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Bowel Screening Wales Annual Statistical Report 2022-23

Version 1

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Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg. Byddwn yn ateb gohebiaeth yn Gymraeg heb oedi / We welcome correspondence and phone calls in Welsh. We will respond to correspondence in Welsh without delay.

QA statement

Screening data records are constantly changing. The databases used by Public Health Wales Screening Division are updated on a daily basis when records are added, changed or removed (archived). This might relate to when a person has been identified as needing screening; has had screening results that need to be recorded, or has a change of status and no longer needs screening respectively. Data is received from a large number of different sources with varying levels of accuracy and completeness. The Screening Division checks data for accuracy by comparing datasets – for example GP practice data – and corrects the coding data where possible. It should be noted that there are sometimes delays in data collection – for example a person might not immediately register with their GP if they move address. These delays will therefore affect the completeness of the data depending on individual circumstances. In addition, the reader should be aware that data is constantly updated and there might be slight readjustments in the numbers cited in this document year on year because of data refreshing. We occasionally suppress numbers lower than five when the data is potentially sensitive.

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This document is also available in Welsh.

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Key messages

- Bowel screening reduces the risk of dying from bowel cancer;
- During the earlier part of this reporting period, men and women aged 58 to 74 were invited to take part every two years. The age range was extended to 55 to 74 years from October 2022, taking a phased approach so that only around half of those newly eligible were invited for screening during this reporting period;
- People can feel well even if they have bowel cancer. Finding cancer early gives the best chance of survival;
- Bowel screening uses a free NHS test that can be completed easily at home;
- Screening will miss some cancers, and some cancers cannot be cured;
- Taking part in bowel screening is an individual's choice. We encourage people invited for screening to read the information pack carefully to help them make their decision.



Introduction

Background

This is the tenth annual statistical report published by Bowel Screening Wales. This report covers data for the financial year 2022-23.

Bowel Screening Wales was launched in October 2008 with the aim to reduce the number of people dying from bowel cancer in the group of people invited for screening in Wales. The bowel screening programme identifies bowel cancers early when treatment is more likely to be successful and also removes pre-cancerous growths that could develop into cancer over a period of time. In the year 2022-23 Bowel Screening Wales diagnosed 376 people with bowel cancer and removed polyps from 2,733 screening participants.

The 2022 Annual Report from the National Bowel Cancer Audit¹ reported that 10% of patients diagnosed with bowel cancer were referred via screening programmes in England and Wales. People with a cancer detected by screening had less advanced disease and were generally fitter. As a result, 86% of patients diagnosed via screening received curative treatment compared to 50% who presented as an emergency.

Current eligibility

From the 5th of October 2022, Bowel Screening Wales invited individuals aged between 55 to 74 for bowel cancer screening every two years.

Sources of additional information

2020 NBOCAP: <https://www.nboca.org.uk/content/uploads/2020/12/NBOCA-2020-Annual-Report.pdf>

Bowel Screening Wales website: www.phw.nhs.wales/bowel-screening

Screening locations

Bowel Screening Wales offers home sample collection of the screening test kit, with any further investigations performed in the Health Board hospitals across Wales.

Summary of activity in reported year

During this reporting period Bowel Screening Wales expanded the eligible age range for bowel cancer screening in Wales. From October 2022, individuals aged between 55 and 57 started to be invited for screening for the first time (eligible population age range 55-74). This age expansion was phased in, with approximately 50% of those newly eligible 55-57 year olds invited by the end of March 2023. As such, the data presented in this report will relate to individuals aged 58-74 between April 2022 and September 2022 and 55-74 between October 2022 and March 2023.

Looking forward to the next screening year

The age expansion described above is part of a longer-term (4-year) plan to expand the eligible screening age to 50-74. From October 2023, the eligible screening age was expanded further to include those aged from 51, and will include those aged from 50 from October 2024. During this time period Bowel Screening Wales has also increased the sensitivity of the screening faecal immunochemical test (FIT), with further plans to increase this in the future.

Programme delivery

The Screening Division of Public Health Wales is responsible for managing, delivering and quality assuring the programme. The programme is led by a Consultant in Public Health Medicine and headed by a Head of Programme. The bowel screening programme is delivered by multi-disciplinary staff, including Screening Colonoscopists, Pathologists, Radiologists, nursing, administrative and laboratory-based staff. The programme is supported by Quality Assurance Advisors for colonoscopy, pathology, biochemistry, radiology and surgery.

Screening pathway

Eligible participants are identified from the Welsh Demographic System and invited for screening.

Invitation is based on date of birth and comprises of a letter and an information pack which contains the test to be completed. The test is sent to eligible people by post for completion at home and returned to the central screening laboratory by post in the prepaid envelope provided.

People with negative screening test results require no further investigations at that time. These individuals are returned to routine recall and invited again for screening two years later, if they remain in the eligible age range.

Participants with positive results require further investigations and are invited for an assessment of their fitness for colonoscopy with a Screening Practitioner (SP). These specialist nurses are based in

hospitals across Wales and most assessments are conducted by telephone, but face to face appointments are available on request or if considered necessary by the SP.

If considered medically fit, colonoscopy is offered to the participant and, if accepted, this is undertaken at a hospital local to the participant. Depending on the findings after colonoscopy, participants are either; returned to routine recall; put onto a surveillance programme according to the number and size of polyps identified; or referred to the multi-disciplinary team following a diagnosis of cancer.

If a participant is not fit for colonoscopy, a Computed Tomography Colonography (CTC) scan is usually offered.

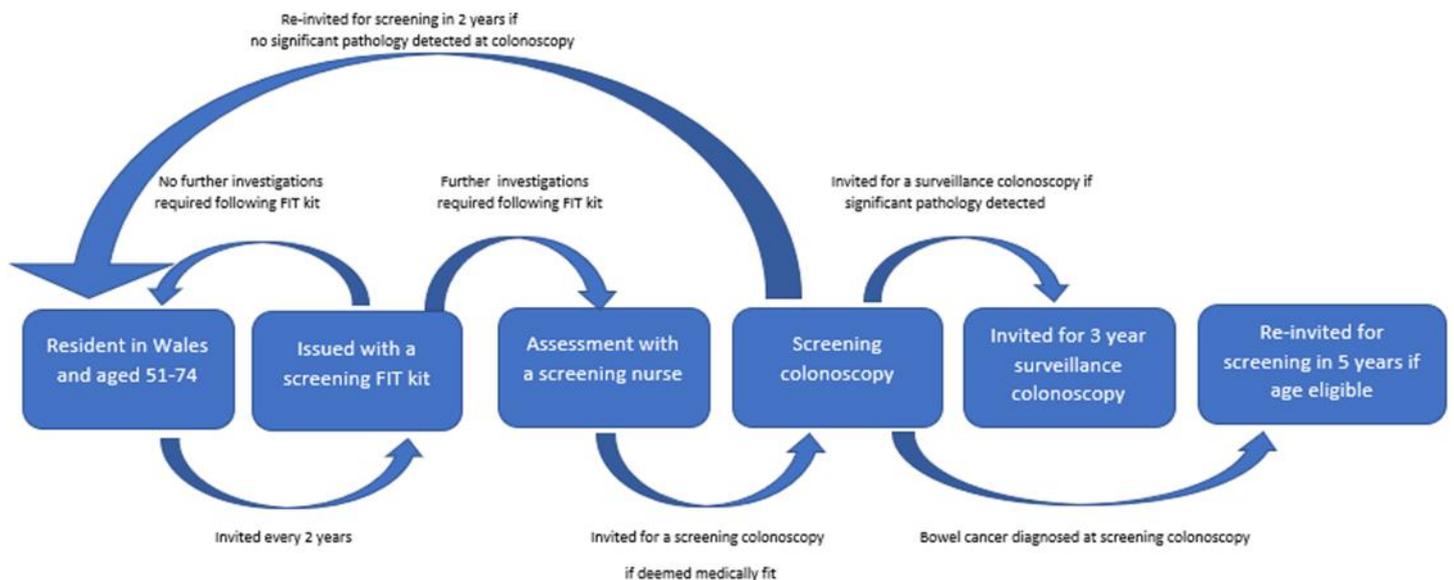


Figure 1: Pathway for bowel screening



Headline statistics

This report covers the time period from April 2022 to March 2023.

- Bowel screening coverage as of 1st October 2023 was 63.1%.
- Coverage on 1st October 2023 ranged from 62.2% in Swansea Bay University Health Board to 64.4% in Powys Teaching Health Board.
- Bowel screening uptake for participants invited (and eligible) between April 2022 and March 2023 was 65.9%.
- Uptake in 2022-23 ranged from 65.0% in Swansea Bay University Health Board to 67.7% in Powys Teaching Health Board.
- Coverage and uptake rates were higher in females. Coverage was 65.1% in females compared to 61.2% in males, uptake was 68.1% in females compared to 63.7% in males.
- Coverage and uptake rates were also higher in those living in the least deprived areas (69.6% and 72.8% respectively in the least deprived areas compared to 54.4% and 56.6% respectively in the most deprived areas).
- 417,683 participants were invited¹ for bowel screening.
- 269,240 tests were authorised of which 2.1% were rejected as they could not be tested.
- 263,516 tests were given a definitive result, of which 98.1% were negative and 1.9% were positive.
- A results letter was issued to 100% of the participants within a week (less than seven calendar days) of receipt by the laboratory.
- Across Wales, 15.2% of participants with a screening positive result were offered a diagnostic procedure (colonoscopy or flexible sigmoidoscopy) within four weeks of contacting Bowel Screening Wales to make the appointment with a Screening Practitioner.
- 63.2% of participants with a screening positive result were offered a diagnostic procedure within eight weeks.
- Attendance at the first diagnostic procedure was 95.0% with 3,725 participants attending a first procedure.
- At the first diagnostic procedure, the cancer detection rate was 10.1%, polyp detection rate was 73.4% and the adenoma detection rate was 56.7%.

¹ This invited number is not the same as invited *and* eligible participants used for uptake calculations



- 376 participants were diagnosed with cancer and 2,733 participants had polyps detected and removed.
- Across Wales, 91.4% of booked Computed Tomography Colonography (CTC) scans were attended.



Data

Coverage

Definition and standard

For coverage calculations, eligible participants are those that are resident in Wales at the time of reporting, that are not currently ceased or suspended from bowel screening invitation following notification of a diagnosed bowel condition, movement out of Wales or death and are between invite age range of 55 to 74 years.

Deprivation quintiles were assigned using the Welsh Index of Multiple Deprivation (WIMD) 2019, measured at lower super output area (LSOA) level. LSOAs are ranked into quintiles at an all-Wales level so they can be compared between health boards. This means that there will not be an equal proportion of people in each quintile when individual health board data are examined (e.g. in Monmouthshire, 40% of the population live in the least deprived quintile of Wales, but no areas fall into the Welsh most deprived quintile).

The calculation counts those eligible participants that have had a bowel cancer screening test analysed and authorised by the laboratory within two and a half years of the reporting date.

Standard: At least 60% of eligible people will have participated in the screening programme within the last 2.5 years.

Result for 2022-2023

At an all-Wales level, coverage was 63.1%

Three-year trend

All-Wales level coverage was 63.1% in 2022-23, 63.9% in 2021-22, and 63.2% in 2020-21.

Comment

At an all-Wales level, coverage decreased slightly (0.8%) in 2022-23 compared to the previous year but is comparable to 2020-21.



Figures and tables

Table 1: Bowel Screening Coverage (within 2.5 years) by gender and health board of residence, as at 1 October 2023

Health Board	Total			Female			Male		
	Eligible	Screened within 2.5 years	% Coverage	Eligible	Screened within 2.5 years	% Coverage	Eligible	Screened within 2.5 years	% Coverage
Aneurin Bevan UHB	150,732	95,427	63.3	75,909	49,615	65.4	74,823	45,812	61.2
Betsi Cadwaladr UHB	188,123	118,856	63.2	95,259	62,137	65.2	92,864	56,719	61.1
Cardiff and Vale UHB	108,776	68,219	62.7	54,632	35,482	64.9	54,144	32,737	60.5
Cwm Taf Morgannwg UHB	111,293	69,654	62.6	56,189	35,887	63.9	55,104	33,767	61.3
Hywel Dda UHB	111,509	71,561	64.2	56,640	37,596	66.4	54,868	33,964	61.9
Powys Teaching HB	41,188	26,531	64.4	20,772	13,953	67.2	20,416	12,578	61.6
Swansea Bay UHB	95,943	59,681	62.2	48,591	30,870	63.5	47,352	28,811	60.8
Unknown	339	191	56.3	168	102	60.7	171	89	52.0
All Wales	807,903	510,120	63.1	408,160	265,642	65.1	399,742	244,477	61.2

Where a residence postcode is unknown it is not possible for it to be linked to a quintile or health board. It is therefore categorised as unknown.

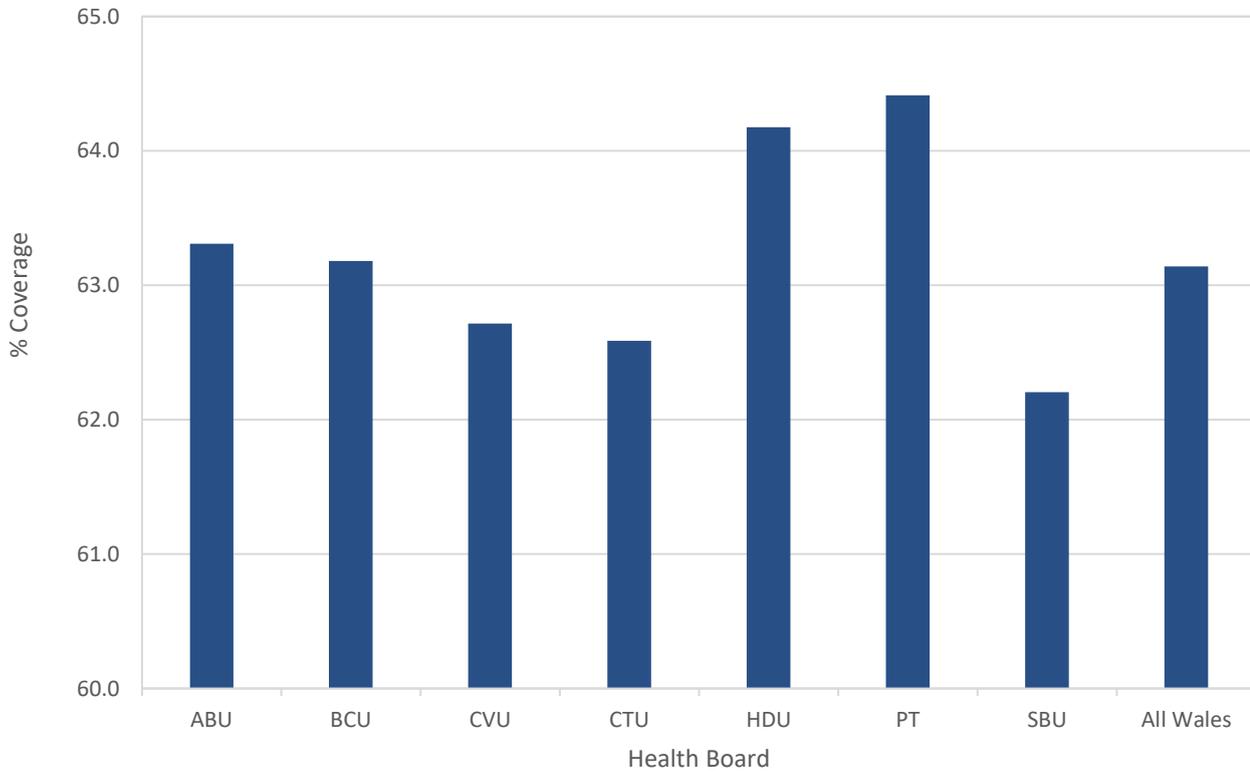


Figure 2: Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2023



Table 2: Bowel Screening Coverage (within 2.5 years), %, by deprivation quintile and health board of residence, as at 1 October 2023

Health Board	Coverage %					Total coverage
	Q1 - most deprived	Q2	Q3	Q4	Q5 - least deprived	
Aneurin Bevan UHB	55.5	61.5	63.7	67.7	70.5	63.3
Betsi Cadwaladr UHB	52.7	58.4	62.8	65.8	68.4	63.2
Cardiff and Vale UHB	51.2	56.4	59.7	64.0	70.2	62.7
Cwm Taf Morgannwg UHB	56.4	61.3	62.6	66.1	70.9	62.6
Hywel Dda UHB	55.7	61.6	64.1	67.1	68.5	64.2
Powys Teaching HB	56.2	59.8	63.4	65.8	67.7	64.4
Swansea Bay UHB	54.4	60.2	62.0	65.9	69.1	62.2
Unknown	N/A	N/A	N/A	N/A	N/A	56.3
All Wales	54.4	60.2	63.0	66.2	69.6	63.1

Where a residence postcode is unknown it is not possible for it to be linked to a quintile or health board. It is therefore categorised as unknown.

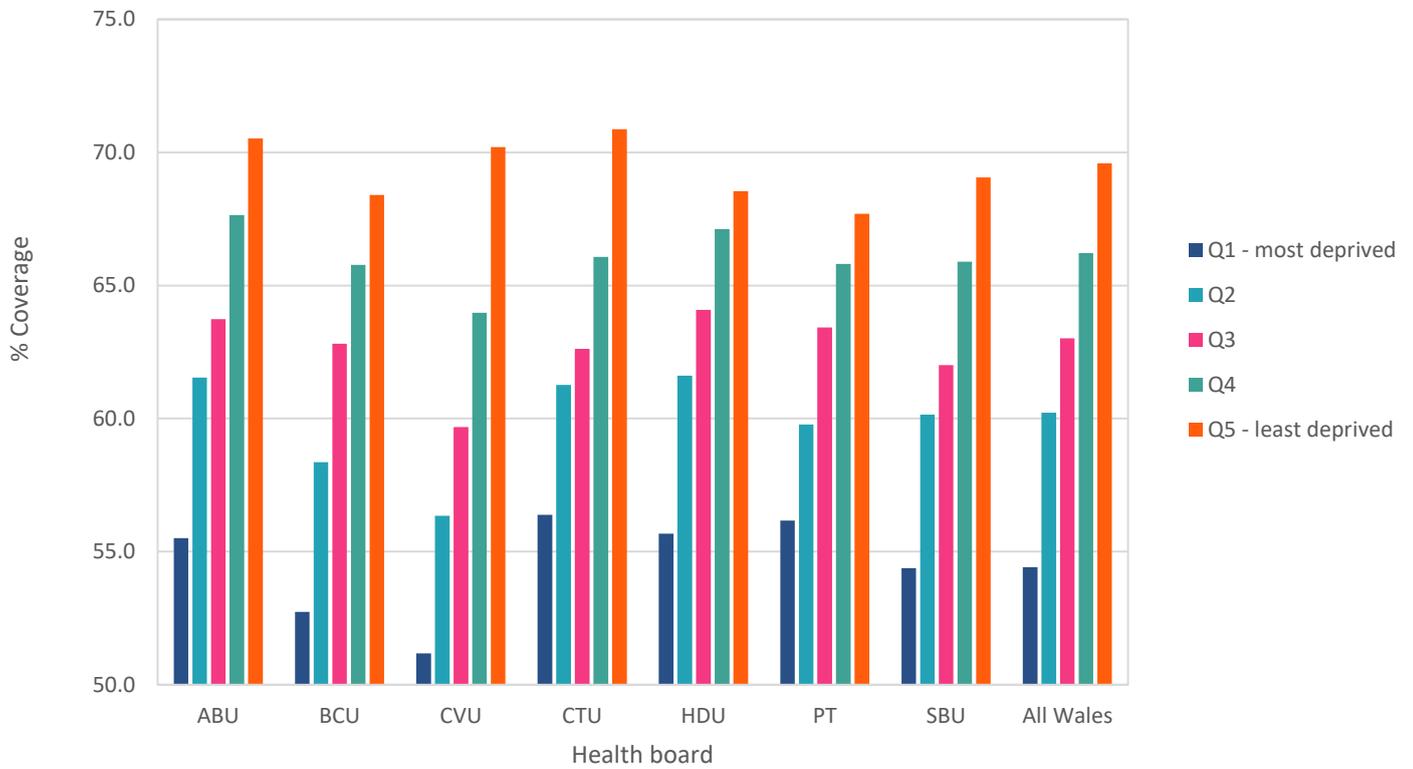


Figure 3: Bowel Screening Coverage (within 2.5 years) by deprivation quintile and health board of residence, as at 1 October 2023



Table 3: All Wales Bowel Screening Coverage - Historical Comparison

Year	Eligible	Tested	% Coverage
2015-16	540,022	279,308	51.7
2016-17	545,623	281,321	51.6
2017-18	550,971	294,121	53.4
2018-19	555,549	309,303	55.7
2019-20	546,106	321,695	58.9
2020-21	572,681	361,846	63.2
2021-22	664,439	424,573	63.9
2022-23	807,903	510,120	63.1



Uptake by health board of residence

Definition and standard

For uptake calculations, eligible participants are those that were resident in Wales (not deducted on NHAIS in the six months following invitation) and invited for bowel screening during the reporting period date range. Participants that were ceased or suspended from bowel screening invitation following notification of a diagnosed bowel condition, movement out of Wales or death, within six months following invitation were excluded, unless they had returned a used test.

Participants were deemed to have responded to their invitation if the bowel screening programme received a used test within six months following their invitation.

Deprivation quintiles were assigned using the Welsh Index of Multiple Deprivation (WIMD) 2019, measured at lower super output area (LSOA) level. LSOAs are ranked into quintiles at an all-Wales level so they can be compared between health boards. This means that there will not be an equal proportion of people in each quintile when you look at each health board e.g. in Monmouthshire, 40% of the population live in the least deprived quintile of Wales, but no areas fall into the Welsh most deprived quintile.

Standard: A minimum of 60% of invited participants returned a completed test within six months of invitation.

Result for 2022-2023

At an all-Wales level, uptake was 65.9%

Three-year trend

All-Wales level uptake was 65.9% in 2022-23, 67.2% in 2021-22, and 67.1% in 2020-21.

Comment

At an all-Wales level, uptake decreased in 2022-23 (by 1.3%, 1.2%) compared to the previous years.

The programme is working closely with partners to increase uptake across the population as well as specifically in groups where uptake is low.

Figures and tables

Table 4: Bowel Screening uptake by gender and health board of residence, 2022-23

Health Board	Total			Female			Male		
	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake
Aneurin Bevan UHB	77,750	51,480	66.2	39,037	26,717	68.4	38,713	24,763	64.0
Betsi Cadwaladr UHB	96,444	63,527	65.9	48,616	33,178	68.2	47,828	30,349	63.5
Cardiff and Vale UHB	55,424	36,269	65.4	27,820	18,959	68.1	27,604	17,310	62.7
Cwm Taf Morgannwg UHB	57,368	37,468	65.3	28,905	19,264	66.6	28,463	18,204	64.0
Hywel Dda UHB	56,716	37,935	66.9	28,880	19,995	69.2	27,835	17,939	64.4
Powys Teaching HB	20,964	14,183	67.7	10,534	7,444	70.7	10,430	6,739	64.6
Swansea Bay UHB	49,219	31,975	65.0	24,877	16,551	66.5	24,342	15,424	63.4
Unknown	147	91	61.9	73	49	67.1	74	42	56.8
All Wales	414,032	272,928	65.9	208,742	142,157	68.1	205,289	130,770	63.7

Where a residence postcode is unknown it is not possible for it to be linked to a quintile or health board. It is therefore categorised as unknown.

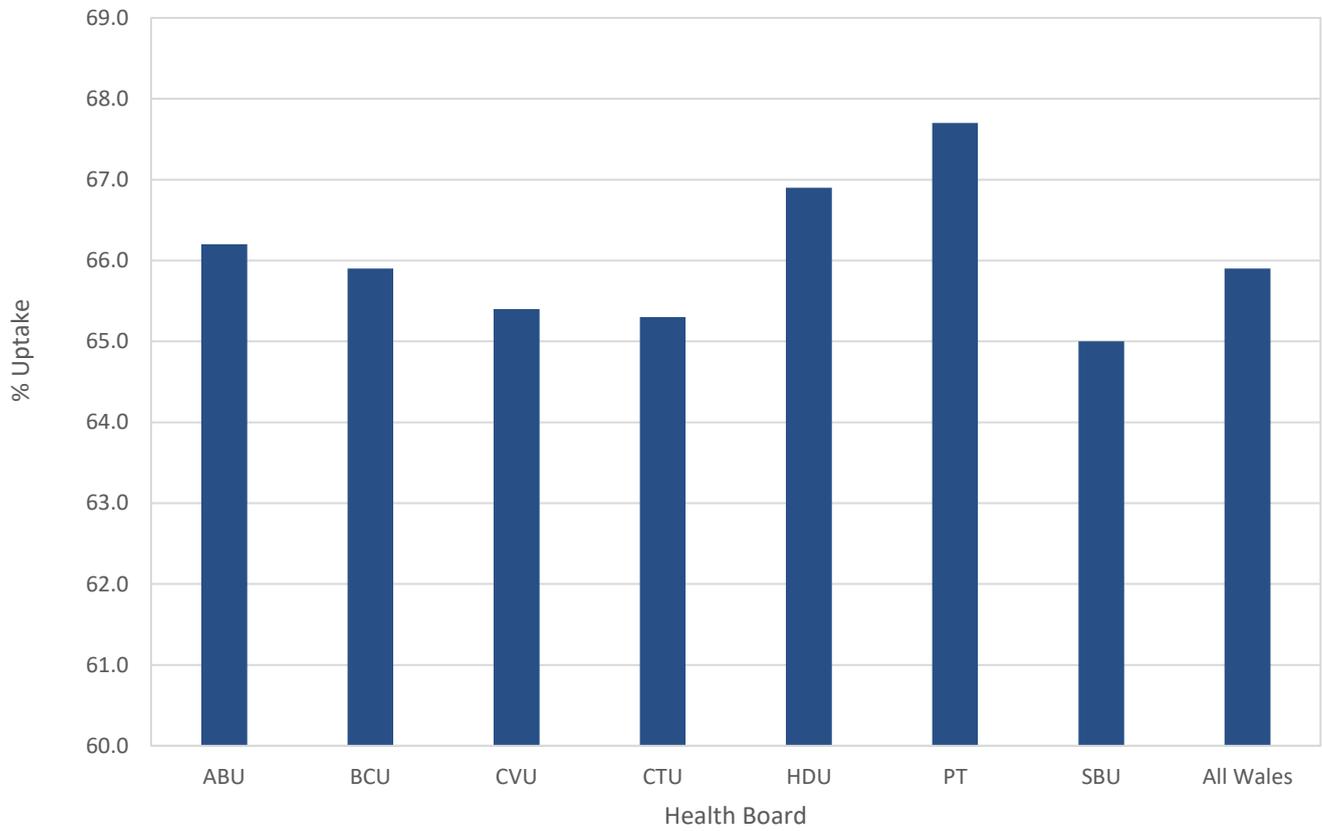


Figure 4 Bowel Screening Uptake by health board of residence, 2022-23



Table 5: Bowel Screening Uptake, %, by deprivation quintile and health board of residence, 2022-23

Health Board	Uptake %					Total uptake
	Q1 - most deprived	Q2	Q3	Q4	Q5 - least deprived	
Aneurin Bevan UHB	58.0	63.9	67.1	70.8	74.0	66.2
Betsi Cadwaladr UHB	54.6	60.9	65.6	68.8	71.2	65.9
Cardiff and Vale UHB	52.8	59.0	62.2	67.0	73.5	65.4
Cwm Taf Morgannwg UHB	58.8	63.6	65.5	69.3	74.4	65.3
Hywel Dda UHB	57.7	63.9	66.8	70.2	71.8	66.9
Powys Teaching HB	58.7	64.1	66.8	69.0	70.3	67.7
Swansea Bay UHB	56.9	62.6	65.1	68.6	72.3	65.0
Unknown	N/A	N/A	N/A	N/A	N/A	61.9
All Wales	56.6	62.7	65.9	69.3	72.8	65.9

Where a residence postcode is unknown it is not possible for it to be linked to a quintile or health board. It is therefore categorised as unknown.

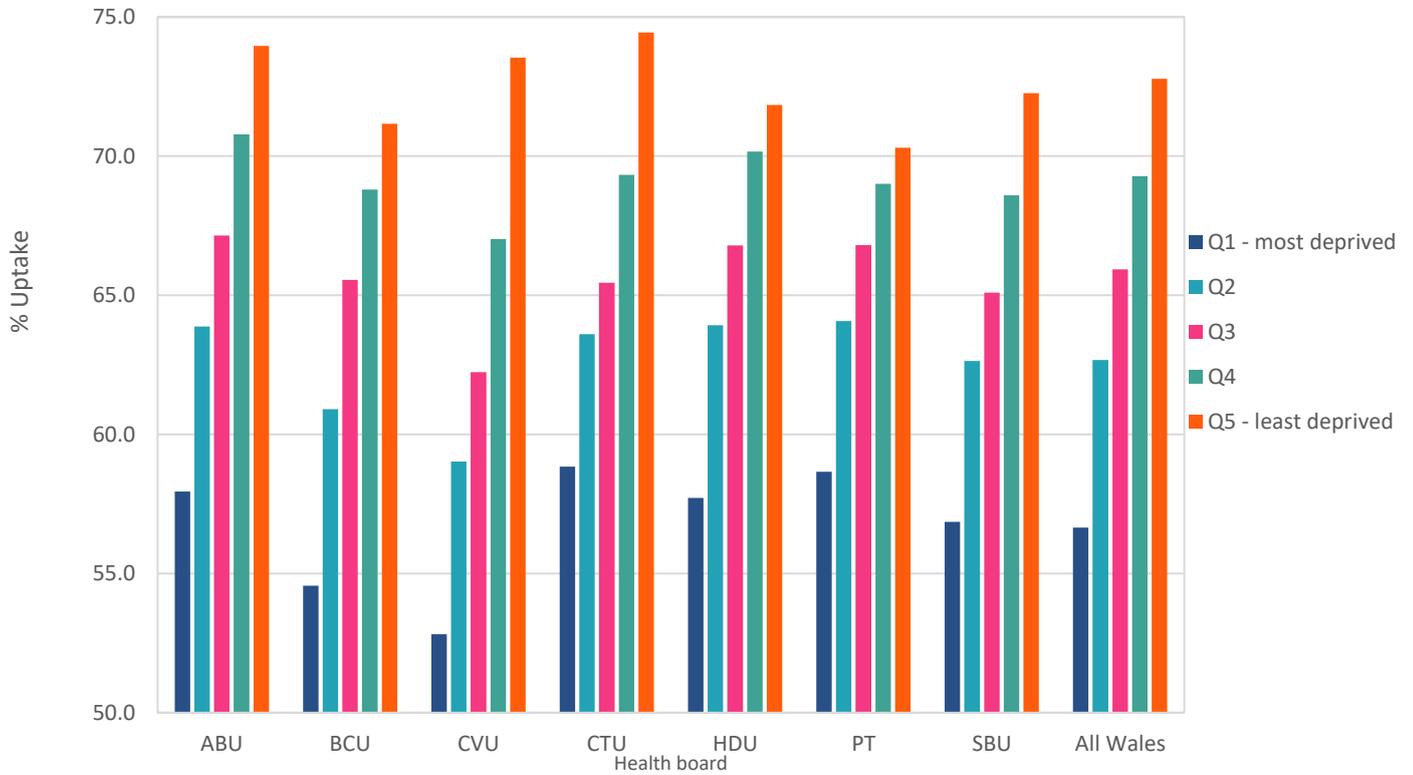


Figure 5: Bowel Screening Uptake (%) by deprivation quintile and health board of residence, 2022-23



Table 6: All Wales Bowel Screening Uptake - Historical Comparison

Year	Eligible	Tested	% Uptake
2015-16	281,082	152,794	54.4
2016-17	274,738	146,592	53.4
2017-18	283,106	157,594	55.7
2018-19	280,556	160,652	57.3
2019-20	273,045	167,986	61.5
2020-21	223,667	150,161	67.1
2021-22	354,131	238,065	67.2
2022-23	414,032	272,928	65.9



Table 7: All Wales Bowel Screening Uptake (%) by month of invite, 2022-23

Invite Year	Invite Month	Eligible	Tested	Uptake %
2022	Apr	30004	20435	68.1
2022	May	25638	18447	72.0
2022	Jun	33139	21704	65.5
2022	Jul	25221	16590	65.8
2022	Aug	31529	19791	62.8
2022	Sep	25089	16801	67.0
2022	Oct	37917	24150	63.7
2022	Nov	46812	30065	64.2
2022	Dec	35070	22586	64.4
2023	Jan	39968	26815	67.1
2023	Feb	37068	25014	67.5
2023	Mar	46577	30530	65.5
Total		414032	272928	65.9

Uptake by type of recall

Definition and standard

For uptake calculations, eligible participants are those that were resident in Wales (not deducted on NHAIS in the six months following invitation) and invited for bowel screening during the reporting period date range. Participants that were ceased or suspended from bowel screening invitation following notification of a diagnosed bowel condition, movement out of Wales or death, within six months following invitation were excluded, unless they had returned a used test.

Participants were deemed to have responded to their invitation if the bowel screening programme received a used test within six months following their invitation.

Prevalent Round - first invite: The prevalent round first invitation is the first time a person is invited to take part in screening. They have not been screened before as they have not been invited previously.

Prevalent round - subsequent invite: The prevalent round subsequent invitation is when a person has previously been invited, but has not actually taken part in screening before. They have not been screened before but they have been invited previously.

Incident Round: The incident round is when people who have been invited previously, and taken up the offer, are subsequently re-invited for screening.

Standard: A minimum of 60% of invited participants returned a completed test within six months of invitation.

Result for 2022-2023

Table 8: All Wales Bowel Screening Uptake by Type of Recall, 2022-23

Year	Prevalent Round - 1st Invite			Prevalent Round - Subsequent invite(s)			Incident Round		
	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake
2022-23	205,701	129,694	63.0	61,070	10,319	16.9	147,261	132,915	90.3



Three-year trend

Table 9: All Wales Bowel Screening Uptake by Type of Recall, three-year trend

Year	Prevalent Round - 1st Invite			Prevalent Round - Subsequent invite(s)			Incident Round		
	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake
2022-23	205,701	129,694	63.0	61,070	10,319	16.9	147,261	132,915	90.3
2021-22	68,961	44,283	64.2	94,478	20,809	22.0	190,692	172,973	90.7
2020-21	49,434	32,585	65.9	62,147	15,826	25.5	112,086	101,750	90.8

Comment

Screening uptake is highest in those who have participated in bowel cancer screening previously (incident round) and lowest in those who have been invited previously but have not participated (prevalent round- subsequent invite). This trend has been consistent over the past three-year period.



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Participants invited

Definition and standard

No definition or standard

Result for 2022-2023

417,683 participants, 55 to 74 years old, were invited.

Three-year trend

417,683 participants, 55 to 74 years old, were invited in 2022-23;

356,851 participants, 58 to 74 years old, were invited in 2021-22;

220,550 participants, 60 to 74 years old, were invited, in 2020-21.



Figures and tables

Table 10: Number of female participants invited for bowel screening by age and health board of residence, 2022-23

Health Board	Female Participants					Total Invited
	55-57 years	58-59 years	60-64 years	65-69 years	70-74 years	
Aneurin Bevan UHB	8,409	9,741	8,351	5,898	6,917	39,316
Betsi Cadwaladr UHB	10,027	11,969	10,482	7,642	8,896	49,016
Cardiff and Vale UHB	6,050	7,110	6,104	4,185	4,593	28,042
Cwm Taf Morgannwg UHB	6,150	7,280	6,408	4,113	5,146	29,097
Hywel Dda UHB	5,641	7,081	6,424	4,568	5,359	29,073
Powys Teaching Health Board	2,108	2,525	2,330	1,746	1,916	10,625
Swansea Bay UHB	5,049	6,152	5,532	3,854	4,445	25,032
Unknown	14	11	24	12	12	73
All Wales	43,448	51,869	45,655	32,018	37,284	210,274



Table 11: Number of male participants invited for bowel screening by age and health board of residence, 2022-23

Male Participants						
Health Board	55-57 years	58-59 years	60-64 years	65-69 years	70-74 years	Total Invited
Aneurin Bevan UHB	8,638	9,888	8,418	5,653	6,503	39,100
Betsi Cadwaladr UHB	10,191	11,962	10,537	7,172	8,479	48,341
Cardiff and Vale UHB	6,281	7,162	6,265	3,980	4,292	27,980
Cwm Taf Morgannwg UHB	6,423	7,211	6,183	4,138	4,767	28,722
Hywel Dda UHB	5,515	6,841	6,146	4,513	5,080	28,095
Powys Teaching Health Board	2,067	2,469	2,256	1,787	1,950	10,529
Swansea Bay UHB	5,189	6,199	5,380	3,652	4,146	24,566
Unknown	16	13	21	13	12	75
All Wales	44,320	51,745	45,206	30,908	35,229	207,408



Table 12: Total participants invited for bowel screening by age and health board of residence, 2022-23

Health Board	Participants					Total Invited
	55-57 years	58-59 years	60-64 years	65-69 years	70-74 years	
Aneurin Bevan UHB	17,047	19,629	16,769	11,551	13,420	78,416
Betsi Cadwaladr UHB	20,218	23,931	21,019	14,814	17,375	97,357
Cardiff and Vale UHB	12,331	14,272	12,369	8,165	8,885	56,022
Cwm Taf Morgannwg UHB	12,573	14,491	12,591	8,251	9,913	57,819
Hywel Dda UHB	11,157	13,922	12,570	9,081	10,439	57,169
Powys Teaching Health Board	4,175	4,994	4,586	3,533	3,866	21,154
Swansea Bay UHB	10,238	12,351	10,912	7,506	8,591	49,598
Unknown	30	24	45	25	24	148
All Wales	87,769	103,614	90,861	62,926	72,513	417,683

Laboratory reporting rates

Definition and standard

Negative and positive test rates are calculated as a proportion of the tests authorised in the reporting period as negative and positive results – i.e. those tests that have a definitive result.

A rejected test is one that is rejected for testing by the laboratory because it fails to meet defined specific criteria for sample acceptance that are documented in the Laboratory Quality Manual e.g. a mismatch between the name and the barcode or a test that is past the manufacturer's expiry date. These rates are calculated as a proportion of the total bowel screening tests authorised in the reporting period.

Rejected rates are calculated as a percentage of all the results (negative, positive and rejected).

Positivity rate standard: is between 1% and 2.5% of all test kits returned with definitive results have a positive result.

Rejected rate standard: is less than 2% of all authorised test kits returned have a rejected result.

Result for 2022-2023

In 2022-23, the all-Wales negative rate was 98.1%, positive 1.9% and rejected was 2.1%.

Three-year trend

In 2022-23, the all-Wales negative rate was 98.1%, positive 1.9% and rejected was 2.1%.

In 2021-22, the all-Wales negative rate was 98.0%, positive 2.0% and rejected was 3.7%.

In 2020-21, the all-Wales negative rate was 98.2%, positive 1.8% and rejected was 4.5%.

Figures and tables

Table 13: Number of Bowel Screening kits authorised by result and health board of residence

Health Board	Number of tests authorised – Liquid FIT				Percentage - Liquid FIT		
	Rejected	Negative	Positive	Total	Rejected	Negative	Positive
Aneurin Bevan UHB	1,181	48,753	949	50,883	2.3%	98.1%	1.9%
Betsi Cadwaladr UHB	1,156	59,660	1,094	61,910	1.9%	98.2%	1.8%
Cardiff and Vale UHB	903	34,346	644	35,893	2.5%	98.2%	1.8%
Cwm Taf Morgannwg UHB	839	35,469	702	37,010	2.3%	98.1%	1.9%
Hywel Dda UHB	680	36,187	658	37,525	1.8%	98.2%	1.8%
Powys Teaching Health Board	292	13,561	209	14,062	2.1%	98.5%	1.5%
Swansea Bay UHB	671	30,571	625	31,867	2.1%	98.0%	2.0%
Unknown	2	87	1	90	2.2%	98.9%	1.1%
All Wales	5,724	258,634	4,882	269,240	2.1%	98.1%	1.9%

Negative and positive rates are calculated as a percentage of the sum of the negative and positive results only. Rejected rates are calculated as a percentage of all the results (negative, positive and rejected.)



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Waiting times for screening results

Definition and standard

The interval between the receipt of a screening test kit in the Bowel Screening Wales laboratory to the result letter being issued to the participant.

Standard: 95% of participants are sent their screening test result within seven days of receipt of test kit in laboratory.

Result for 2022-2023

In 2022-23, 100% of participants were sent their screening test result within seven days of receipt of screening test kit in laboratory.

Three-year trend

100% of participants were sent their screening test result within seven days of receipt of the screening test kit in laboratory in 2022-23, 2021-22 and 2020-21.

Comment

The majority of screening test kits are analysed the day the kit is received in the laboratory, with all screening participants over the past three-year period sent their result letter within 7 calendar days of receipt of the screening kit in the laboratory.



Figures and tables

Table 14: Waiting time for screening test results, from receipt of test to authorised result, 2022-23

Days from receipt to authorised	Number authorised	Percentage of total authorised
Same day	265,126	98.5%
1	3,636	1.4%
2	1	0.0%
3	476	0.2%
4	1	0.0%
5	0	0.0%
6	0	0.0%
7-13 days	0	0.0%
14 days +	0	0.0%
Total	269,240	100.0%

Attendance at colonoscopy

Definition and standard

Attendance uses index colonoscopy or flexible sigmoidoscopy procedures that are booked in the reporting period.

Standard: none.

Result for 2022-2023

In 2022-23, at an all-Wales level, 95% of participants attended their index procedure.

Three-year trend

At an all-Wales level, 95% of participants attended their index procedure in 2022-23, 94.4% in 2021-22, and 93.1% in 2020-21.

Figures and tables

Table 15: Attendance at index colonoscopy/ flexible sigmoidoscopy by health board of residence, 2022-23

Health Board	Booked index procedure	Attended index procedure	% Attended
Aneurin Bevan UHB	837	781	93.3%
Betsi Cadwaladr UHB	920	887	96.4%
Cardiff and Vale UHB	509	485	95.3%
Cwm Taf Morgannwg UHB	402	379	94.3%
Hywel Dda UHB	562	540	96.1%
Powys Teaching HB	179	174	97.2%
Swansea Bay UHB	510	479	93.9%
All Wales	3,919	3,725	95.0%



Detection rates

Definition and standard

Detection rates are calculated as the percentage of participants that attend an index colonoscopy/flexible sigmoidoscopy procedure that have cancer/ polyp(s)/ adenoma(s) detected.

For polyp detection, one, or more, polyp(s) must also be removed during the procedure.

Standard for cancer detection: A minimum of 10% of participants undergoing index colonoscopy/ flexible sigmoidoscopy have cancer detected.

Standard for polyp detection: A minimum of 50% of participants undergoing index colonoscopy/ flexible sigmoidoscopy have polyps detected.

Standard for adenoma detection: A minimum of 35% of participants undergoing index colonoscopy/ flexible sigmoidoscopy have adenomas detected.

Result for 2022-2023

In 2022-23, the cancer detection rate was 10.1%, the polyp detection rate was 73.4% and the adenoma detection rate was 56.7%.

Three-year trend

In 2022-23, the cancer detection rate was 10.1%, the polyp detection rate was 73.4% and the adenoma detection rate was 56.7%.

In 2021-22, the cancer detection rate was 10.4%, the polyp detection rate was 73.3% and the adenoma detection rate was 59.0%.

In 2020-21, the cancer detection rate was 11.6%, the polyp detection rate was 73.6% and the adenoma detection rate was 57.7%.

Comment

Detection rates at screening colonoscopy have consistently exceeded the accepted screening standard over the past three-year period.



Figures and tables

Table 16: Detection rates, three-year trend

	2022-23 (N=3,725) ^a		2021-22 (N=3,440) ^a		2020-21 (N=1,823) ^a	
	Number Detected	Percentage Detected	Number Detected	Percentage Detected	Number Detected	Percentage Detected
Cancer detection rate	376	10.1%	357	10.4%	211	11.6%
Polyp detection rate	2,733	73.4%	2,522	73.3%	1,342	73.6%
Adenoma detection rate	2,112	56.7%	2,031	59.0%	1,052	57.7%

Detection rates are calculated as the proportion of participants that attend an index colonoscopy/flexible sigmoidoscopy procedure. For polyp detection, one, or more, polyp(s) must also be removed during the procedure.

^aN denotes total index procedures attended.



Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment

Definition and standard

The interval between a participant telephoning to book a Screening Practitioner (SP) assessment and the first offered date of index colonoscopy/ flexible sigmoidoscopy.

Waiting times were calculated using those participants with an index procedure first offered within the reporting period. This might not be the procedure they attended, due to participant choice or other factors.

Standard: 90% of participants found fit for colonoscopy/ flexible sigmoidoscopy are offered their index procedure appointment up to, and including, 28 calendar days from date they telephone to book an SP appointment.

Result for 2022-2023

3,883 participants were offered an index procedure and 591 (15.2%) of those were offered a procedure date within four weeks (28 days) of booking their SP assessment appointment.

Three-year trend

In 2022-23, 591 (15.2%) of 3,883 participants were offered a procedure date within four weeks (28 days).

In 2021-22, 141 (3.8%) of 3,693 participants were offered a procedure date within four weeks (28 days).

In 2020-21, 512 (26.82%) of 1,908 participants were offered a procedure date within four weeks (28 days).

Comment

Of the 3,883 participants offered an index procedure in 2022-23, 1862 (48%) were offered a procedure date between four and eight weeks and 1430 (36.8%) were offered a procedure date more than eight weeks after booking their SSP assessment appointment.



Attendance at Computed Tomography Colonography (CTC) scans

Definition and standard

Definition: None

Standard: None

Result for 2022-2023

In 2022-23, across Wales, 91.4% of the 349 booked CTC scans were attended; this varies between 80.6% and 100% across Health Boards.

Three-year trend

In 2022-23, across Wales, 91.4% of the 349 booked CTC scans were attended; this varies between 80.6% and 100% across Health Boards.

In 2021-22, across Wales, 92.8% of the 375 booked CTC scans were attended; this varies between 88.7% and 97.5% across Health Boards.

In 2020-21, across Wales, 95% of the 181 booked CTC scans were attended; this varies between 90.3% and 100% across Health Boards.



Definitions

Eligible

For coverage calculations, eligible participants are those that are resident in Wales at the time of reporting, that are not currently ceased or suspended from bowel screening invitation following notification of a diagnosed bowel condition, movement out of Wales or death and are between invite age range 55 to 74 years.

For uptake calculations, eligible participants are those that were resident in Wales (not deducted on NHAIS in the six months following invitation) and invited for bowel screening during the reporting period date range. Participants that were ceased or suspended from bowel screening invitation following notification of a diagnosed bowel condition, movement out of Wales or death, within six months following invitation were excluded, unless they had returned a used test.

Uptake

Participants were deemed to have responded to their invitation if the bowel screening programme received a used test kit within six months following their invitation.

Coverage

The calculation counts those eligible participants that have had a used test kit authorised within two and a half years of the reporting date.

Deprivation

Deprivation quintiles were assigned using the Welsh Index of Multiple Deprivation (WIMD) 2014, measured at lower super output area (LSOA) level. LSOAs are ranked into quintiles at an all-Wales level so they can be compared between health boards. This means that there will not be an equal proportion of people in each quintile when you look at each health board e.g. in Monmouthshire, 40% of the population live in the least deprived quintile of Wales, but no areas fall into the Welsh most deprived quintile.

Health board

This is health board of residence.

Prevalent Round - first invite

The prevalent round first invitation is the first time a person is invited to take part in screening. They have not been screened before as they have not been invited before.



Prevalent round - subsequent invite

The prevalent round subsequent invitation is when a person has previously been invited, but has not actually taken part in screening before. They have not been screened before but they have been invited before.

Incident Round

The incident round is when people who have been invited previously, and taken up the offer, are subsequently re-invited for screening.

Negative and positive test

These rates are calculated as a proportion of the tests authorised in the reporting period as negative and positive results – i.e. those tests that have a definitive result.

Rejected test

A rejected test is one that is rejected for testing by the laboratory because it fails to meet defined specific criteria for sample acceptance that are documented in the Laboratory Quality Manual e.g. a mismatch between the name and the barcode or a test that is past the manufacturer's expiry date. These rates are calculated as a proportion of the total bowel screening tests authorised in the reporting period.

Waiting times for screening results

The interval between the receipt of a screening test kit in the Bowel Screening Wales laboratory to the result letter being issued to the participant.

Index procedure

An index procedure is the first procedure in the participants screening episode.

Colonoscopy

Colonoscopy is the visual inspection of the interior of the colon with a flexible, lighted tube (colonoscope) inserted through the rectum. During colonoscopy, biopsies (tissue samples of abnormal areas) can be obtained to aid diagnosis.

Flexible Sigmoidoscopy

A flexible sigmoidoscopy is the visual inspection of the lower part of the large intestine with a flexible lighted tube inserted through the rectum. During flexible sigmoidoscopy, biopsies (tissue samples of abnormal areas) can be obtained to aid diagnosis.



Attendance and detection rates

Attendance and detection rates report procedures that are booked in the reporting period.

Detection rates

Detection rates are calculated as the percentage of participants that attend an index colonoscopy/flexible sigmoidoscopy procedure that have cancer/ polyp(s)/ adenoma(s) detected.

For polyp detection, one, or more, polyp(s) must also be removed during the procedure.

Polyp

A polyp is a growth found on the lining of the colon or rectum.

Adenoma

An adenoma is a benign growth which can develop into a cancer.

Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment

The interval between a participant phoning to book a Screening Practitioner (SP) assessment and the first offered date of index colonoscopy/ flexible sigmoidoscopy

Waiting times were calculated using those participants with an index procedure first offered within the reporting period. This might not be the procedure they attended, due to participant choice or other factors.

Computed Tomography Colonography (CTC) scan

A CTC scan is a specialised X-ray technique that produces detailed images of the large intestine.

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