BowelScreen
An Clár Náisiúnta Scagthástála Putóige
The National Bowel Screening Programme

BowelScreen Programme Report 2022-2023

An tSeirbhís Náisiúnta Scagthástála
National Screening Service

BowelScreen
An Clár Náisiúnta Scagthástála Putóige
The National Bowel Screening Programme

Screening charter*

About BowelScreen – The National Bowel Screening Programme

BowelScreen – The National Bowel Screening Programme offers free bowel screening to men and women aged 59 to 69 years. We are planning to offer bowel screening to all people aged 55-74.

- The bowel screening test is carried out in your own home.
- Bowel screening can detect changes in the bowel before they become cancer.
- Bowel screening aims to find bowel cancer at an early stage when it is easier to treat.

Our commitment to you

- We will respect your privacy, dignity, religion, race and cultural beliefs.
- We will help you access our service.
- We will keep your screening records safe and confidential.
- We welcome your views and take them into account.
- We will provide a Freephone information and support line during normal working hours.
- We will offer you free screening every 2 years while you are aged 59 to 69, when you are registered with us.
- We will provide information explaining each step in the bowel screening process.
- We will send your home test kit, instructions, and information to you within 5 working days of you letting us know you want to choose bowel screening.
- We will screen your test in a laboratory that meets high quality standards.
- We will send your test result to you and to your GP (family doctor) within 4 weeks.

If you take part in the screening programme and your test result is not normal

- We will offer you a colonoscopy – a special examination of your bowel.
- We will offer you a colonoscopy within 4 weeks of finding you are suitable for the process.

If you need treatment following your colonoscopy

- We will tell you sensitively and honestly.
- We will explain the treatment available to you.
- We will encourage you to share in decision-making about your treatment.
- We can include your partner, friend or relative in any discussions if that is what you want.
- We will offer you treatment within 25 working days of your colonoscopy if you need it.
- We will offer you the support of a nurse before and during your colonoscopy.
- You have the right to choose not to have treatment, to get a second opinion or to choose a different treatment.
- If you develop cancer within 36 months of your screening colonoscopy you can ask us for a review of your colonoscopy.

Ways you can help us

- Read the information we send you and if you have any questions, call our Freephone information and support line.
- Follow the instructions with your BowelScreen home test and return the test to us within 7 days.
- If we refer you for more tests, keep your appointment time. Give us at least 3 days' notice if you need to change your appointment.
- Tell us if you have extra needs that we can plan for.
- Tell us if you change your address.
- Tell us what you think of our service and the care you received. Your views will help us to improve our service for you and other people.

Freephone

1800 45 45 55

hse.ie/bowelscreen

The National Screening Service is part of the Health Service Executive. It encompasses BreastCheck – The National Breast Screening Programme, CervicalCheck – The National Cervical Screening Programme, BowelScreen – The National Bowel Screening Programme and Diabetic RetinaScreen – The National Diabetic Retinal Screening Programme.

* *This Charter was is effect during the reporting period. The age ranges provided are accurate to the reporting period. The Charter will be updated in 2025.*

CR-COM-005 Rev02

Contents

Introduction

Bowel screening can save lives. It's about both prevention, and early detection of asymptomatic disease:

- **preventing bowel cancer from developing by finding and removing early signs of disease (polyps)**
- **helping to find bowel cancer at an early stage when it can be easier to treat.**

BowelScreen is Ireland's national bowel screening programme. The programme was introduced in 2012 to provide free bowel cancer screening to the eligible population - men and women aged 60 to 69 - every two years. In October 2023, we lowered the age range to include everyone aged 59, additionally in 2022 some people who had turned 70 and were not invited due to the COVID-19 epidemic were invited. For this report, we report age groups 60-64 and 65-69 years for the main performance metrics and overall tables include all eligible people of all ages, including those aged 59 and over 70. The results of extending screening to people aged 59 will be included in our next programme report.

BowelScreen is for people who have no symptoms of bowel cancer. To take part, people are invited by letter to take a faecal immunochemical test (FIT) - a home kit that is returned for analysis in a contracted laboratory.

Most people receive a normal result from the laboratory. When a person has a positive (not normal) test result, they are offered a colonoscopy in a BowelScreen endoscopy unit. Once this is completed, the person is either discharged, offered further monitoring via a surveillance colonoscopy at a planned interval, or offered treatment if a cancer has been diagnosed.

The statistics presented in this report relate to people who received an invitation to take part in BowelScreen between 01 January 2022 and 31 December 2023.

Message from the BowelScreen Clinical Director and Programme Manager

We are pleased to present the key findings from our 2022 to 2023 reporting period. The data reported relates to people invited for bowel screening during this two-year period.

We invited over 600,000 people to take part in bowel screening and over 286,000 satisfactory FIT kits were completed and returned. The screening uptake rate, based on the invited population, was 46.4 per cent, which is similar to the previous reporting period (2020 to 2021).[1] This is below our programme standard of 50 per cent, and increasing the uptake rate remains a priority objective.

The uptake rate remains high at 89.2 per cent among people who have previously completed a FIT kit and are re-invited to take part. A lower uptake rate among initial participants may be partly due to the dilution effect of eligible people who persistently don't attend and who continue to be invited to take part in BowelScreen for their first screening.

We're working on initiatives to increase uptake of BowelScreen. In 2023, we completed market research among the eligible population to understand knowledge and awareness of bowel screening and bowel cancer. The findings provide insights into why some people may or may not take part in screening. This informs our communications campaigns which aim to help people to make informed choices about taking part in bowel screening.

In 2022 and 2023, over 11,000 people had a colonoscopy at one of our contracted endoscopy centres. Adenomas (polyps) were found in over 4,000 people and 849 people had advanced adenomas removed. As most bowel cancers develop from adenomas, their removal at colonoscopy meets an integral aim of our bowel screening programme, which is to reduce a person's risk of developing bowel cancer in the future through prevention.

Bowel cancer can be a treatable disease if found early. BowelScreen aims to find bowel cancer as early as possible. In 2022 and 2023, we identified 448 cancer cases through bowel screening. 43.8 per cent of these cases were found at an early stage (i.e., stage 1 or 2).

Our Standards for Quality Assurance in Colorectal Screening sets out the quality standards and requirements against which we measure the performance of our BowelScreen programme, including administrative components, the FIT, endoscopy, radiology, histopathology, surgery and treatment.[2] We performed well against these standards in 2022 and 2023, achieving the majority of our targets, which are outlined in Table 10 of this report. COVID-19 continued to have an impact on the delivery of bowel screening with infection prevention control measures in place until April 2022. This particularly impacted our capacity to deliver colonoscopies: 75 per cent of participants received appointment offers within the target 4-week window, below our programme standard of 90 per cent.

We began work with the National Cancer Registry Ireland to measure our rate of post colonoscopy bowel cancers (PCCRC) in BowelScreen. A PCCRC is a bowel cancer that is diagnosed within 36 months (3 years) of a person's last BowelScreen colonoscopy, that was reported as a negative colonoscopy where no abnormality was found[3].

PCCRCs are inevitable and happen in every bowel screening programme in the world. Measuring and publishing the PCCRC rate is one component of quality assurance and demonstrates our commitment to transparency and accountability. It's one part of a system of internationally accepted measurements of how well we are performing against our standards for quality assurance in bowel screen. These standards tell us that the PCCRC rate should be between 2.5% and 8.5%. Our PCCRC rate for BowelScreen is 4.3%. This tells us that our programme is performing well.

In April 2022, we launched our BowelScreen Patient Reported Experience Measures (PREMs) survey. This digital survey gathers real time feedback from our screening participants and explores their experience at each stage of their BowelScreen journey. We published a report in 2024 capturing the experiences of our BowelScreen participants.[4]

Responses provide us with information about how well we communicate, the standard of our services and where improvements could be made across the programme including our colonoscopy units. The valuable insights will help us to continuously improve the BowelScreen experience for people who choose screening.

In 2022 and 2023, our strong performance in finding and removing early signs of disease, and high uptake rates among previous screening participants, demonstrates the power of bowel screening to truly prevent bowel cancer. We will continue our work to address the barriers to screening and to address service delivery constraints to maximise the public health impact of our bowel screening programme. We are confident that we will be able to increase the number of screening colonoscopy units associated with BowelScreen over the course of the next 2 years.

Our focus on operational excellence ensures that we deliver high-quality, efficient, and safe services. This could not be achieved without the dedication and professionalism of the people who work to ensure that all our services are delivered to high standards. We extend our thanks to our staff and our partners. We will continue to work together to save lives and improve people's health, and to enable more people to choose screening.

Hilary Coffey Farrell
Programme Manager

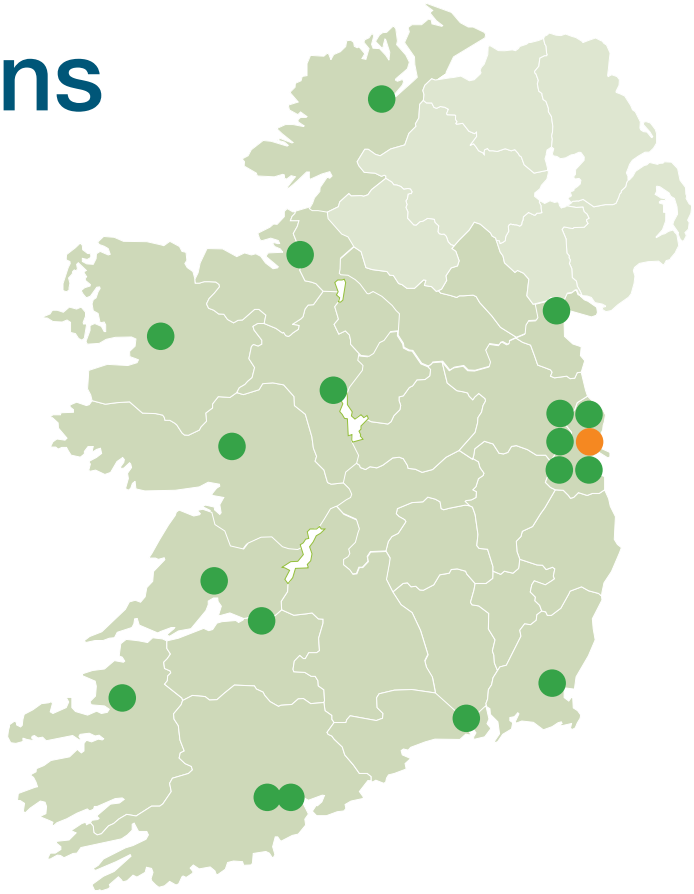
Professor Pádraic Mac Mathúna
Clinical Director

Figure 1.

An overview of BowelScreen's clinical service providers

Our Locations

2020-2025



- BowelScreen, Central Office
- BowelScreen, Hospitals

- Endoscopy Units
- Histopathology Units
- Surgery Units
- Computed tomography (CT) colonography Units

■ ■ ■ ■	Mater Misericordiae, Dublin
■ ■ ■ ■	St. Vincent's, Dublin
■	Connolly Hospital, Dublin
■ ■ ■ ■	St James Hospital, Dublin
■ ■ ■	Beaumont Hospital, Dublin
■	Louth County Hospital
■	Ennis Hospital, Co. Clare
■	Letterkenny University Hospital
■ ■	University Hospital Limerick
■	Mercy University Hospital
■ ■ ■	Cork University Hospital
■	University Hospital Kerry
■ ■ ■	Galway University Hospital
■	Sligo University Hospital
■ ■ ■	University Hospital Waterford
■	Wexford General Hospital
■	Roscommon University Hospital
■	Mayo University Hospital

Highlights of 2022-2023

617,512
people invited

286,288
satisfactory FIT tests completed

46.4%
screening uptake rate

448
cancers detected

4,232
participants found to have adenomas on index colonoscopy

13,218
adenomas removed

849
patients with advanced adenomas removed

58.7%
adenoma detection rate

Programme performance

Screening activity

During 2022 and 2023, we invited 617,512 people to take part in bowel screening (Table 1). Of these, 319,154 people consented to take part in screening, and 286,288 satisfactory faecal immunochemical tests (FIT) were completed and returned. This reflects a screening uptake rate based on the invited population of 46.4 per cent. Our programme standard is 50 per cent.

Adenomas (polyps) were detected in 4,232 people who had a colonoscopy, giving an adenoma detection rate (ADR) of 58.7 per cent. Our programme standard is >45 per cent. As most bowel cancers develop from adenomas, their removal at colonoscopy meets an integral aim of bowel screening, which is to reduce a person's risk of developing bowel cancer in the future through prevention.

Table 1:

BowelScreen screening performance, 2022-2023

Performance Parameter	2022*	2023*	2022-2023*	Quality Assurance Standard
Number of people invited	302,685	314,827	617,512	
Number of people consented	151,820	167,334	319,154	
Number of FIT kit returns	135,914	151,467	287,381	
Percentage of people who consented who returned a FIT kit	89.5%	90.5%	90.0%	
Number of satisfactory FIT kits returned	135,230	151,058	286,288	
Uptake	44.7%	48.0%	46.4%	≥50%
Number of FIT positive	4,476	4,473	8,949	
FIT positive	3.3%	3.0%	3.1%	
Number of index colonoscopies completed	3,439	3,499	6,938	
Number of cancers detected	242	206	448	
Cancer detection rate (CDR) per 1,000 screened	1.79	1.36	1.56	
Number of participants with adenomas on index colonoscopy	2,095	2,137	4,232	
Adenoma detection rate (ADR) on index colonoscopy	58.6%	58.7%	58.7%	>45%

**Includes all ages*

To take part in bowel screening, people are invited by letter to take a FIT test, which is a home test kit that is returned for analysis by a contracted laboratory. Approximately 96 per cent of people's tests are given a normal result by the laboratory. If a person has a positive (not normal) test result, they are offered a colonoscopy in a BowelScreen endoscopy unit.

Once this is completed, the person is either discharged, offered further monitoring via a surveillance colonoscopy at a planned interval, or offered treatment if a cancer has been diagnosed.

Uptake of type of screen by gender and age group

Some people were invited to take their first BowelScreen FIT test (initial participants) having only become eligible, or because we received their data for the first time. Some people who previously completed a BowelScreen FIT test were invited for their second or subsequent screen (subsequent participants).

Initial participants

Initial participants are:

- people who are invited to take their first BowelScreen FIT test
- people who were invited to take their first BowelScreen FIT test previously and did not take up the offer of screening at that time.

The BowelScreen quality standard for uptake is >50 per cent. Uptake amongst initial participants was 26.9 per cent overall and was higher in females than males in 2022 and 2023 (Table 2). In females, initial uptake was higher in 2023 compared to 2022.

Table 2:

Uptake in initial participants by gender, 2022-2023

Performance parameter	2022*		2023*		2022-2023*
	Male	Female	Male	Female	Total
Number of people invited	111,304	103,804	109,633	99,636	424,377
Number screened	26,735	30,710	26,174	30,488	114,107
Uptake	24.0%	29.6%	23.9%	30.6%	26.9%

** Includes all ages*

Subsequent participants

The term 'subsequent participants' describes people who have previously completed a satisfactory BowelScreen FIT test. These people are issued FITs in subsequent years if they are within the eligible age range. Uptake was 89.2 per cent overall and was similar among females and males in 2022 and 2023 (Table 3).

Table 3:

Uptake in subsequent participants by gender, 2022-2023

Performance parameter	2022*		2023*		2022-2023*
	Male	Female	Male	Female	Total
Number of people invited	36,044	51,533	49,003	56,556	193,136
Number screened	31,850	45,935	43,631	50,765	172,181
Uptake	88.4%	89.1%	89.0%	89.8%	89.2%

** Includes all ages*

Uptake

Uptake by age, gender, and type of invitation (initial or subsequent) against the Quality Assurance (QA) standard is shown in Figure 2. This demonstrates that subsequent participants continue to choose screening in high numbers. This is an indication that these people find the test and the service acceptable and are participating when invited subsequently. The uptake rate among initial participants remains low, with low uptake reported especially among the 65 to 69 age group, particularly in males. Most people in the 65-69 year old group were invited previously and did not accept their offer of screening. Evidence from other screening programmes has shown that non-participation often persists over time and that these people are less likely to attend when re-invited. This reduces the uptake rate among initial people overall.

Figure 2:

Uptake by age, gender, and invitation type, 2022-2023

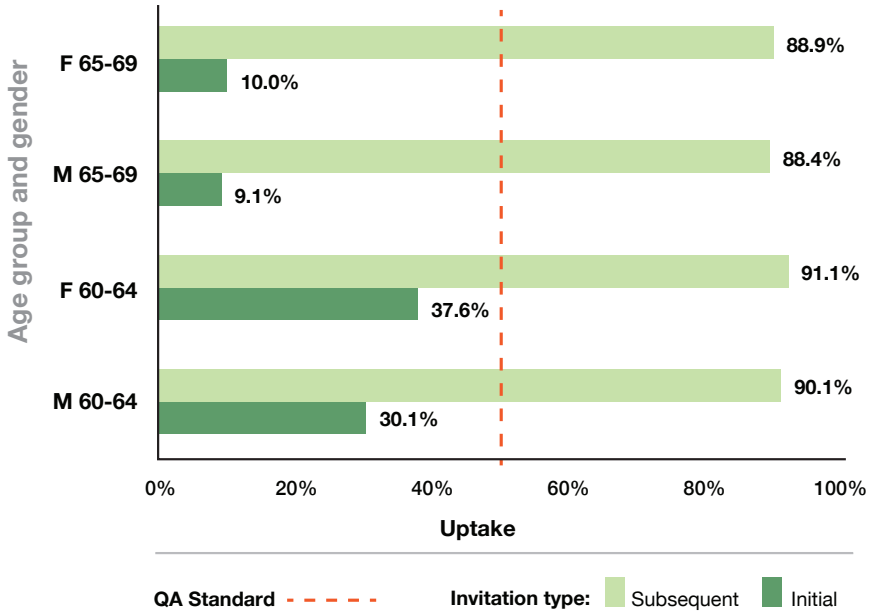


Figure 3 shows uptake of initial participants by age group.

In people aged 60 to 64 years, uptake decreased in 2023 compared to 2022 for males (29.0% vs 31.2%) and females (36.6% vs 38.5%). In those aged 65-69 years, uptake also decreased since 2022 (males:7.5% vs 10.4%; females:7.8% vs 11.6%). A lower initial uptake rate may be partly due to the dilution effect of eligible people who persistently don't attend and who continue to be invited to take part in BowelScreen for their first (initial) screening.

Figure 3:

Initial participants - uptake by age group, 2022-2023

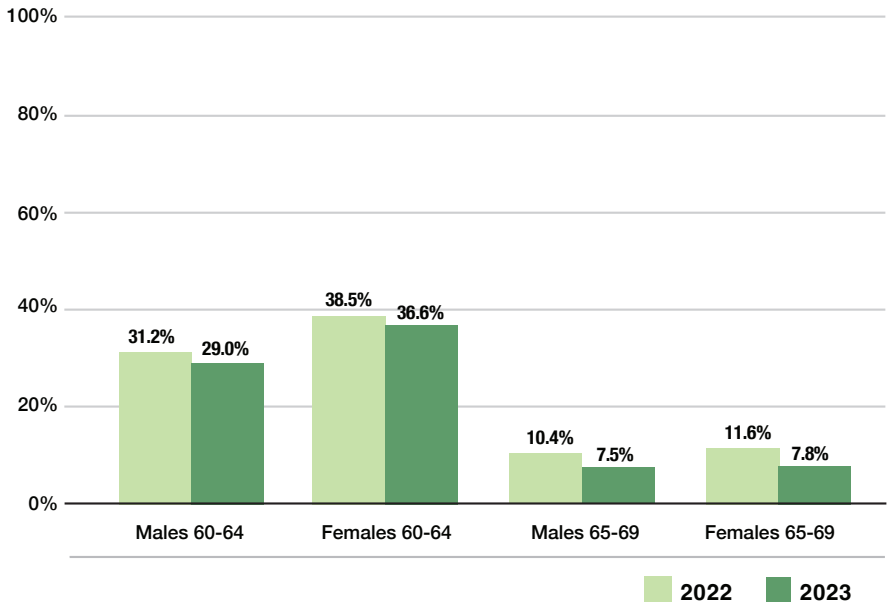
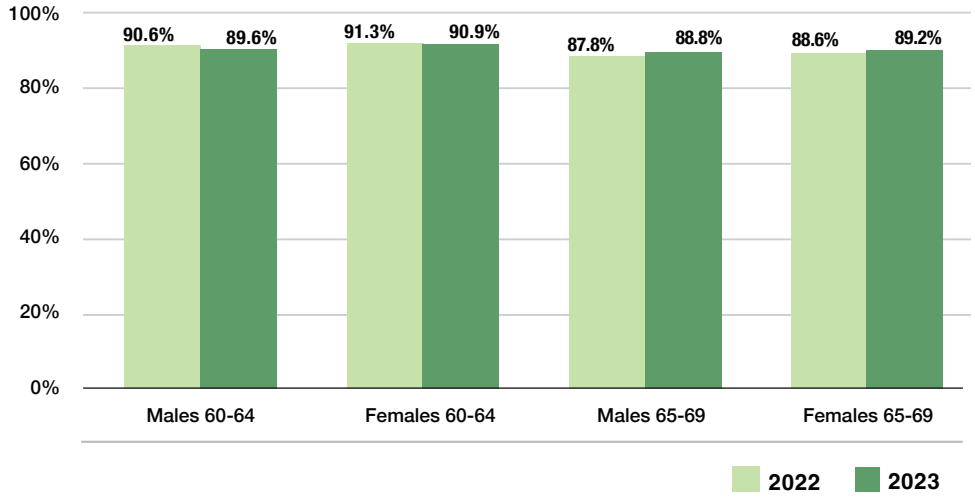


Figure 4 shows uptake of subsequent participants by age group. In people aged 60 to 64 years, uptake was slightly lower in 2023 than 2022 for males (89.6% vs 90.6%) and similar for females (90.9% vs 91.3%). In those aged 65-69 years, uptake increased slightly in 2023 compared to 2022 for males (88.8% vs 87.8 %) but remained the similar for females (89.2% vs 88.6%).

Figure 4:

Subsequent participants - uptake by age group, 2022-2023



Programme coverage

Coverage by invitation

We aim to invite all eligible people for bowel screening every two years. The quality standard 'coverage by invitation' measures the proportion of the eligible population on our bowel screening register that has been invited in the previous two-year period. Data shows that all eligible men and women aged 60-69 on the register were invited between 01 January 2022 and 31 December 2023.

Screening outcomes

Our primary screening tool is the FIT test, which looks for a level of blood in the stool sample provided. This blood is often not visible to the human eye. If a level of blood is detected (a FIT positive result), we offer the person a colonoscopy in one of our contracted endoscopy centres.

The results of FIT testing for initial participants invited during 2022 and 2023 are shown in Table 4. Those aged 65 to 69 are mainly subsequent participants who are attending for the second or third time. For initial participants who had their first screen, the FIT positive rate was 3.5 per cent between 2022 and 2023; 3.7 per cent in 2022 and 3.2 per cent in 2023.

The positivity rate was 4.2 per cent for males aged 60 to 64 compared to 2.6 per cent for females aged 60 to 64. In those aged 65 to 69, the rate was 5.8 per cent for males compared to 4.2 per cent for females.

Of the 114,107 FIT kits examined, a small number (327) were unsatisfactory. These people were offered a repeat test. The unsatisfactory FIT rate as a percentage of the number returned was slightly higher in 2022 compared to 2023, remaining low and within the programme standard of less than 3 per cent.

Table 4:

BowelScreen screening outcome: Initial screen by age group and gender, 2022-2023

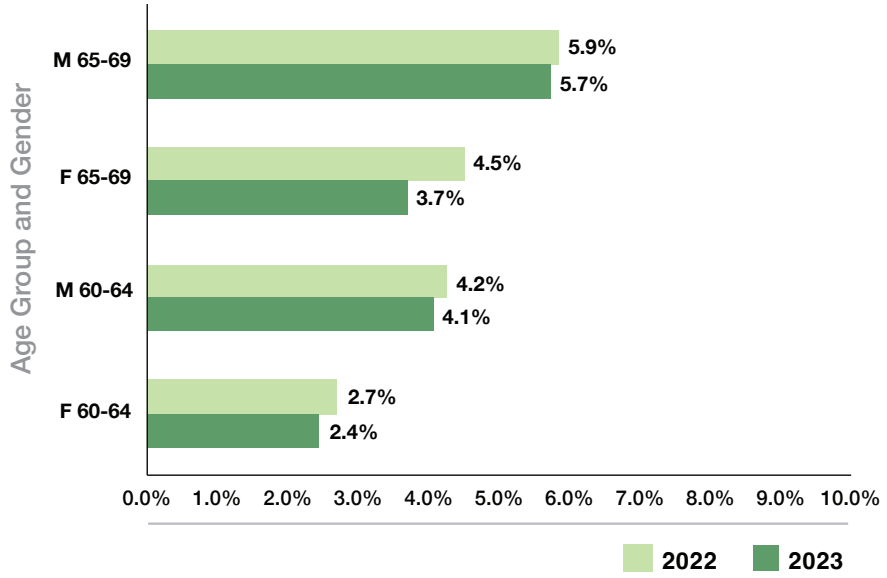
Performance parameter	Male 60-64	Male 65-69	Female 60-64	Female 65-69	Overall 2022*	Overall 2023*	Overall 2022-2023*
Number of satisfactory FIT returns	43,243	6,066	50,796	5,670	57,445	56,662	114,107
Percentage of satisfactory FIT by number returned	99.7%	99.5%	99.7%	99.4%	99.6%	99.8%	99.7%
Number of unsatisfactory FIT	120	28	132	35	212	115	327
Percentage of unsatisfactory FIT by number returned	0.3%	0.5%	0.3%	0.6%	0.4%	0.2%	0.3%
Number of FIT positive	1,800	353	1,302	240	2,102	1,836	3,938
Percentage of FIT positive satisfactory tests	4.2%	5.8%	2.6%	4.2%	3.7%	3.2%	3.5%
Number of FIT negatives	41,443	5,713	49,494	5,430	55,343	54,826	110,169
Percentage of FIT negative satisfactory tests	95.8%	94.2%	97.4%	95.8%	96.3%	96.8%	96.5%

**Overall includes all ages*

The results of FIT testing for initial participants invited by gender and age group during 2022 and 2023 are shown in Figure 5. In 2022, the positive FIT rate in participants aged 65 to 69 years was 5.9 per cent for males compared to 4.5 per cent for females. In those aged 60 to 64 years, the rate was 4.2 per cent for males and 2.7 per cent for females. In 2023, the positive FIT rate in participants aged 65-69 years was 5.7 per cent for males compared to 3.7 per cent for females. In those aged 60-64 years, the rate was 4.1 per cent for males and 2.4 per cent for females.

Figure 5:

FIT positive rate of satisfactory tests: Initial screening by age group and gender, 2022 and 2023



The results of FIT testing for subsequent participants invited during 2022 and 2023 are shown in Table 5. The number of people subsequently participating increased from 77,785 in 2022 to 94,396 in 2023. Among participants who had their second or subsequent screen, the FIT positive rate was 2.9 per cent. Of the 172,181 FIT kits examined among subsequent participants, a small number of returned FIT kits (766; 0.4%) were unsatisfactory and these individuals were offered a repeat test. The rate is within the programme standard of less than 3 per cent.

Table 5:

BowelScreen screening outcome: Subsequent screen by age group and gender, 2022-2023

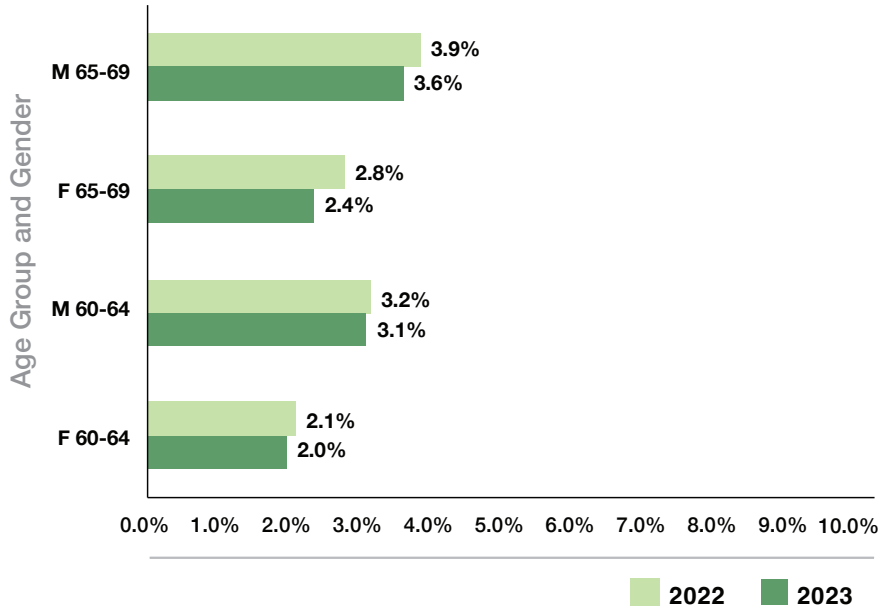
Performance parameter	Male 60-64	Male 65-69	Female 60-64	Female 65-69	Overall 2022*	Overall 2023*	Overall 2022-2023*
Number of satisfactory FIT returns	22,143	50,462	29,547	62,612	77,785	94,396	172,181
Satisfactory FIT by number returned	99.6%	99.5%	99.6%	99.6%	99.4%	99.7%	99.6%
Number of unsatisfactory FIT	96	239	112	269	472	294	766
Unsatisfactory FIT by number returned	0.4%	0.5%	0.4%	0.4%	0.6%	0.3%	0.4%
Number of FIT positive	689	1,868	597	1,593	2,374	2,640	5,014
Percentage of FIT positive satisfactory tests	3.1%	3.7%	2.0%	2.5%	3.1%	2.8%	2.9%
Number of FIT negatives	21,454	48,594	28,950	61,019	75,411	91,772	167,183
Percentage of FIT negative satisfactory tests	96.9%	96.3%	98.0%	97.5%	96.9%	97.2%	97.1%

**Overall includes all ages*

The results of FIT testing for subsequent participants invited by gender and age group during 2022 and 2023 are shown in Figure 6. In 2022, the positive FIT rate in participants aged 65 to 69 years was 3.9 per cent for males compared to 2.8 per cent for females. In those aged 60 to 64 years, the rate was 3.2 per cent for males and 2.1 per cent for females. In 2023, the positive FIT rate in participants aged 65 to 69 years was 3.6 per cent for males compared to 2.4 per cent for females. In those aged 60 to 64 years, the rate was 3.1 per cent for males and 2.0 per cent for females.

Figure 6:

FIT positive rate of satisfactory tests: Subsequent screening by age group and gender, 2022 and 2023



Colonoscopy

Colonoscopy is the procedure used to assess the colon and rectum following a positive FIT result. It enables examination, biopsy and subsequent histopathological diagnosis of abnormalities in the bowel, as well as identification and endoscopic removal of polyps and adenomas. This colonoscopy is known as an index colonoscopy.

People who receive a positive FIT result are contacted by a dedicated nurse from a BowelScreen-contracted endoscopy centre for a pre-assessment to establish their suitability for colonoscopy. This pre-assessment includes a telephone interview enquiring about their general health, any co-morbidities, and any medication they may be taking.

Between 2022 and 2023, almost 81 per cent of participants who had a positive FIT had an index colonoscopy at a BowelScreen contracted endoscopy centre (Table 6). While this is below the QA standard of 85 per cent, there is an increase from 2022 to 2023. Among people who had a positive FIT and were deemed suitable for colonoscopy, 96 per cent accepted and underwent an index colonoscopy.

Table 6:

BowelScreen participant colonoscopy referrals, 2022-2023

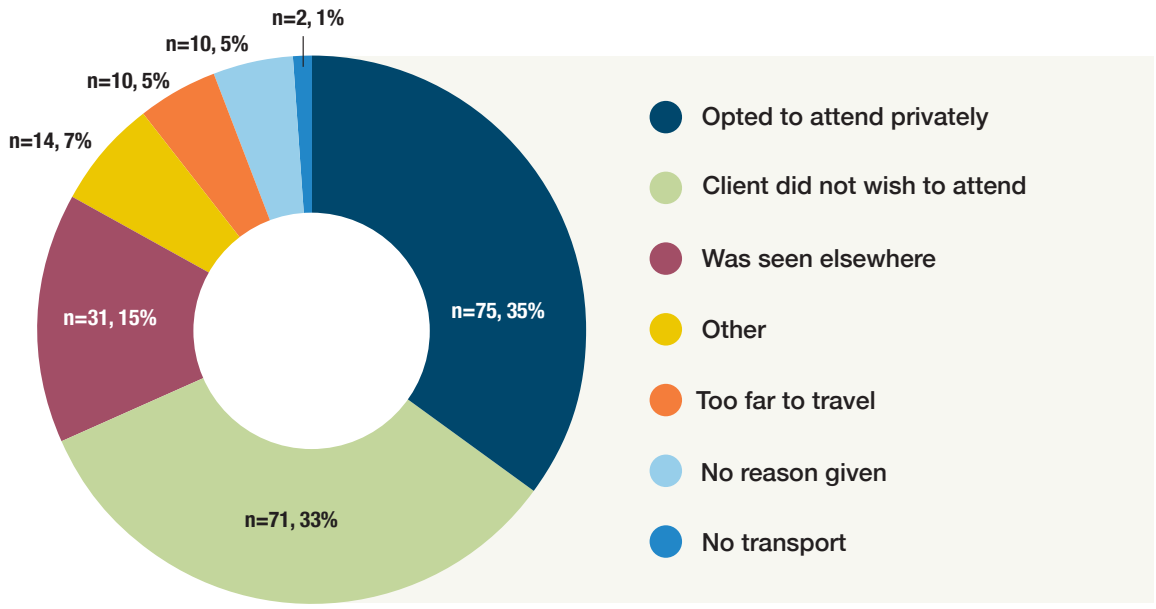
Performance parameter	2022*	2023*	2022-2023*	QA Standard
Number of participants referred for index colonoscopy	4,476	4,473	8,949	
Number of participants who completed pre- assessment	3,788	3,875	7,663	
Number deemed suitable for index colonoscopy	3,720	3,795	7,515	
Number attending index colonoscopy	3,574	3,639	7,213	
Number of index colonoscopies completed	3,439	3,499	6,938	
Acceptance rate based on positive FIT	79.9%	81.4%	80.6%	>85%
Acceptance rate for colonoscopy participants deemed suitable	96.1%	95.9%	96.0%	
Number of participants who attended for a surveillance colonoscopy	1,824	1,974	3,798	
Number of additional planned procedures performed	157	184	341	

**Includes all ages*

The number of people who declined a colonoscopy after pre-assessment with a dedicated nurse was 213. The reason why people with positive FIT results declined colonoscopy are shown in Figure 7. The main reason was that the person opted to attend colonoscopy privately, followed by not wishing to attend.

Figure 7:

Reasons for not attending colonoscopy*, 2022-2023 (n=213)



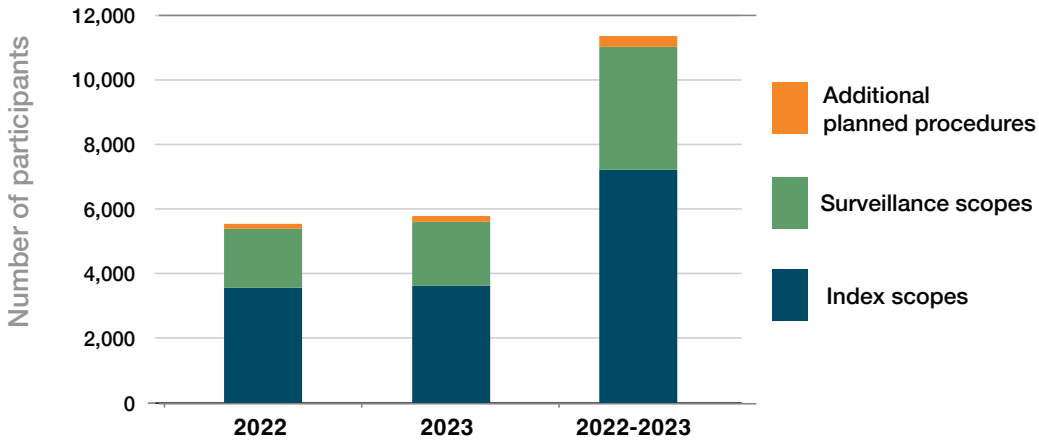
**Index only; index colonoscopy participants based on date of FIT KIT abnormal result.*

In addition to index colonoscopy, we provide surveillance colonoscopies for people who had a previous programme colonoscopy where the outcome was determined to be intermediate-risk or high-risk. People who have an intermediate risk are recalled for a surveillance colonoscopy after three years and people deemed to have a high risk are recalled after one year. Surveillance colonoscopies make up a large proportion of our total endoscopy work, with the numbers increasing over time. Numbers of surveillance colonoscopies performed were slightly higher in 2023, compared to 2022, and are shown in Table 6 and Figure 8.

Additional planned colonoscopies are part of any screening programme. An additional endoscopic procedure may be deemed clinically necessary for many reasons. These include that the first colonoscopy may be incomplete because of poor bowel preparation, patient tolerance to the first procedure, the requirement to have a second colonoscopy to site-check, or a clinical decision to perform colonoscopy over two visits, instead of surgery.

Figure 8:

Number of index scopes, surveillance scopes and additional planned procedures undertaken by BowelScreen, 2022-2023



Colonoscopy performance

In the reporting period 7,213 people had an index colonoscopy at one of our contracted endoscopy centres.

Effective bowel preparation is crucial to carrying out a colonoscopy as it supports improved detection of adenomas and/or polyps, as well as caecal intubation. Poor bowel preparation is associated with failure to reach the caecum during the procedure and hinders the detection of lesions.

Overall, bowel preparation was effectively carried out, colonoscopies could proceed, and completion rates were high. Reported adverse effects were low and within QA standards. Colonoscopy performance for index scopes is shown in Table 7. There was a similar proportion of people with bowel cleanliness classified as adequate or excellent. The proportion of people with colonoscopies complete was similar (96%) in each year.

It is essential that colonoscopy is performed to a high standard and that it is both safe and comfortable. This is to minimise harm to the screening population and to optimise the patient experience. 80 per cent of patients undergoing colonoscopy should have a comfort score of 1 or 2 from the Gloucester Scale. The percentage of patients with a comfort score of ≤ 2 ranged from 86.9 per cent in 2022 to 89.6 per cent in 2023.

Table 7:

Colonoscopy performance, 2022-2023 (index colonoscopy only)

Quality Standard	2022*	2023*	2022-2023*	QA Standard
Bowel cleanliness adequate or excellent	93.0%	93.0%	93.0%	≥90%
Reported colonic perforation rate (per 1,000 colonoscopies)	1.1	0.6	0.8	<1
Reported post-polypectomy perforation rate (per 1,000 colonoscopies)	0.0	0.6	0.3	<2
Post-polypectomy bleeding requiring transfusion (PPB)	0.0%	0.1%	0.1%	<1%
Colonoscopy complete	96.2%	96.1%	96.2%	
Colonoscopy Comfort Score ≤ 2	86.9%	89.6%	88.3%	80%

**Includes all ages*

Colonoscopy waiting times

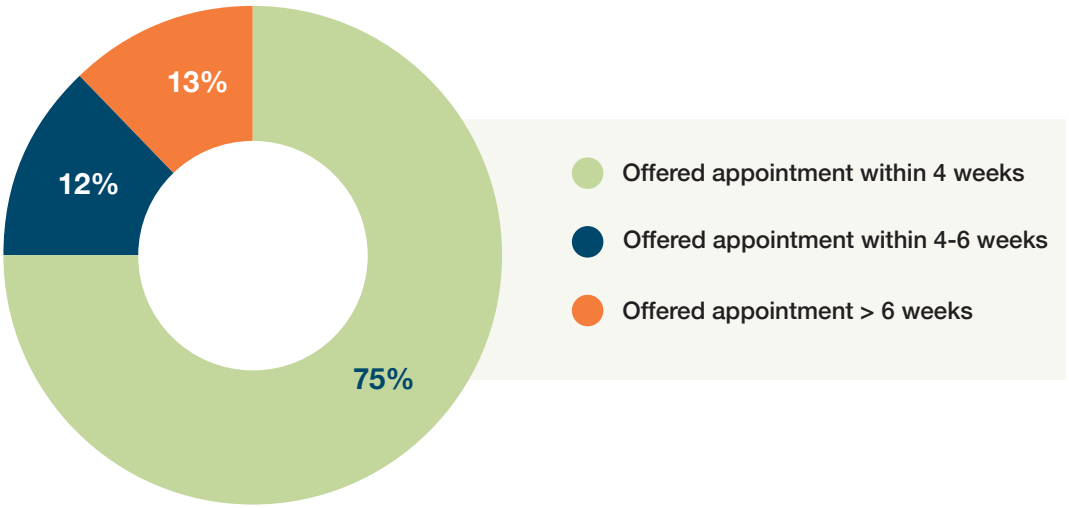
Our programme QA standard requires that we offer an index colonoscopy within four weeks in over 90 per cent of suitable cases. This is to reduce unnecessary anxiety to screening participants and to facilitate timely investigation of positive screening results.

Providing access to colonoscopy services in a timely manner depends on many factors including demand for colonoscopy services (for both symptomatic services and BowelScreen), capacity and waiting list management protocols.

The proportion of participants who were offered an index colonoscopy appointment within four weeks was 75 per cent. This is below our programme target of 90 per cent (Figure 9). A further 12 per cent of people were offered an appointment within four to six weeks and 13 per cent of participants had to wait longer than six weeks for an appointment.

Figure 9:

Waiting times for index colonoscopy, 2022-2023



Computed tomography (CT) colonography.

On some occasions, it is not possible to carry out a colonoscopy. In these instances, the person may be referred for a CT colonography.

Of our 8,949 participants with a positive FIT result, 186 were referred for CT colonography. This corresponds to 2.1per cent of all FIT-positive participants and is within our programme standard of less than 10 per cent. Of those referred for CT colonography, all had the procedure performed. Colonography performance is shown in Table 8.

Table 8:

BowelScreen participant CT colonography referrals, 2022-2023

Quality Standard	2022*	2023*	2022-2023*	QA Standard
Referral rate of participants to CT colonography following a positive FIT	2.0%	2.2%	2.1%	≤10%
Number of participants with CT colonography performed	86	87	173	
Participants with CT colonography performed within 30 days of referral**	62.8%	64.4%	63.6%	≥95%
Participants with CT colonography complete/adequate	84.9%	90.8%	87.9%	≥95%

* *Includes all ages*

** *This figure does not necessarily capture individuals offered appointments within the timeframe of 30 days but who deferred their appointment often due to travel distances, personal reasons, etc.*

Histopathological findings

Cancers detected

During the reporting period, 448 people had bowel cancer detected. Of these, there were 285 colon cancers, 154 rectal cancers and 9 cases of cancer where the site was not clinically confirmed, giving an overall cancer detection rate of 1.6 per 1,000 people screened by the FIT (Table 9). This corresponds to a detection rate of 4.9 per cent at colonoscopy.

The cancer detection rate among initial participants overall (2.2 per 1,000 participants screened) was higher than among subsequent participants (1.3 per 1,000 participants screened). This is to be expected because subsequent participants have been screened previously, and it is expected that abnormalities might have been found and removed following an earlier screening test.

Of those cancers diagnosed and treated following screening, where stage was indicated, almost 44% per cent were stage I or II. This indicates that they were detected at an early stage where successful treatment is more likely (Table 9).

849 people had advanced adenomas removed, and 448 cancers were detected. The adenoma detection rate was 59 per cent. This is above our programme standard of 45 per cent.

Histopathology outcomes from 2022 to 2023 are detailed in Table 9.

Table 9:

Histopathology outcomes for the BowelScreen programme, 2022-2023*

Performance Parameter	First screen	Subsequent screen	2022-2023	2023	2022	QA Standard
Number of cancers	235	213	448	206	242	
Cancer detection rate per 1,000 participants screened	2.06	1.24	1.56	1.36	1.79	
Stage I and II **	40.4%	46.9%	43.8%	38.8%	47.9%	
Adenoma detection rate	60.8%	57.0%	58.7%	58.7%	58.6%	>45%
Number of participants with adenomas	1,959	2,275	4,232	2,137	2,095	
Number of adenomas removed	6,241	6,970	13,218	6,489	6,729	
Number of participants with advanced adenomas removed	417	431	849	411	438	
Adenomas with high grade dysplasia	5.0%	3.3%	4.1%	4.1%	4.1%	<10%
Sessile serrated lesions (SSL)	673	812	1,485	770	715	
SSL with high-grade dysplasia	0.59%	0.86%	0.74%	0.13%	1.40%	

* *Includes all ages*

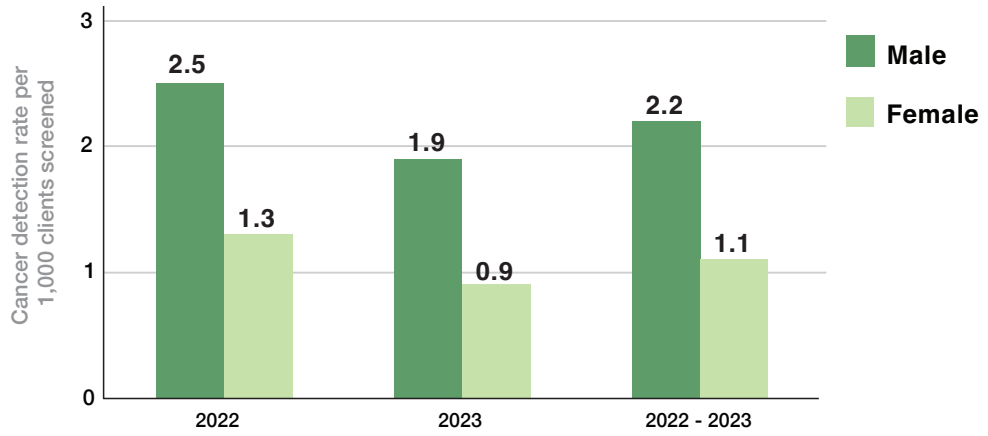
** *Histopathological stage; this excludes cases that were diagnosed by BowelScreen but went elsewhere for treatment.*

Cancer detection

Figure 10 and 11 shows the cancer detection rate (per 1,000 participants screened) by gender and age group.

Figure 10:

Cancer detection rate (per 1,000 screened) by gender, 2022-2023*

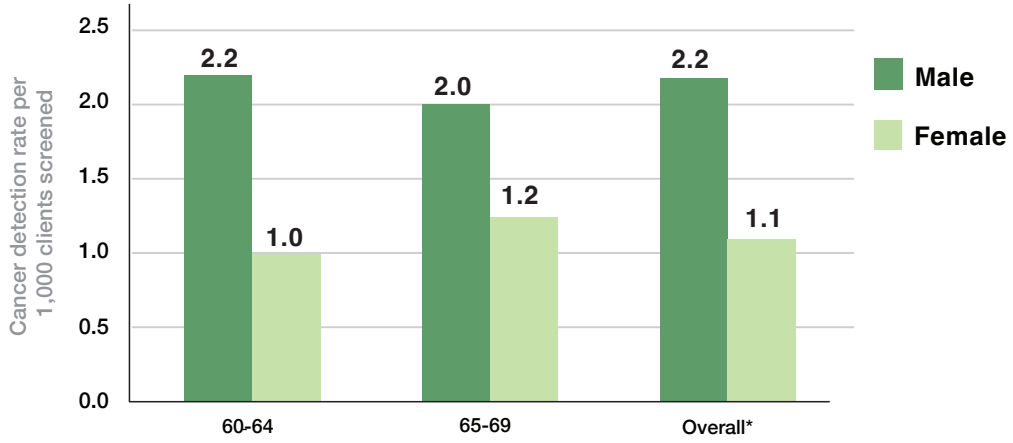


*Includes all ages

The cancer detection rate among male participants was higher than for female participants (Figure 10). This pattern was also seen in previous reporting periods, and it reflects gender- incidence statistics from the National Cancer Registry of Ireland[5]. There was a slight decrease in the cancer detection rate for both males and females in 2023 compared to 2022. The cancer detection rate was lower among males aged 65 to 69 years compared to 60-64 year olds and slightly higher for females aged 65-69 years compared to 60-64 year olds (Figure 11).

Figure 11:

Cancer detection rate (per 1,000 screened) by gender and age group, 2022-2023



*Overall includes all ages

Adenoma detection

13,218 adenomas or polyps were removed during the reporting period. These are abnormal tissue growths that can become cancerous at a later stage. The removal of pre-cancerous adenomas greatly reduces the risks associated with future bowel cancer development.

Adenomas with the most risk associated with bowel cancer are known as advanced adenomas. Advanced adenomas are defined as the finding of five or more small adenomas in the large bowel or one or more adenomas equal to or greater than 2cm. The number of screening participants that had advanced adenomas was 849; 438 in 2022 and 411 in 2023.

BowelScreen Charter indicators

Our charter outlines our commitments to people who choose screening, and the service they can expect from us. In addition, we have developed standards to ensure that timelines are reasonable to minimise waiting times and possible anxiety for participants. Table 10 outlines how we have performed against these standards.

The number of participants receiving a reminder letter to take part was above the target of ≥95 per cent. The proportion of repeat FIT test kits sent to participants within 10 working days increased from 91.1 per cent in 2022 to 96.6 per cent in 2023.

Participants with a result of routine recall, both with and without pathology taken, fell outside the standards.

People who received their first ever invitation within 24 months of becoming known to the programme or becoming eligible fell below the standard. This reflects the high numbers of subsequent participants invited after pauses during the COVID-19 pandemic.

We achieved our standards for timely dispatch of FIT kits, analysis of kits returned, and reporting results to participants.

Table 10:

BowelScreen charter results for the 2022-2023 reporting period

Quality Standard	2022	2023	2022-2023	QA Standard
People invited (who do not decline or are not excluded), who do not consent to screening within 8 weeks who are sent one reminder	100.0%	100.0%	100.0%	≥95%
FIT test kits and instructions dispatched within 5 working days to people above who requested them	99.9%	100.0%	99.9%	≥95%
Participants (where it is possible to do so), who are sent a reminder if FIT test kit is not received at laboratory within 4 weeks	99.9%	99.6%	99.7%	≥95%
Repeat FIT test kits dispatched to participants who were contactable and satisfied for a replacement to be sent within 10 working days following receipt of unacceptable kit by laboratory	91.1%	96.6%	94.4%	≥95%
FIT results where file sent to NSS within 5 working days	100.0%	100.0%	100.0%	≥95%
FIT results where file sent to participants within 5 working days	98.8%	98.8%	98.8%	≥95%
FIT results where file sent to GP within 5 working days	98.8%	98.8%	98.8%	≥95%
Positive FIT appearing on preassessment list of screening endoscopy unit within 7 working days of result received by NSS	100.0%	99.9%	99.9%	≥95%
Participants with no pathology taken as part of colonoscopy and result classified as routine recall where file dispatched to mail provider within 11 working days	72.5%	74.7%	73.6%	≥95%
Participants with pathology taken as part of colonoscopy and result classified as routine recall where file dispatched to mail provider within 15 working days	43.2%	50.9%	47.3%	≥95%
Participants with a routine recall colonoscopy result where file sent to mail provider (for circulation to GP) within 10 working days	99.7%	99.7%	99.8%	≥95%
Participants with a surveillance colonoscopy result where file sent to mail provider within 10 working days	99.3%	99.7%	99.6%	≥95%
People who received first ever invitation were invited within 24 months of becoming known to the programme or becoming eligible	67.9%	73.7%	71.3%	≥95%
Participants re-invited within 24 months of becoming due for re-invite	88.8%	96.2%	92.2%	≥95%

References

1. *BowelScreen Programme Report 2020-2021*, National Screening Service, 2023. Available online at: https://assets.hse.ie/media/documents/BowelScreen_Programme_Report_2020-2021.pdf

2. *Standards for Quality Assurance in Colorectal Screening, Second Edition.* The National Bowel Screening Programme, 2017. Available online at: https://assets.hse.ie/media/documents/Guidelines_for_ Quality_Assurance_in_Colorectal_Screening.pdf

3. *Standards for Quality Assurance in Colorectal Screening, Third Edition*. The National Bowel Screening Programme, 2023. Available online at: https://assets.hse.ie/media/documents/Standards_for_QA_in_Colorectal_Screening.pdf

4. *BowelScreen Patient Reported Experience Measures programme 2023.* The National Bowel Screening Programme, 2023. Available online at: https://assets.hse.ie/media/documents/BowelScreen_Patient_Reported_Experience_Measures_Report_2023.pdf

5. *Cancer in Ireland 1994-2022, Annual Statistical Report of the National Cancer Registry*. National Cancer Registry, Cork, 2024. Available online at: https://www.ncri.ie/publications/statistical-reports/cancer-ireland-1994-2022-annual-statistical-report-national-cancer

BSP/PR/PM-7 Rev 0

Published April 2025