



# Bowel Screening Wales Annual Statistical Report 2021-22



# About us

Public Health Wales exists to protect and improve health and wellbeing and reduce health inequalities for people in Wales.

We are part of the NHS and report to the Minister for Health and Social Services in the Welsh Government.

Our vision is for a healthier, happier and fairer Wales. We work locally, nationally and, with partners, across communities in the following areas:

**Health protection** – providing information and advice and taking action to protect people from communicable disease and environmental hazards

**Microbiology** – providing a network of microbiology services which support the diagnosis and management of infectious diseases

**Screening** – providing screening programmes which assist the early detection, prevention and treatment of disease

**NHS quality improvement and patient safety** – providing the NHS with information, advice and support to improve patient outcomes

**Primary, community and integrated care** – strengthening its public health impact through policy, commissioning, planning and service delivery

**Safeguarding** - providing expertise and strategic advice to help safeguard children and vulnerable adults

**Health intelligence** – providing public health data analysis, evidence finding and knowledge management

**Policy, research and international development** – influencing policy, supporting research and contributing to international health development

**Health improvement** – working across agencies and providing population services to improve health and reduce health inequalities

## Further information

**Web:** [phw.nhs.wales](http://phw.nhs.wales)  
**Email:** [general.enquiries@wales.nhs.uk](mailto:general.enquiries@wales.nhs.uk)  
**Twitter:** [@PublicHealthW](https://twitter.com/PublicHealthW)  
**Facebook:** [facebook.com/PublicHealthWales](https://facebook.com/PublicHealthWales)

This report is a detailed summary of information on work undertaken by Bowel Screening Wales for the year from April 2021 to the end of March 2022.

**Publication Details:**

**Title:** Bowel Screening Wales Annual Statistical Report 2021-22

**Date:** This report published August 2024

**ISBN:** 978-1-83766-443-6

**For more information about this report contact:**

Helen Clayton, Lead Informatics and Data Services Manager,  
Informatics Division, Floor 6, Public Health Wales, Number 2 Capital  
Quarter, Tyndall Street, Cardiff, CF10 4BZ  
Tel: 029 2010 4405

Email: [screening.information@wales.nhs.uk](mailto:screening.information@wales.nhs.uk)

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.

**Quality Assurance 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.

© 2024 Public Health Wales NHS Trust

Material contained in this document may be reproduced under the terms of the Open Government Licence (OGL)

[www.nationalarchives.gov.uk/doc/open-government-licence/version/3/](http://www.nationalarchives.gov.uk/doc/open-government-licence/version/3/) provided it is done so accurately and is not used in a misleading context.

Acknowledgement to Public Health Wales NHS Trust to be stated.

Copyright in the typographical arrangement, design and layout belongs to Public Health Wales NHS Trust.

This document is also available in Welsh.

## Contents

<b>1</b>	<b>INTRODUCTION .....</b>	<b>7</b>
1.1	'Key messages' for the public .....	7
1.2	Programme delivery .....	8
1.3	Screening pathway .....	8
<b>2</b>	<b>HEADLINE STATISTICS .....</b>	<b>9</b>
<b>3</b>	<b>DATA .....</b>	<b>11</b>
3.1	Coverage and Uptake .....	11
3.2	Participants invited .....	21
3.3	Authorised tests .....	24
3.4	Waiting times for screening results .....	25
3.5	Attendance at colonoscopy.....	26
3.6	Detection rates.....	26
3.7	Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment within four weeks of booking SP appointment.....	27
3.8	Attendance at CT scans .....	27
<b>4</b>	<b>DEFINITIONS .....</b>	<b>27</b>
<b>5</b>	<b>PRODUCTION TEAM .....</b>	<b>29</b>

## Tables and Graphs

Table 1a: Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2022..... 11

Graph 1a: Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2022..... 12

Table 1b: Bowel Screening Coverage (within 2.5 years) by Deprivation Quintile and Health Board of residence, as at 1 October 2022..... 13

Graph 1b: Bowel Screening Coverage (within 2.5 years) by Deprivation Quintile and Health Board of residence, as at 1 October 2022..... 14

Table 1c: Bowel Screening Uptake by Health Board of residence..... 15

Graph 1c: Bowel Screening Uptake by Health Board of residence..... 16

Table 1d: Bowel Screening Uptake by Deprivation Quintile and Health Board of residence..... 17

Graph 1d: Bowel Screening Uptake by Deprivation Quintile and Health Board of residence.....	18
Table 1e: All Wales Bowel Screening Uptake, %, by Month of Invite .....	19
Table 1f: All Wales Bowel Screening Uptake by Type of Recall.....	20
Table 1g: All Wales Bowel Screening Coverage and Uptake - Historical Comparison .....	20
Table 2a: Number of female participants invited for bowel screening (eligibility not a factor) – by age and Health Board of residence, 2021-22.....	21
Table 2b: Number of male participants invited for bowel screening (eligibility not a factor) – by age and Health Board of residence, 2021-22.....	22
Table 2c: Total participants invited for bowel screening (eligibility not a factor) – by age and Health Board of residence, 2021-22.....	23
Table 3a: Bowel screening tests authorised by Health Board of residence.....	24
Table 4: Waiting time for screening test results, from receipt of test to authorised result .....	25
Table 5: Attendance at index colonoscopy/ flexible sigmoidoscopy by Health Board of residence.....	26
Table 6: All Wales Cancer / Polyp / Adenoma detection rates at index colonoscopy/ flexible sigmoidoscopy .....	26

# 1 Introduction

This is the ninth annual statistical report published by Bowel Screening Wales (BSW). This report covers data for the financial year 2021-22. The aim of the bowel screening programme is to identify cancer early when treatment is more likely to be successful and also remove pre-cancerous growths. In the year 2021-22 Bowel Screening Wales diagnosed 357 people with bowel cancers and removed polyps for 2,522 participants.

The 2022 Annual Report from the National Bowel Cancer Audit<sup>1</sup> reported that 10% of patients diagnosed with bowel cancer were referred via screening programmes in England and Wales. Screen-detected patients 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.

In March 2020, due to the COVID-19 pandemic the screening programme was temporarily paused for a five-month period. Screening kits could not be tested as screening colonoscopy procedures had temporarily ceased across Wales. During this reporting period 2021-22, the screening programme was continuing to recover normal service following this pause.

The programme recovered the impact of the pandemic on timeliness of screening invitation by October 2021. It was then able to start to implement the first phase of optimising the programme by starting to invite people aged 58 to 60 years. This was implemented from October 2021 and took a phased approach over 12 months so that around half of those newly eligible were invited for screening during this 2021-22 reporting period.

## 1.1 'Key messages' for the public

- Bowel screening reduces your risk of dying from bowel cancer;
- During the earlier part of this reporting period, men and women aged 60 to 74 were invited to take part every two years. The age range was extended to 58 to 74 years with roll out from 1 October 2021.
- People can feel well even if they have early bowel cancer. Finding cancer early gives the best chance of survival;
- Bowel screening uses a free NHS test that can be completed easily in your own 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.

<sup>1</sup>2022 NBCOCAP <https://www.nboca.org.uk/reports/annual-report-2022/>

## 1.2 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.

## 1.3 Screening pathway

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

Invitation is based on date of birth and comprises a letter and an information pack which contains the test to complete. 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 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 are invited for assessment of their fitness for colonoscopy with Screening Practitioners (SP), who are nurses based in hospitals across Wales. Most assessments are undertaken by telephone, but face to face appointments are available on request or if considered necessary by the SP.

If considered 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 and removed; 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.

More information is available at [www.phw.nhs.wales/bowel-screening](http://www.phw.nhs.wales/bowel-screening)

## 2 **Headline statistics**

This report covers the time period from April 2021 to March 2022.

- Bowel screening coverage as at 1 October 2022 was 63.9%, an increase from the previous year when coverage was 58.9%
- Coverage on 1 October 2022 ranged from 63.1% in Swansea Bay University Health Board to 64.9% in Hywel Dda University Health Board
- Bowel screening uptake for participants invited between April 2021 and March 2022 was 67.2%, an increase from the previous year when uptake was 61.5%
- Uptake in 2021-22 ranged from 66.5% in Swansea Bay University Health Board to 68.3% in Hywel Dda University Health Board
- Coverage and uptake rates were higher in females. Coverage was 65.5% in females compared to 62.3% in males, uptake was 68.6% in females compared to 65.8% in males
- Coverage and uptake rates were also higher in those living in the least deprived areas (70.3% and 73.8% respectively in the least deprived areas compared to 55.4% and 57.9% respectively in the most deprived areas)
- 356,851 participants were invited for bowel screening, with an uptake of 67.2%, the highest ever achieved by the programme
- 247,540 tests were authorised of which 3.7% were rejected as they could not be tested
- 238,328 tests were given a definitive result, of which 98.0% were negative and 2.0% 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, 3.8% 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
- In 2021-22, 33.4% of participants with a screening positive result were offered a diagnostic procedure within eight weeks compared to 85.7% last year

- Attendance at the first diagnostic procedure was 94.4% with 3,440 participants attending a first procedure
- At the first diagnostic procedure, the cancer detection rate was 10.4%, polyp detection rate was 73.3% and the adenoma detection rate was 59.0%
- 357 participants were diagnosed with cancer and 2,522 participants had polyps detected and removed
- Across Wales, 92.8% of booked Computerised Tomography Colonography (CTC) scans were attended

### 3 Data

#### 3.1 Coverage and Uptake

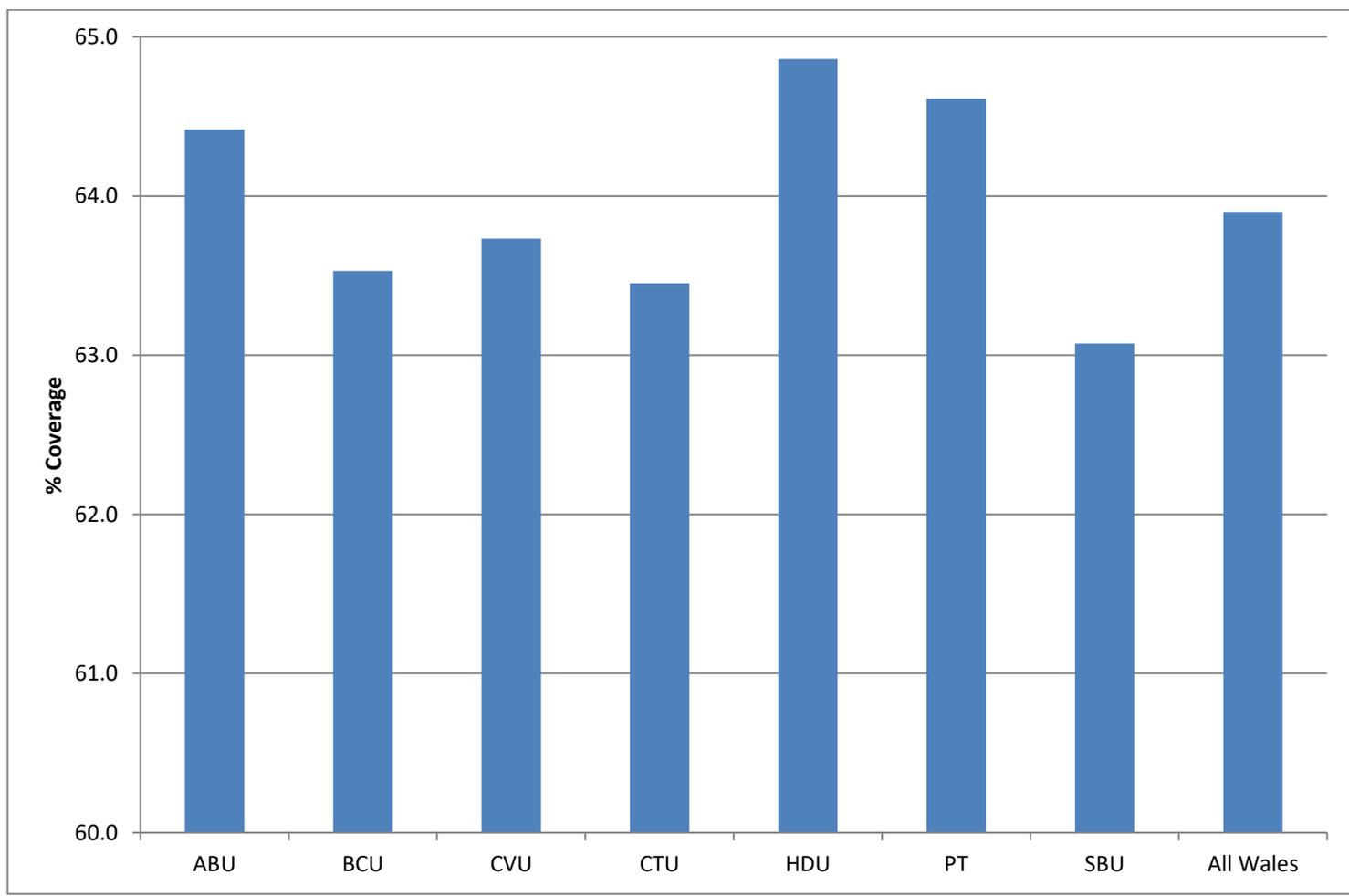
**Table 1a:** Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2022

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	122,774	79,089	<b>64.4</b>	62,026	40,876	<b>65.9</b>	60,748	38,213	<b>62.9</b>
Betsi Cadwaladr UHB	155,509	98,795	<b>63.5</b>	78,985	51,522	<b>65.2</b>	76,524	47,273	<b>61.8</b>
Cardiff and Vale UHB	88,436	56,362	<b>63.7</b>	44,621	29,239	<b>65.5</b>	43,815	27,123	<b>61.9</b>
Cwm Taf Morgannwg UHB	90,877	57,663	<b>63.5</b>	46,177	29,787	<b>64.5</b>	44,700	27,876	<b>62.4</b>
Hywel Dda UHB	93,079	60,372	<b>64.9</b>	47,279	31,521	<b>66.7</b>	45,800	28,851	<b>63.0</b>
Powys Teaching HB	34,506	22,295	<b>64.6</b>	17,403	11,680	<b>67.1</b>	17,103	10,615	<b>62.1</b>
Swansea Bay UHB	79,170	49,936	<b>63.1</b>	40,360	25,919	<b>64.2</b>	38,810	24,017	<b>61.9</b>
Unknown	88	61	<b>69.3</b>	38	27	<b>71.1</b>	50	34	<b>68.0</b>
<b>All Wales</b>	<b>664,439</b>	<b>424,573</b>	<b>63.9</b>	<b>336,889</b>	<b>220,571</b>	<b>65.5</b>	<b>327,550</b>	<b>204,002</b>	<b>62.3</b>

For description of uptake and coverage calculations, please see definitions in section 4.

Note: 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 and not shown.

**Graph 1a:** Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2022

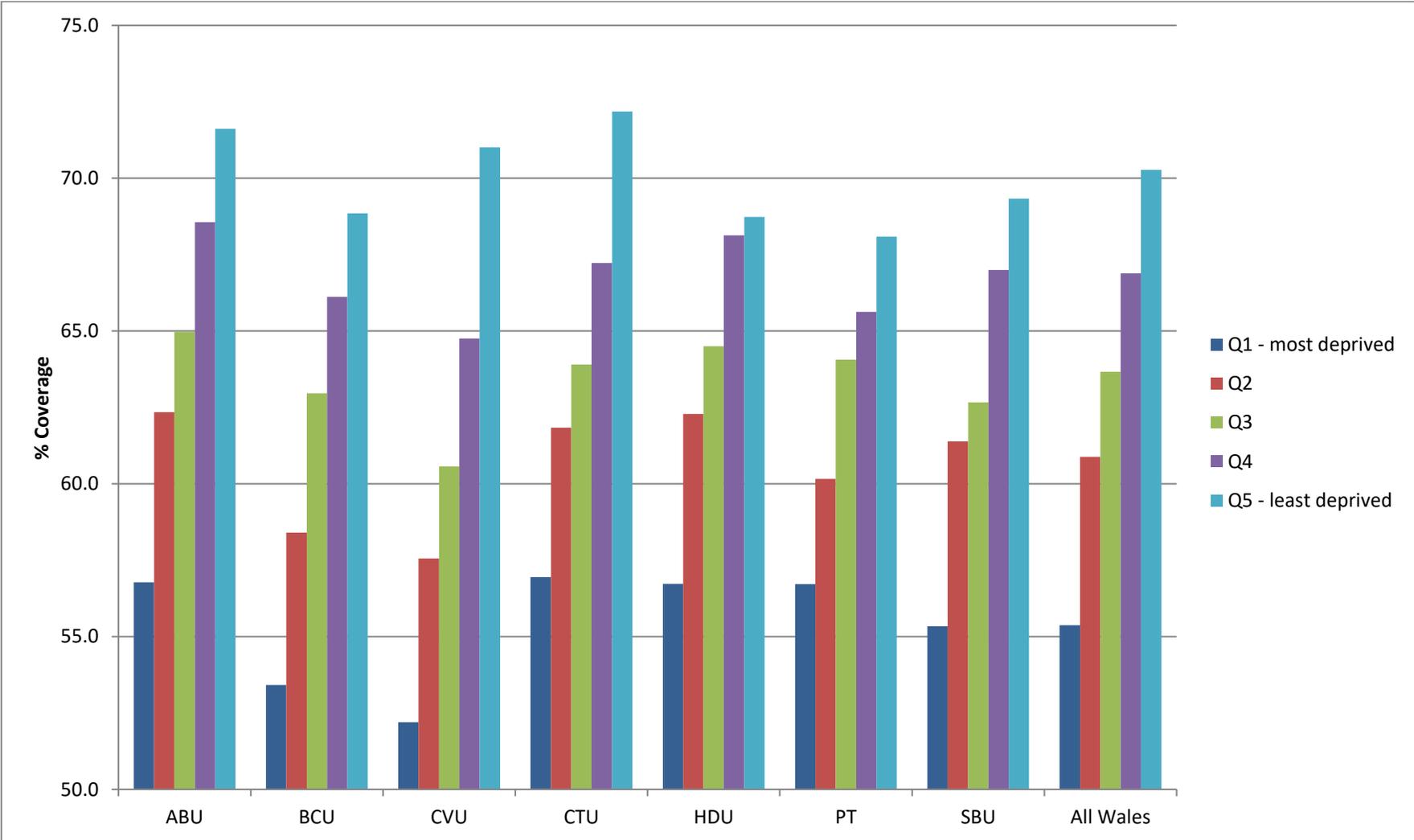


**Table 1b:** Bowel Screening Coverage (within 2.5 years) by deprivation quintile and health board of residence, as at 1 October 2022

<b>Health Board</b>	<b>Q1 - most deprived</b>	<b>Q2</b>	<b>Q3</b>	<b>Q4</b>	<b>Q5 - least deprived</b>	<b>Total</b>
Aneurin Bevan UHB	56.8	62.3	65.0	68.6	71.6	<b>64.4</b>
Betsi Cadwaladr UHB	53.4	58.4	63.0	66.1	68.9	<b>63.5</b>
Cardiff and Vale UHB	52.2	57.6	60.6	64.8	71.0	<b>63.7</b>
Cwm Taf Morgannwg UHB	56.9	61.8	63.9	67.2	72.2	<b>63.5</b>
Hywel Dda UHB	56.7	62.3	64.5	68.1	68.7	<b>64.9</b>
Powys Teaching HB	56.7	60.2	64.1	65.6	68.1	<b>64.6</b>
Swansea Bay UHB	55.3	61.4	62.7	67.0	69.3	<b>63.1</b>
Unknown	0.0	0.0	0.0	0.0	0.0	<b>69.3</b>
<b>All Wales</b>	<b>55.4</b>	<b>60.9</b>	<b>63.7</b>	<b>66.9</b>	<b>70.3</b>	<b>63.9</b>

Note: 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 and not shown.

**Graph 1b:** Bowel Screening Coverage (within 2.5 years) by deprivation quintile and health board of residence, as at 1st October 2022



**Table 1c:** Bowel Screening Uptake by health board of residence, 2021-22

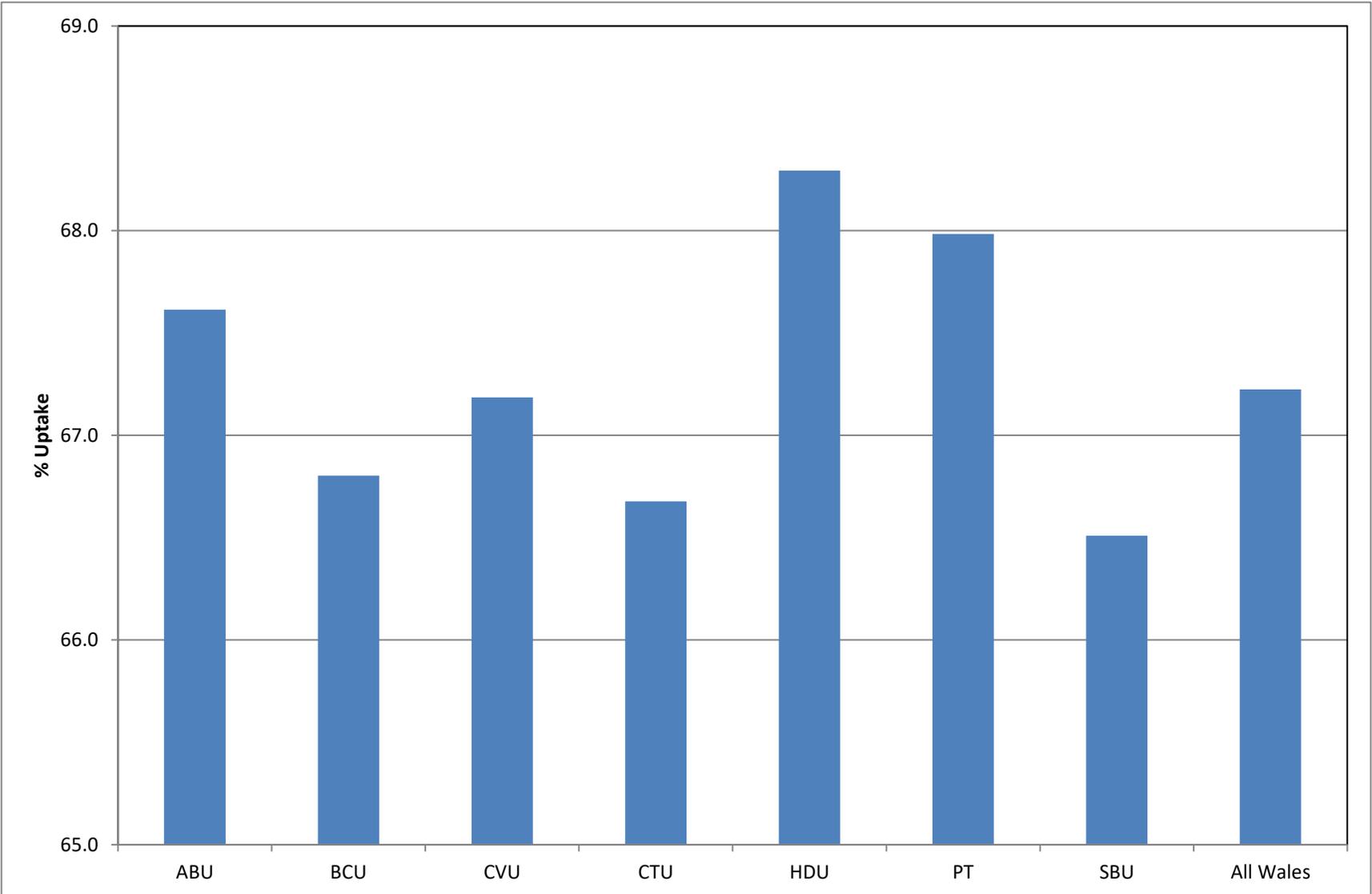
Standard: A minimum of 60% of invited participants returned a completed test within six months of invitation.

Health Board	Total			Female			Male		
	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake
Aneurin Bevan UHB	64,790	43,807	<b>67.6</b>	32,809	22,505	<b>68.6</b>	31,981	21,302	<b>66.6</b>
Betsi Cadwaladr UHB	83,852	56,016	<b>66.8</b>	42,735	29,177	<b>68.3</b>	41,117	26,839	<b>65.3</b>
Cardiff and Vale UHB	46,744	31,405	<b>67.2</b>	23,722	16,328	<b>68.8</b>	23,022	15,077	<b>65.5</b>
Cwm Taf Morgannwg UHB	48,073	32,054	<b>66.7</b>	24,556	16,590	<b>67.6</b>	23,517	15,464	<b>65.8</b>
Hywel Dda UHB	50,027	34,165	<b>68.3</b>	25,379	17,743	<b>69.9</b>	24,648	16,422	<b>66.6</b>
Powys Teaching Health Board	18,791	12,775	<b>68.0</b>	9,496	6,693	<b>70.5</b>	9,295	6,082	<b>65.4</b>
Swansea Bay UHB	41,807	27,806	<b>66.5</b>	21,471	14,483	<b>67.5</b>	20,336	13,323	<b>65.5</b>
Unknown	47	37	<b>78.7</b>	17	13	<b>76.5</b>	30	24	<b>80.0</b>
<b>All Wales</b>	<b>354,131</b>	<b>238,065</b>	<b>67.2</b>	<b>180,185</b>	<b>123,532</b>	<b>68.6</b>	<b>173,946</b>	<b>114,533</b>	<b>65.8</b>

Uptake includes participants invited for bowel screening during April 2021 to March 2022.

Note: 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 and not shown.

**Graph 1c:** Bowel Screening Uptake by health board of residence, 2021-22



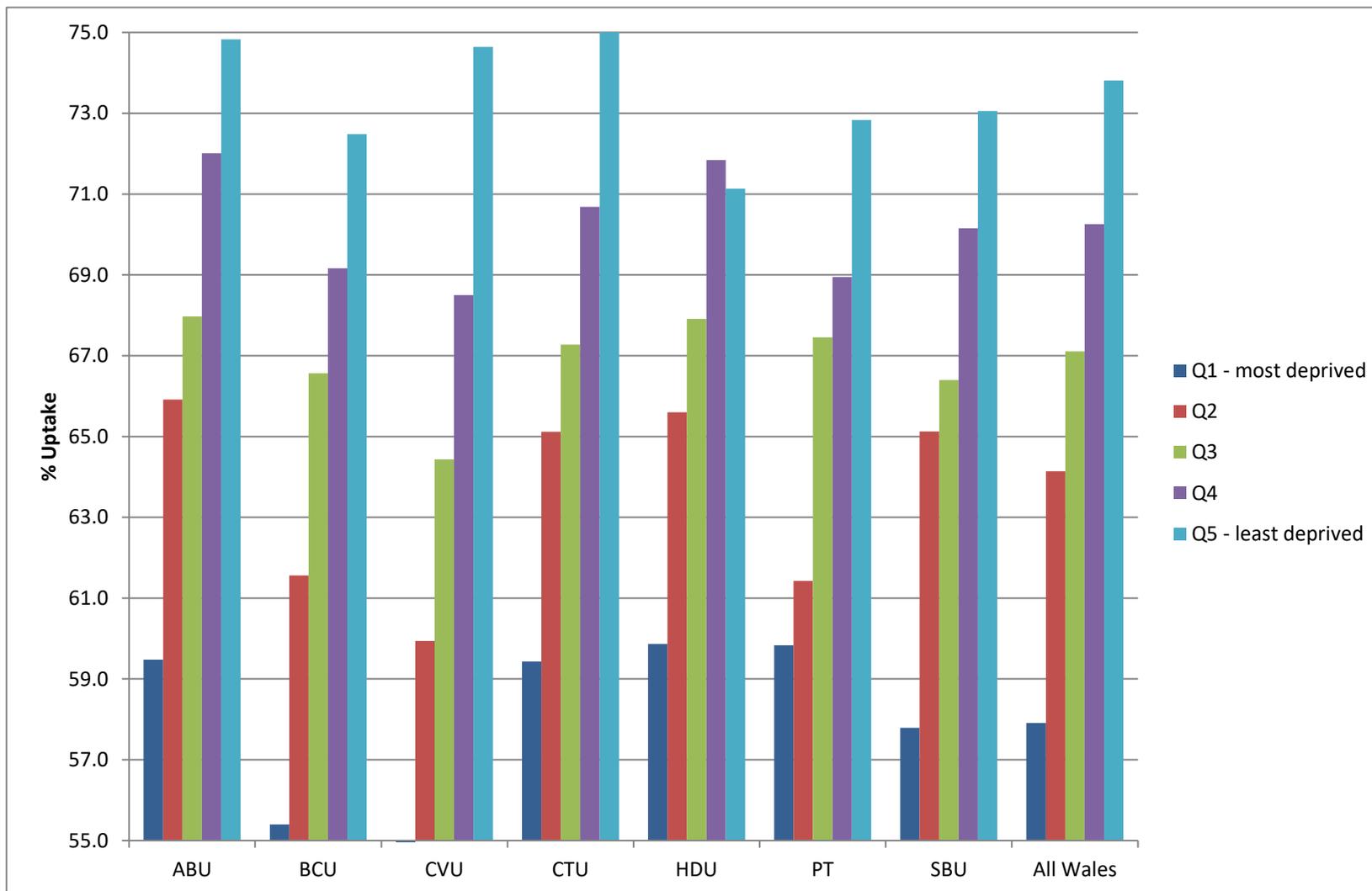
**Table 1d:** Bowel Screening Uptake, %, by deprivation quintile and health board of residence, 2021-22

Health Board	Q1 - most deprived	Q2	Q3	Q4	Q5 - least deprived	Total
Aneurin Bevan UHB	59.5	65.9	68.0	72.0	74.8	<b>67.6</b>
Betsi Cadwaladr UHB	55.4	61.6	66.6	69.2	72.5	<b>66.8</b>
Cardiff and Vale UHB	54.8	59.9	64.4	68.5	74.6	<b>67.2</b>
Cwm Taf Morgannwg UHB	59.4	65.1	67.3	70.7	75.6	<b>66.7</b>
Hywel Dda UHB	59.9	65.6	67.9	71.8	71.1	<b>68.3</b>
Powys Teaching HB	59.8	61.4	67.5	68.9	72.8	<b>68.0</b>
Swansea Bay UHB	57.8	65.1	66.4	70.2	73.1	<b>66.5</b>
Unknown	0.0	0.0	0.0	0.0	0.0	<b>78.7</b>
<b>All Wales</b>	<b>57.9</b>	<b>64.1</b>	<b>67.1</b>	<b>70.3</b>	<b>73.8</b>	<b>67.2</b>

Note: 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 and is not shown.

Bowel screening uptake has seen an increase during 2021-22 to 67.2% compared to 61.5% the previous year. The programme is working closely with partners to increase uptake across the population as well as specifically in groups where uptake is low.

**Graph 1d:** Bowel Screening Uptake (%) by deprivation quintile and health board of residence, 2021-22



**Table 1e:** All Wales Bowel Screening Uptake (%) by month of invite, 2021-22

Invite Year	Invite Month	Eligible	Tested	Uptake %
2021	Apr	36425	24506	67.3
2021	May	33042	22340	67.6
2021	Jun	27798	18802	67.6
2021	Jul	33655	22520	66.9
2021	Aug	29669	19129	64.5
2021	Sep	30973	20996	67.8
2021	Oct	32673	22804	69.8
2021	Nov	24524	16775	68.4
2021	Dec	29055	19111	65.8
2022	Jan	26298	18092	68.8
2022	Feb	24819	16369	66.0
2022	Mar	25200	16621	66.0
Total		354131	238065	67.2

**Table 1f:** All Wales Bowel Screening Uptake by Type of Recall, 2021-22

Year	Prevalent Round - 1st Invite			Prevalent Round - Subsequent invite(s)			Incident Round		
	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake
2021-22	68,961	44,283	64.2	94,478	20,809	22.0	190,692	172,973	90.7

**Table 1g:** All Wales Bowel Screening Coverage and Uptake - Historical Comparison

Year	Eligible	Tested	% Coverage	Eligible	Tested	% Uptake
2014-15	533,294	268,257	50.3	254,139	129,118	50.8
2015-16	540,022	279,308	51.7	281,082	152,794	54.4
2016-17	545,623	281,321	51.6	274,738	146,592	53.4
2017-18	550,971	294,121	53.4	283,106	157,594	55.7
2018-19	555,549	309,303	55.7	280,556	160,652	57.3
2019-20	546,106	321,695	58.9	273,045	167,986	61.5
2020-21	572,681	361,846	63.2	223,667	150,161	67.1
2021-22	664,439	424,573	63.9	354,131	238,065	67.2

Coverage has shown an improving trend and uptake this year is the highest achieved by the programme.

## 3.2 Participants invited

**Table 2a:** Number of female participants invited for bowel screening by age and health board of residence, 2021-22

Health Board	Female Participants				Total Invited
	58-59 years	60-64 years	65-69 years	70-74 years	
Aneurin Bevan UHB	2,533	12,183	7,975	10,326	33,017
Betsi Cadwaladr UHB	3,069	15,365	10,573	13,989	42,996
Cardiff and Vale UHB	1,891	8,994	5,785	7,177	23,847
Cwm Taf Morgannwg UHB	1,880	8,978	5,957	7,922	24,737
Hywel Dda UHB	1,790	9,119	6,488	8,167	25,564
Powys Teaching Health Board	669	3,393	2,466	3,039	9,567
Swansea Bay UHB	1,569	7,952	5,266	6,823	21,610
Unknown	1	3	5	7	16
All Wales	13,402	65,987	44,515	57,450	181,354

Note: 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 and not shown.

**Table 2b:** Number of male participants invited for bowel screening by age and health board of residence, 2021-22

Health Board	Male Participants				Total Invited
	58-59 years	60-64 years	65-69 years	70-74 years	
Aneurin Bevan UHB	2,687	12,421	7,491	9,654	<b>32,253</b>
Betsi Cadwaladr UHB	3,165	15,043	10,202	13,047	<b>41,457</b>
Cardiff and Vale UHB	1,904	9,188	5,568	6,598	<b>23,258</b>
Cwm Taf Morgannwg UHB	1,839	8,993	5,538	7,359	<b>23,729</b>
Hywel Dda UHB	1,750	8,982	6,282	7,837	<b>24,851</b>
Powys Teaching Health Board	637	3,320	2,416	2,996	<b>9,369</b>
Swansea Bay UHB	1,615	7,770	4,947	6,217	<b>20,549</b>
Unknown	4	13	9	5	<b>31</b>
All Wales	<b>13,601</b>	<b>65,730</b>	<b>42,453</b>	<b>53,713</b>	<b>175,497</b>

Note: 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 and not shown.

**Table 2c:** Total participants invited for bowel screening by age and health board of residence, 2021-22

Health Board	Participants				Total Invited
	58-59 years	60-64 years	65-69 years	70-74 years	
Aneurin Bevan UHB	5,220	24,604	15,466	19,980	<b>65,270</b>
Betsi Cadwaladr UHB	6,234	30,408	20,775	27,036	<b>84,453</b>
Cardiff and Vale UHB	3,795	18,182	11,353	13,775	<b>47,105</b>
Cwm Taf Morgannwg UHB	3,719	17,971	11,495	15,281	<b>48,466</b>
Hywel Dda UHB	3,540	18,101	12,770	16,004	<b>50,415</b>
Powys Teaching Health Board	1,306	6,713	4,882	6,035	<b>18,936</b>
Swansea Bay UHB	3,184	15,722	10,213	13,040	<b>42,159</b>
Unknown	5	16	14	12	<b>47</b>
<b>All Wales</b>	<b>27,003</b>	<b>131,717</b>	<b>86,968</b>	<b>111,163</b>	<b>356,851</b>

Note: 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 and not shown.

Note: 735 people outside the age bands (i.e. 2 people younger than 58 years and 733 people older than 74 years) were invited between the reporting period. This is due to COVID recovery.

### 3.3 Authorised tests

**Table 3a:** Total bowel screening tests authorised by test 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	1,662	43,005	891	<b>45,558</b>	3.6%	98.0%	2.0%
Betsi Cadwaladr UHB	1,989	54,776	1,145	<b>57,910</b>	3.4%	98.0%	2.0%
Cardiff and Vale UHB	1,381	30,825	590	<b>32,796</b>	4.2%	98.1%	1.9%
Cwm Taf Morgannwg UHB	1,133	31,516	609	<b>33,258</b>	3.4%	98.1%	1.9%
Hywel Dda UHB	1,379	33,729	644	<b>35,752</b>	3.9%	98.1%	1.9%
Powys Teaching Health Board	476	12,545	218	<b>13,239</b>	3.6%	98.3%	1.7%
Swansea Bay UHB	1,191	27,197	603	<b>28,991</b>	4.1%	97.8%	2.2%
Unknown	1	35	0	<b>36</b>	2.8%	100.0%	0.0%
<b>All Wales</b>	<b>9,212</b>	<b>233,628</b>	<b>4,700</b>	<b>247,540</b>	<b>3.7%</b>	<b>98.0%</b>	<b>2.0%</b>

Note: Rejected rates are calculated as a percentage of the total results

Negative and positive rates are calculated as a percentage of negative and positive results only.

### 3.4 Waiting times for screening results

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

**Table 4:** Waiting time for screening test results, from receipt of test to authorised result, 2021-22

Days	Liquid FIT	
	Number authorised	Percentage of total authorised
Same day	240,605	97.2%
1	6,533	2.6%
2	11	0.0%
3	390	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%
<b>TOTAL</b>	<b>247,540</b>	<b>100.0%</b>

Across Wales in 2021-22, 100% of all tests were authorised and a result letter issued to the participant within a week (seven calendar days) of receipt by the laboratory. This is an increase from the 99.5% seen last year. Over 97% of tests are tested and authorised the same day that they are received in the laboratory.

### 3.5 Attendance at colonoscopy

**Table 5:** Attendance at index colonoscopy/ flexible sigmoidoscopy by health board of residence, 2021-22

Health Board	Booked index procedure	Attended index procedure	% Attended
Aneurin Bevan UHB	652	615	94.3%
Betsi Cadwaladr UHB	920	884	96.1%
Cardiff and Vale UHB	435	408	93.8%
Cwm Taf Morgannwg UHB	559	518	92.7%
Hywel Dda UHB	510	494	96.9%
Powys Teaching HB	152	148	97.4%
Swansea Bay UHB	416	373	89.7%
<b>All Wales</b>	<b>3,644</b>	<b>3,440</b>	<b>94.4%</b>

### 3.6 Detection rates

**Table 6:** All-Wales Cancer / Polyp / Adenoma detection rates at index colonoscopy/ flexible sigmoidoscopy, 2021-22

	Number Detected	Total Index Procedures	Percentage Detected
Cancer detection rate	357	3,440	10.4%
Polyp detection rate	2,522	3,440	73.3%
Adenoma detection rate	2,031	3,440	59.0%

The number of screen detected cancers increased this reporting period due to the improved uptake and improved screening test and is the highest ever achieved by the programme to date.

### 3.7 Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment within four weeks of booking SP appointment

During April 2021 to March 2022, 3693 participants were offered an index procedure and 141 (3.8%) were offered a procedure date within four weeks of booking their Specialist Screening Practitioner (SSP) assessment appointment.

Another 1093 (29.6%) were offered a procedure date between four and eight weeks and 2459 (66.6%) were offered a procedure date more than eight weeks after booking their SSP assessment appointment.

### 3.8 Attendance at CTC scans

Across Wales, 92.8% of booked CTC scans were attended; this varies between 88.7% and 97.5% across Health Boards for the year April 2021 to March 2022.

## 4 Definitions

This section provides further detail on the calculations used in this report.

### 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 or death and are between invite age range 58 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 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 within six months following their invitation.

### **Coverage**

The calculation counts those eligible participants that have had a used test 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.

### **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.

### **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.

### **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.

### **Prevalent Round - first invite (table 1e)**

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 (table 1e)**

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** (table 1e)

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

**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.

**Computed Tomography Colonography (CTC) scan**

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

**Attendance and detection rates**

Attendance and detection rates (Tables 5 and 6) report procedures that are booked in the reporting period. 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.

**5 Production Team**

Dr Graham Brown	Consultant in Public Health Medicine
Steve Court	Head of Programme - Bowel Screening Wales
Dr Sharon Hillier	Director of Screening Division
Helen Clayton	Lead Informatics and Data Services Manager
Richard Wakely	Senior Informatics and Data Analyst
Guy Stevens	Deputy Informatics & Data Services Manager
Rhys George	Cofus CTF (Translator)