of unnecessary investigations and allow for a more focused approach to determine which patients will most benefit from colposcopic assessment.

Figure 10. Referral to colposcopy rates September 2008 to December 2024



Failsafe

A key part of any screening programme is making sure people with abnormal results receive appropriate follow-up.

Our programme uses failsafe processes to support timely follow-up when it is advised. These processes help ensure results reach women and their clinically responsible doctor. They also support the safe management of repeat tests, further investigations, and referrals where needed.

During April to December 2023, we performed 17,707 failsafe processes. During January to December 2024, we performed 22,758 failsafe processes.

Table 4. Failsafe process examples

Time period	Number and percentage of screening tests performed in primary screening locations resulting in a new referral to colposcopy
Awaiting colposcopy update	A referred to colposcopy following an abnormal screening test has been advised and an appointment has not been scheduled.
HPV positive/normal cytology 12-month repeat	A repeat screening test in 12 months was recommended, and this test has not been taken.
Post-colposcopy discharge 12-month repeat	A repeat test in 12 months in primary care was requested by the colposcopy clinic and this test has not been taken.
Discharge DNA (did not attend)	A follow-up test has been recommended (in primary care or in colposcopy) and woman has not attended.
3-month repeat	When test was not processed or was inadequate - a recommended repeat test in 3 months has not happened.

Colposcopy activity and outcomes

Colposcopy provides the diagnostic part of the cervical screening service. Colposcopists use a colposcope (binocular camera) to examine the cervix in detail. Colposcopy clinics also provide expertise in cervical assessment for a small number of patients with a suspicious appearance of their cervix or symptoms that could suggest cervical cancer.

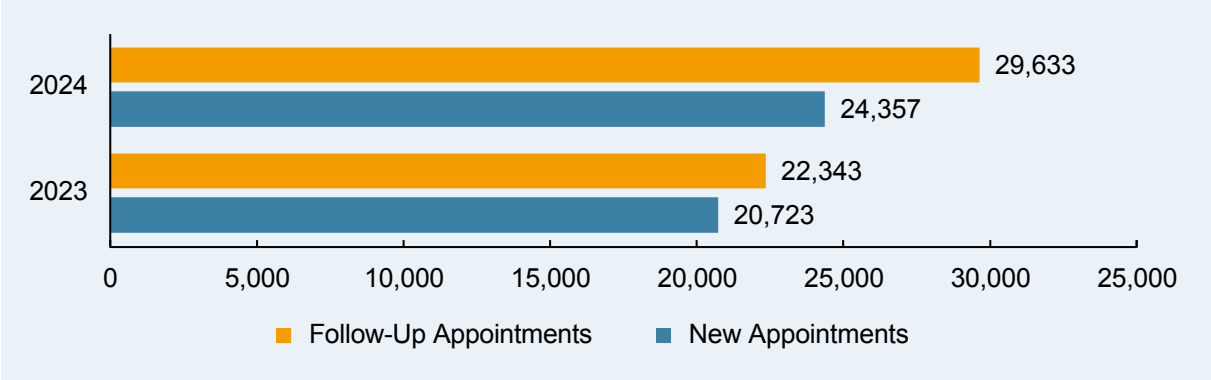
From April to December 2023, 20,723 women attended colposcopy as a new referral (Figure 11). The majority (18,196; 87.8%) were referred with a positive HPV test (either a HPV test with abnormal cytology, or 2 consecutive HPV tests with normal cytology at a 12 monthly interval). 2,527 women (12.2%) were also referred for clinical reasons. Over 22,340 women (return patients)* attended colposcopy for follow-up assessment.

In 2024, 24,357 women attended colposcopy as new referrals (Figure 11). The majority (20,979; 86.1%) were referred with a positive HPV test (either a HPV test associated with abnormal cytology or 2 consecutive HPV tests with normal cytology at a 12 monthly interval). 3,378 (13.9%) women were referred for clinical reasons. Over 29,630 women attended colposcopy for follow-up (return patients)*.

Due to the interval between the test being taken and the attendance at colposcopy, a woman may have more than 1 screening test and more than 1 colposcopy visit +/- cervical biopsy during the time period of a report. Therefore, figures reported in a given time period may differ between screening and colposcopy chapters.

**This includes women under surveillance for low-grade cell changes, and those having follow-up after treatment of abnormal precancerous cells*

Figure 11: Number of new and follow-up appointments at colposcopy



Reason for a new referral to colposcopy

Table 5 outlines reasons why women were referred to colposcopy in 2024. Over 86% were referred due to an abnormal screening test result and the remainder were referred due to a clinical reason.

Table 5. HPV and cytology results in patients newly referred to colposcopy

	2023	Percentage	2024	Percentage
Abnormal screening test	**18,196**	**87.8%**	**20,979**	**86.1%**
Reasons:				
HPV positive/high-grade cytology	1,975	9.5%	2,125	8.7%
HPV positive/low-grade cytology	13,152	63.5%	15,455	63.5%
Persistent HPV/normal cytology	3,057	14.8%	3,379	13.9%
Unsatisfactory/inadequate sample	12	0.1%	20	0.1%
Clinical indication	**2,527**	**12.2%**	**3,378**	**13.9%**
Reasons:				
Clinical indication - non-urgent	1,570	7.6%	2,268	9.3%
Clinical indication - urgent	957	4.6%	1,110	4.6%
Total no. of referrals	**20,723**	**100%**	**24,357**	**100%**

Did not attend (DNA) rate

Did not attend (DNA) rates for colposcopy services

CervicalCheck QA standard	Definition	Target
Standard	The percentage of appointments offered where women do not attend and who do not notify the colposcopy service	<10%

Table 6 shows the rate of women who did not attend (DNA) their appointment at colposcopy. A low DNA rate is important so that women get the care they need when they need it. It is also a measure of an efficient colposcopy service. We aim to use our resources effectively while prioritising women's health and supporting them to complete all their recommended follow-up appointments.

The colposcopy DNA rate was within our programme standard of <10% for this reported period.

Table 6. DNA rate at colposcopy clinics

Time period	2023	2024
Overall DNA rate	7.7%	8.0%
DNA rate - new appointments	7.2%	7.5%
DNA rate - follow-up appointments	10.1%	9.6%

Waiting times for colposcopy

Table 7 details the percentage of women seen within the programme standard for waiting times for colposcopy. Our programme standards state that women for whom a cervical cancer is suspected should be seen within 2 weeks. Those with a HPV positive/high-grade cytology result should be seen within 4 weeks. Those with HPV positive/low-grade or normal cytology should be seen within 8 weeks. Our standards state that over 90% of all women referred should be offered a colposcopy appointment within 8 weeks.

Definition: Colposcopy waiting time is a measure of the interval between the referral letter being received by the colposcopy clinic and the woman attending colposcopy.

Table 7. The percentage of women seen at colposcopy within the programme QA standard for waiting times 2023/2024

Referral reason	QA Standard	2023 % women seen within standard	2024 % women seen within standard
Suspicion of cancer	2 weeks	100%	100%
HPV positive/high-grade cytology	4 weeks	81.4%	91.7%
HPV positive/low-grade cytology	8 weeks	75.1%	91.1%
HPV positive/normal cytology	8 weeks	74.0%	89.3%
Cytology not recorded/ cytology unsatisfactory	8 weeks	71.9%	89.3%
All referrals to colposcopy	8 weeks	76.7%	90.8%

Histological biopsies

Where an abnormality is suspected at colposcopy, a biopsy is performed to confirm the diagnosis. A diagnostic biopsy involves sampling a portion of the abnormal area on the cervix. A therapeutic biopsy involves excising the abnormal area in its entirety. The abnormal area usually includes the transformation zone of the cervix. Some patients diagnosed with cervical abnormalities are treated by thermal ablation of the transformation zone.

Table 8 shows the histology results from histological biopsies taken in colposcopy clinics. Each individual woman is counted once, even though she may have multiple biopsies taken. The highest-grade biopsy per individual is included. Histology of the cervix is described using the term cervical intra-epithelial neoplasia (CIN). Low-grade CIN is usually managed with careful monitoring as it often returns to normal without treatment. High-grade CIN is less likely to return to normal. It is usually treated by excision or ablation. International evidence supports conservative management (careful monitoring) of moderate CIN (CIN2), thus we have adopted this approach.[3,4]

Table 8. Histological biopsies taken in colposcopy clinics

April to December 2023	Totals	Highest grade histology (all samples)	CIN grade (samples with CIN detected)
No CIN/Normal	3,692	22%	
Low-grade CIN	8,776	52.4%	67%
High-grade CIN	4,187	25%	32%
Cancer	89	0.5%	0.7%
Total	**16,744**	**100%**	**100%**

January to December 2024	Totals	Highest grade histology (all samples)	CIN grade (samples with CIN detected)
No CIN/Normal	4,764	24.3%	
Low-grade CIN	10,122	51.7%	68.4%
High-grade CIN	4,562	23.3%	30.8%
Cancer	119	0.6%	0.8%
Total	**19,567**	**100%**	**100%**

Treatment at colposcopy

All colposcopists working in CervicalCheck clinics are accredited by the British Society of Colposcopy and Cervical Pathology (BSCCP) as per our programme quality assurance standards.[5] Most women who have their treatment for precancer (CIN) or early cancer performed in the outpatient setting of the colposcopy service. All women are offered local anaesthetic for treatment in colposcopy. Some women require a general anaesthetic for their treatment. Some women are recommended to have a hysterectomy to reduce their risk from persistent precancerous abnormalities. If there is evidence of cancer or persistent high-grade disease, some women are referred for a cone biopsy (wider excision of cervical tissue), trachelectomy (removal of entire cervix) or total hysterectomy (removal of the entire uterus and cervix). These treatments are performed in theatre under general anaesthetic.

In both 2023 and 2024 our programme met our programme standard of >90% of treatments being performed in an outpatient setting. Table 9 shows the percentages of women treated in an outpatient setting, usually under local anaesthetic, in 2023 and 2024.

Table 9. Treatment under local anaesthetic

Performance parameter	2023	2024	QA standard
The majority of women should have treatment performed as an outpatient under local anaesthetic	**99.1%**	**98.8%**	**>90%**

In the 9-month period in 2023 (April to December) 4,974 treatments were performed at colposcopy clinics (Table 10). Under local anaesthetic, 3,760 (75.6%) LLETZ biopsies and 966 (19.4%) thermal ablations were performed. Under general anaesthetic, 43 (0.9%) hysterectomies, <5 (0.02%) cone biopsies and <5 (0.02%) trachelectomies were performed. There were 203 (4.1%) treatments performed for non-CIN reasons (vulval biopsies, vaginal biopsies, removal of cervical polyps, hysteroscopies).

In 2024 (Jan to December) 6,019 treatments were performed. Most treatments were performed under local anaesthetic in colposcopy outpatient settings (Table 10). Under local anaesthetic, 4,395 (73.0%) LLETZ and 1,257 (20.9%) thermal ablations were performed. Under general anaesthetic, 62 (1.0%) hysterectomies, 9 (0.1%) cone biopsies and <5 (0.03%) trachelectomies were performed. There were also 294 (4.9%) treatments for non-CIN reasons.

Table 10. Treatments in colposcopy

Performance parameter	2023	2024	QA standard
The majority of women should have treatment performed as an outpatient under local anaesthetic	**99.1%**	**98.8%**	**>90%**

	2023	2024
Total number of colposcopy appointments	47,175	59,607
Treatments at new appointment	1,236	1,491
Treatments at follow-up appointment	3,738	4,528
Total number of treatments performed	4,974	6,019
% of appointments where a treatment was performed - all visits	**10.5%**	**10.1%**
% of new appointments where a treatment was performed	**6.0%**	**6.1%**
% of follow-up appointments where a treatment was performed	**16.7%**	**15.3%**

In both 2023 and 2024, most treatments were performed at follow-up colposcopy appointments. Most colposcopy appointments focus on diagnosis and assessment with or without a biopsy. The majority of women who attend colposcopy do not require treatment.

Most women referred to colposcopy clinics do not have evidence of high-grade cervical changes (CIN2+) or cervical cancer at the time of assessment. 6% of women receive treatment after their first colposcopy visit. This includes women with clinical indications (either urgent or non-urgent) and women referred following an abnormal screening test result.

Treatment by excisional biopsies

In 2023 our programme standard that >90% excisional (therapeutic) biopsies performed at the first visit should have CIN1 confirmed on histology was met (90.7%). In 2024 the proportion of excisional biopsies at first visit with confirmed CIN was below the standard at 87.6% (Table 11). For both time periods, CIN1+ was confirmed on >85% samples when all excisional (therapeutic) biopsies at all visits were reviewed.

Table 11. Rate of CIN in women treated by excisional technique.

Performance parameter	2023 N (%)	2024 N (%)	QA Standard
Women treated by excisional technique at first visit should have at least CIN1 on histology	753 (90.7)	860 (87.6)	>90%
Women treated by excisional technique at any visit should have at least CIN1 on histology	3,344 (89.8)	3,834 (88.8)	>85%

Positive predictive value of high-grade cytology

The positive predictive value (PPV) is the percentage of women referred with high-grade cytological abnormality who subsequently have CIN2+ confirmed following a histological biopsy in colposcopy. Cervical screening programmes must balance the early detection of high-grade abnormalities with the avoidance of unnecessary investigations and possible overtreatment.

Internationally accepted performance measures[2] have been developed to correlate referral cytology results with histological outcomes in organised, population-based screening programmes. For example, when the PPV of high-grade cytology is 78%, this means that for

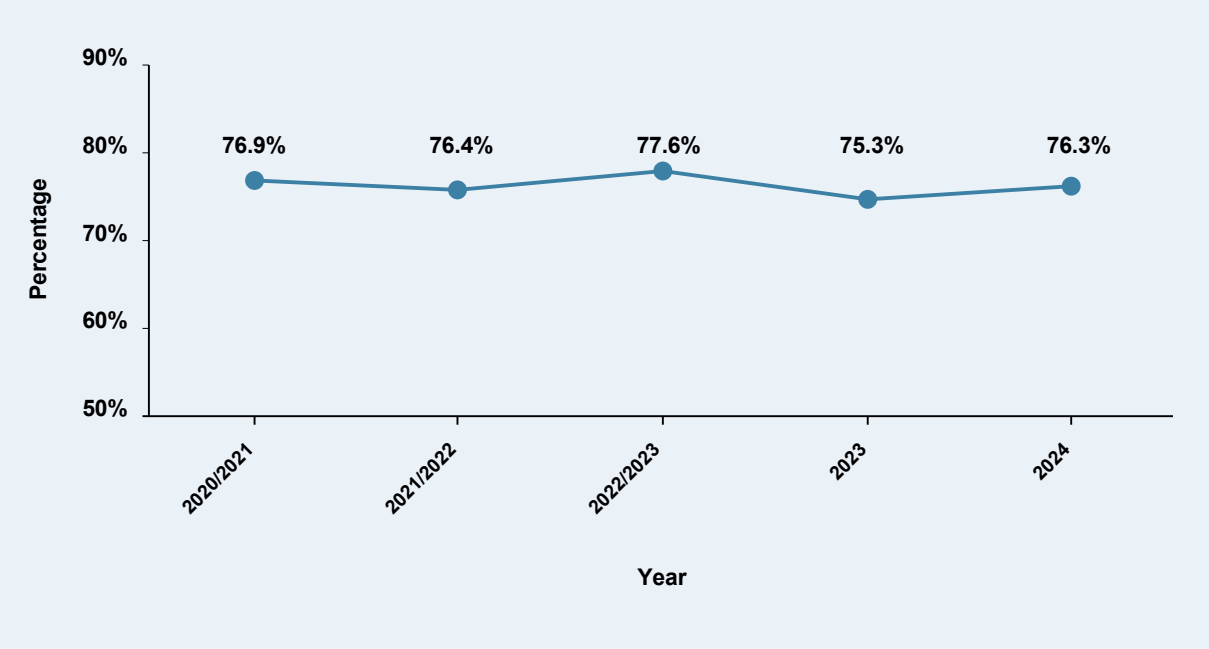
every 100 women who are referred with a high-grade cytology screening result, approximately 78 will have a histological sample that confirms high-grade CIN lesion or an invasive cancer. The other 22 women will either not have a biopsy taken or will have a normal or low-grade CIN which is expected to return to normal without intervention. The positive predictive values of high-grade cytology in HPV positive women for 2023 and 2024 are shown in Table 12.

Table 12. Positive predictive value of a high-grade cytology HPV result in HPV positive women

Performance parameter	2023	2024
Correlation between high-grade cytology and histologically proven high-grade CIN	**75.3%**	**76.3%**

Figure 12 shows that the PPV of high-grade cytology since the introduction of the primary HPV screening programme.

Figure 12. Positive predictive value of a high-grade cytology 2020 to 2024



Positive predictive value of colposcopy

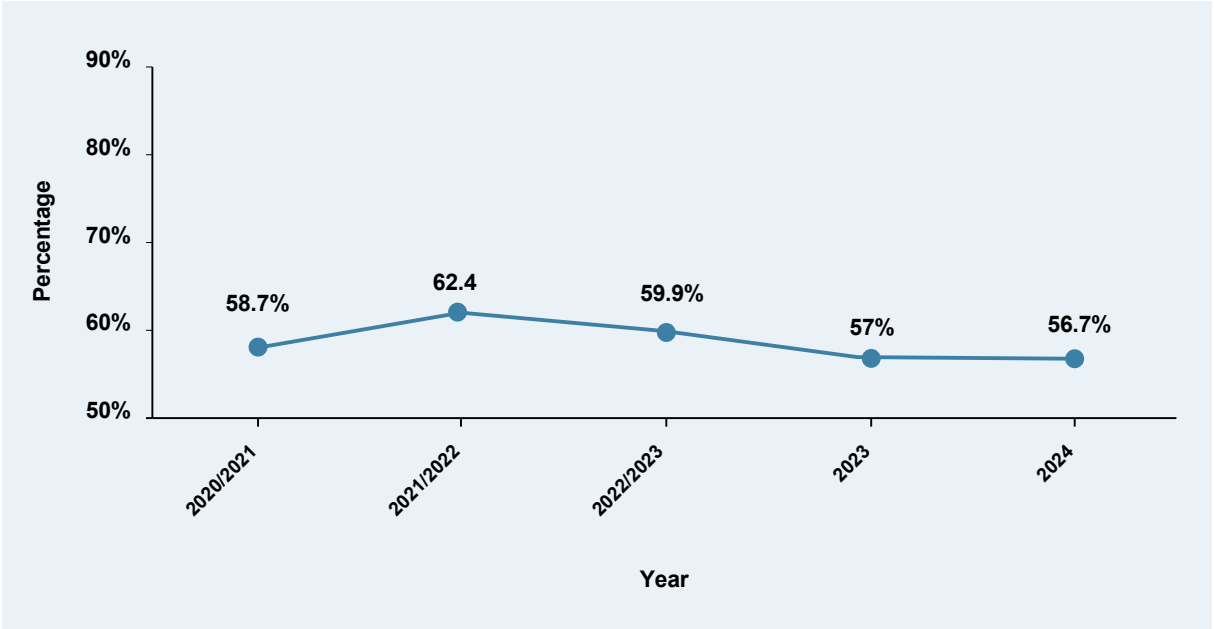
The PPV of colposcopy is the likelihood that a colposcopic impression of high-grade disease will be confirmed on histological biopsy. The correlation between the colposcopic impression and histological diagnosis is useful to assess the quality of colposcopy. Table 13 displays the PPV value of colposcopy for the 9-month period in 2023 and the 12-month period in 2024.

Table 13. Positive predictive value of a high-grade colposcopy impression

Performance parameter	2023	2024
Correlation between colposcopic impression of high-grade disease and histologically proven high-grade CIN	**57.0%**	**56.7%**

Figure 13 shows the PPV of high-grade colposcopy since the introduction of the primary HPV screening programme. As predicted, the positive predictive value of high-grade colposcopy has fallen in a HPV programme. This is due to the increased sensitivity and reduced specificity of HPV testing leading to an increase in referrals to colposcopy and thus a reduced prevalence of disease in women referred. A new standard for colposcopy PPV in HPV screening has not yet been published.

Figure 13. Positive predictive value of high-grade colposcopy 2020-2024



Negative predictive value of colposcopy

International evidence on the negative predictive value of colposcopy shows that 71% of patients with a normal colposcopy will not receive a subsequent diagnosis of high-grade CIN or cervical cancer. Evidence shows that up to 6 per 1,000 patients with a negative colposcopy may be subsequently diagnosed with a cervical cancer.[6] False negative colposcopy is a known potential limitation of this diagnostic test.

Referral value

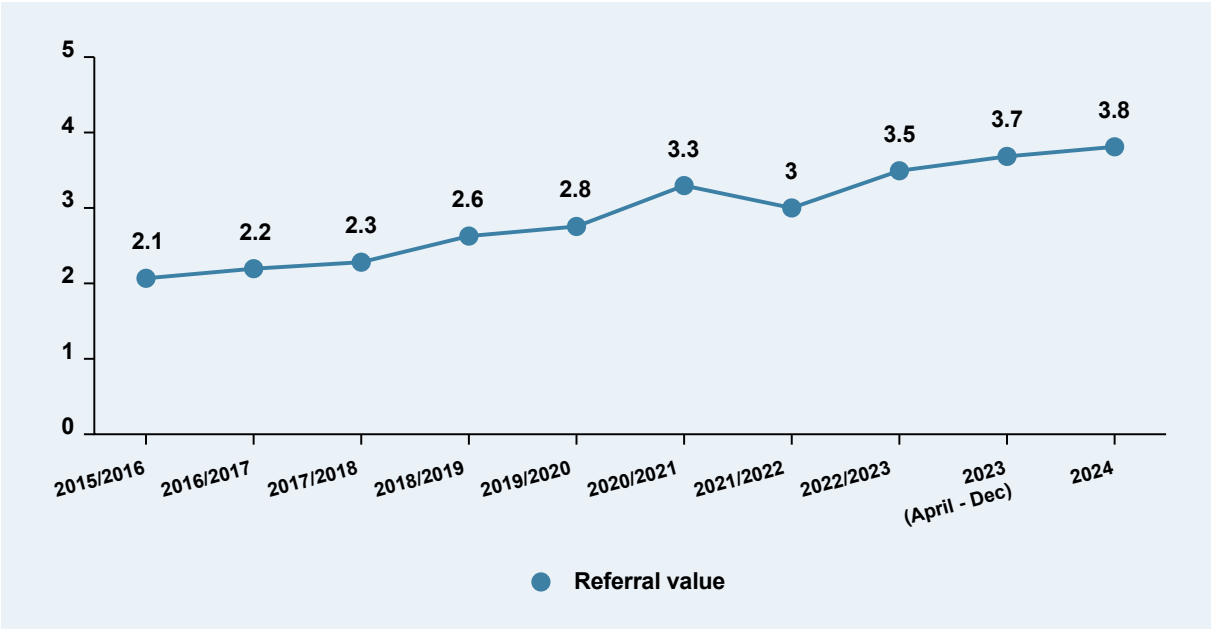
The referral value (RV) is defined as the number of women biopsied in colposcopy to detect 1 case of CIN2+ in a calendar year. It is an important indicator of a screening programme performance. It is also useful when planning colposcopy resources. This measure looks at how many women need to be biopsied in colposcopy to detect 1 case of high-grade CIN or invasive cervical cancer (excludes referrals for inadequate cytology and referrals for clinical reasons). For example, when the RV is 3.0, this means that for every 3 women biopsied in colposcopy, 1 will have at least CIN2 detected, whereas 2 had either low-grade abnormalities or no abnormalities. Table 18 shows the referral values for 2023/2024.

Table 14. Referral value for colposcopy

Referral Value	2023	2024
The number of women biopsied in colposcopy per detection of 1 case of CIN2+ per year	**3.72**	**3.78**

Figure 14 shows the referral value from 2015-2024. It shows that the resource used (cervical biopsies) to detect 1 case of CIN2+ is increasing.

Figure 14. Referral value 2015-2024



Conclusion

The data presented in this report show that Ireland's cervical screening programme is performing well against its quality assurance standards, which are benchmarked against international best practice. While programme coverage continues to meet the World Health Organization target of 70% of women being screened by age 35 and again by age 45 by 2030, the programme continues to work towards achieving its own target coverage of 80%. A continued focus on equity of access and on increasing participation among women aged over 50 will be central to achieving this goal and supporting Ireland's ambition to eliminate cervical cancer by 2040.

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