

# **Bowel Screening Wales Annual Statistical Report 2019-20**

**October 2021**



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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.

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This report is a detailed summary of information on work undertaken by Bowel Screening Wales for the year from April 2019 to the end of March 2020.

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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.

### **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.

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This document is also available in Welsh.

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# 1 Introduction

This is the seventh annual statistical report published by Bowel Screening Wales (BSW). This report covers data for the financial year 2019-20. BSW was launched in October 2008 with the aim to reduce the number of people dying from bowel cancer in Wales by 15% by 2020 in the group of people invited for screening.

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 2019-20 Bowel Screening Wales diagnosed 240 people with bowel cancers and removed polyps for 1,414 participants.

The 2020 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, the difficult decision was taken to pause some of the national screening programmes in Wales, including Bowel Screening, in response to the COVID-19 pandemic. Invitations were paused on March 20<sup>th</sup> 2020 so this only affected a very small proportion of the year 2019-20. However, any screening kits received in the laboratory after Friday 3<sup>rd</sup> April 2020 were not tested, as screening colonoscopy procedures had ceased across Wales, so this may have affected participants invited towards the end of the reporting period.

## 1.1 'Key messages' for the public

- Bowel screening reduces your risk of dying from bowel cancer
- Men and women aged 60 to 74 are invited to take part every two years
- You may feel well even if you have early bowel cancer. Finding cancer early gives you 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 your choice. If you are invited for screening we encourage you to read the information pack carefully to help you make your decision

## 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.

<sup>1</sup> 2020 NBOCAP <https://www.nboca.org.uk/content/uploads/2020/12/NBOCA-2020-Annual-Report.pdf>

## 1.3 Screening pathway

Due to the coronavirus pandemic and the pause in the offer of endoscopy at the start of the pandemic, we paused invitations on the 20<sup>th</sup> of March 2020. This report describes the programme for period April 2019 to March 2020 and is largely the period before the pandemic.

During this reporting period Bowel Screening Wales phased in a new screening test (the liquid Faecal Immunochemical Test) between January and September 2019. From September 2019 the new test kit was fully implemented and included in all invitations. This new test kit is easier to complete as it is one sample for participants to take rather than three. It is hoped that the introduction of this new test will have a positive effect on uptake and inequity in uptake. Although other work on increasing uptake has been continuing, uptake meeting the 60% standard this year is attributed largely to this change in type of test. The data presented in Sections 3.3 and 3.4 refers to both the previous (Guaiac) and new (Immunochemical) screening tests.

Eligible participants are identified from the Welsh Demographic System and invited for screening. Men and women aged 60 to 74 years are invited every two years.

Invitation is based on date of birth and comprises a letter and an information pack which contains the test to complete. The primary screening test used during this reporting period was either a Guaiac Faecal Occult Blood (FOBT) test or a liquid Faecal Immunochemical test (liquid FIT). 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. Those with equivocal results are sent a more sensitive secondary test to confirm the presence of blood in the stool sample.

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 Computerised Tomography (CT) scan is usually offered.

More information is available at <http://www.bowelscreening.wales.nhs.uk/>

## 2 Headline statistics

This report covers the time period from April 2019 to March 2020.

- Bowel screening coverage as at 1 October 2020 was 58.9%, an increase from the previous year when coverage was 55.7%
- Coverage on 1 October 2020 ranged from 58.4% in Betsi Cadwaladr, Cardiff and Vale and Swansea Bay University Health Boards to 59.5% in Powys Teaching Health Board
- Bowel screening uptake for participants invited between April 2019 and March 2020 was 61.5%, an increase from the previous year when uptake was 57.3%
- Uptake in 2019-20 ranged from 60.9% in Betsi Cadwaladr University Health Board to 62.2% in Hywel Dda University Health Board
- Coverage and uptake rates were higher in females. Coverage was 60.3% in females compared to 57.5% in males, uptake was 62.6% in females compared to 60.4% in males
- Coverage and uptake rates were also higher in those living in the least deprived areas (65.8% and 68.4% respectively in the least deprived areas compared to 50.0% and 52.3% respectively in the most deprived areas)

### For the period April 2019 to March 2020:

- 276,226 participants were invited for bowel screening, with an average uptake for screening of 61.5%
- 188,105 tests were authorised of which 0.5% were spoilt and a further 2.7% rejected as they could not be tested
- 179,582 tests were given a definitive result, of which 98.5% were negative and 1.5% were positive
- 1.4% of all guaiac Faecal Occult Blood (FOBt) tests were authorised with an equivocal result, these participants were sent a second test kit
- For 99.5% of all tests a result letter was issued to the participant within a week (less than seven calendar days) of receipt by the laboratory
- Across Wales, 49.1% 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. This is an increase from 41.0% in the previous year

- In 2019-20, 85.7% of participants with a screening positive result were offered a diagnostic procedure within eight weeks compared to 83.3% last year
- Attendance at the first diagnostic procedure was 93.5% with 1,902 participants attending a first procedure
- At the first diagnostic procedure, the cancer detection rate was 12.6%, polyp detection rate was 74.3% and the adenoma detection rate was 58.6%
- 240 participants were diagnosed with cancer and 1,414 participants had polyps detected and removed
- Across Wales, 93.9% of booked Computerised Tomography (CT) scans were attended

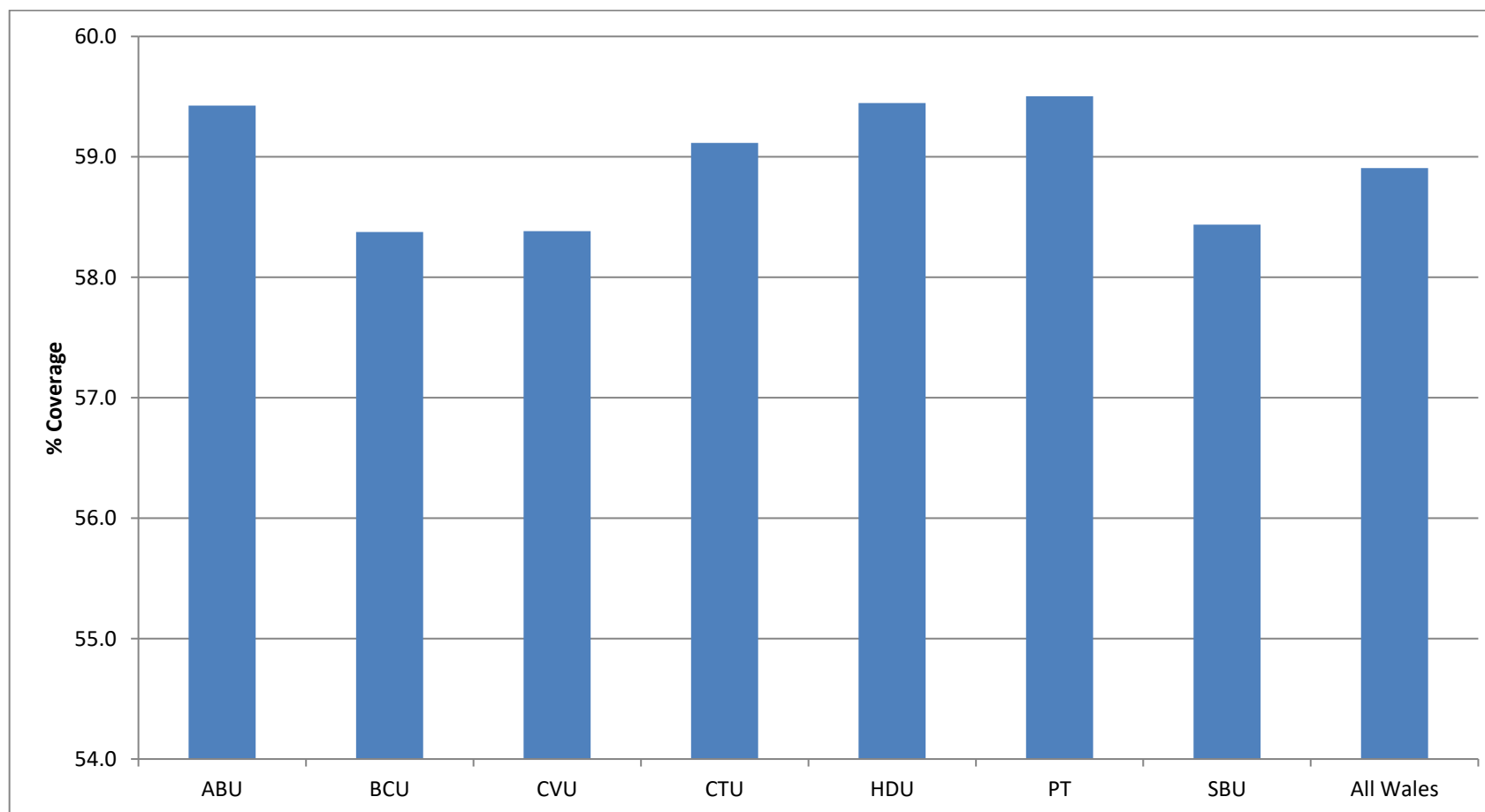
### 3 Data

#### 3.1 Coverage and Uptake

**Table 1a:** Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2020

	Total			Female			Male		
Health Board	Eligible	Screened within 2.5 years	% Coverage	Eligible	Screened within 2.5 years	% Coverage	Eligible	Screened within 2.5 years	% Coverage
Aneurin Bevan UHB	98,205	58,360	<b>59.4</b>	49,771	30,182	<b>60.6</b>	48,434	28,178	<b>58.2</b>
Betsi Cadwaladr UHB	127,483	74,421	<b>58.4</b>	65,082	38,955	<b>59.9</b>	62,401	35,466	<b>56.8</b>
Cardiff and Vale UHB	69,635	40,655	<b>58.4</b>	35,327	21,192	<b>60.0</b>	34,308	19,463	<b>56.7</b>
Cwm Taf Morgannwg UHB	73,160	43,250	<b>59.1</b>	37,203	22,330	<b>60.0</b>	35,957	20,920	<b>58.2</b>
Hywel Dda UHB	75,722	45,015	<b>59.4</b>	38,446	23,523	<b>61.2</b>	37,276	21,492	<b>57.7</b>
Powys Teaching HB	28,474	16,943	<b>59.5</b>	14,371	8,887	<b>61.8</b>	14,103	8,056	<b>57.1</b>
Swansea Bay UHB	64,618	37,761	<b>58.4</b>	33,218	19,734	<b>59.4</b>	31,400	18,027	<b>57.4</b>
Unknown	8,809	5,290	<b>60.1</b>	4,499	2,758	<b>61.3</b>	4,310	2,532	<b>58.7</b>
All Wales	<b>546,106</b>	<b>321,695</b>	<b>58.9</b>	<b>277,917</b>	<b>167,561</b>	<b>60.3</b>	<b>268,189</b>	<b>154,134</b>	<b>57.5</b>

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

**Graph 1a:** Bowel Screening Coverage (within 2.5 years) by Health Board of residence, as at 1 October 2020

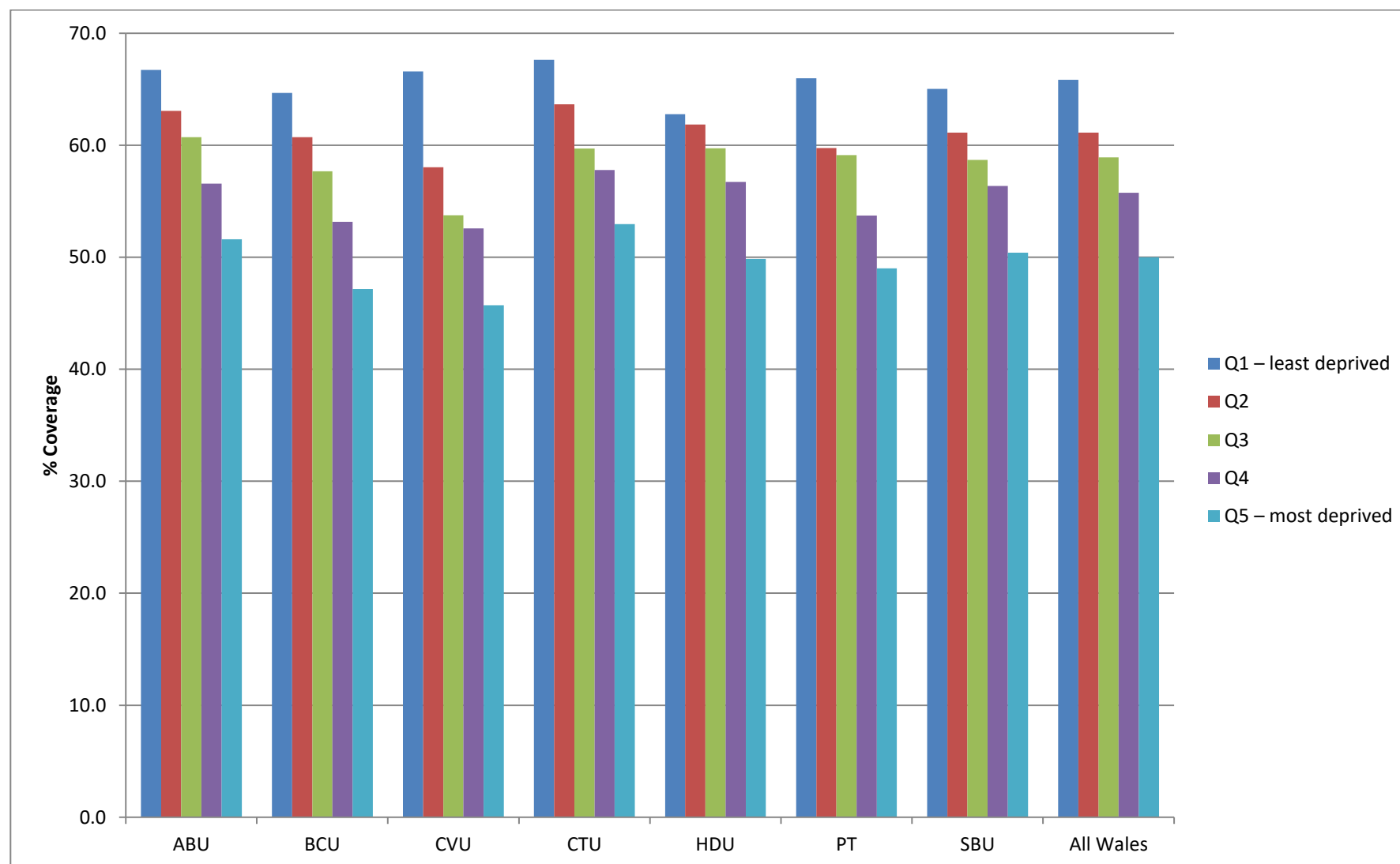


**Table 1b:** Bowel Screening Coverage (within 2.5 years) by Deprivation Quintile and Health Board of residence, as at 1 October 2020

Health Board	Q1 – least deprived	Q2	Q3	Q4	Q5 – most deprived	Total
Aneurin Bevan UHB	66.7	63.1	60.7	56.6	51.6	<b>59.4</b>
Betsi Cadwaladr UHB	64.7	60.7	57.7	53.2	47.2	<b>58.4</b>
Cardiff and Vale UHB	66.6	58.0	53.8	52.6	45.7	<b>58.4</b>
Cwm Taf Morgannwg UHB	67.6	63.6	59.7	57.8	53.0	<b>59.1</b>
Hywel Dda UHB	62.8	61.8	59.7	56.7	49.8	<b>59.4</b>
Powys Teaching HB	66.0	59.8	59.1	53.7	49.0	<b>59.5</b>
Swansea Bay UHB	65.0	61.1	58.7	56.4	50.4	<b>58.4</b>
Unknown	0.0	0.0	0.0	0.0	0.0	<b>60.1</b>
<b>All Wales</b>	<b>65.8</b>	<b>61.1</b>	<b>58.9</b>	<b>55.8</b>	<b>50.0</b>	<b>58.9</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 1 October 2020

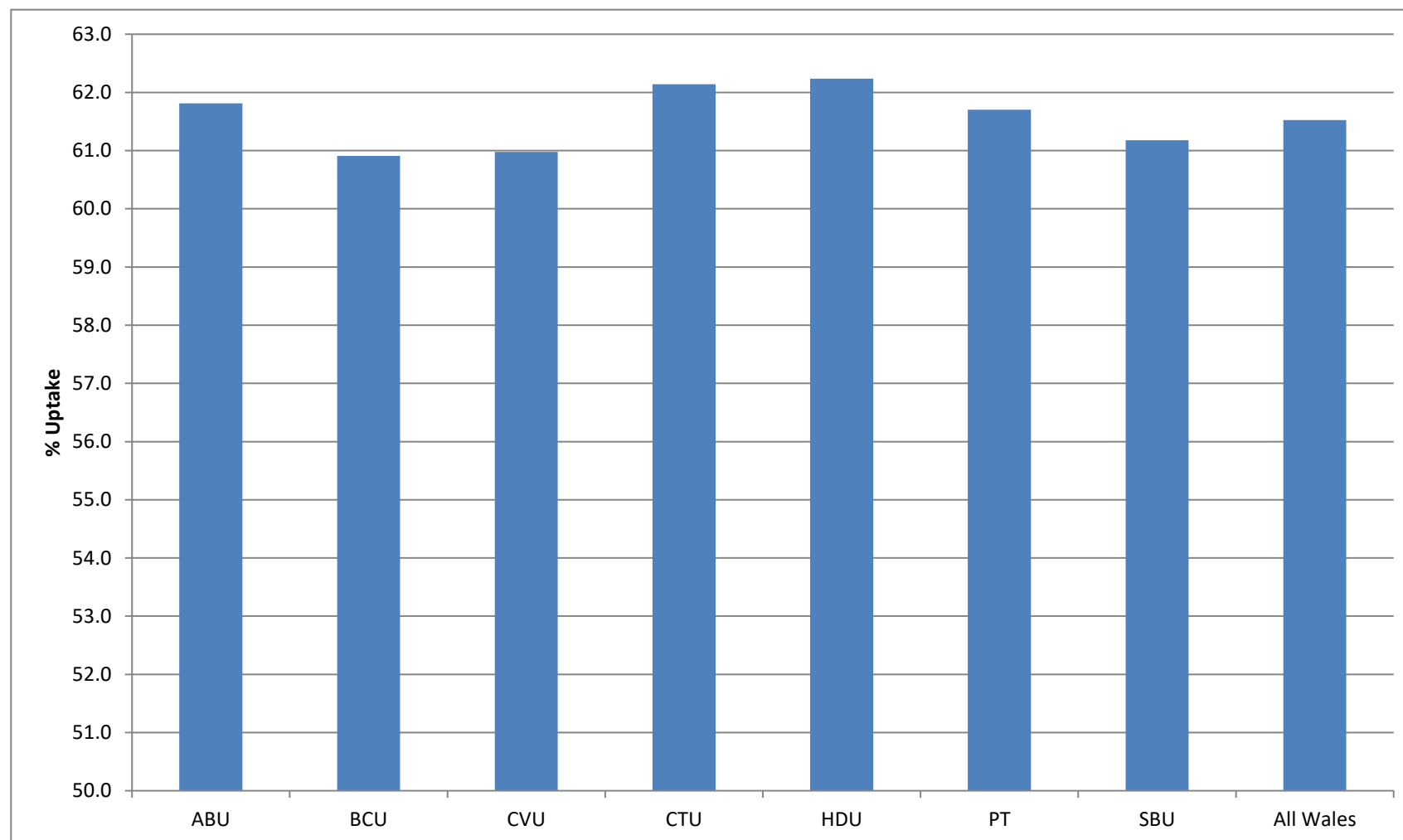


**Table 1c:** Bowel Screening Uptake by Health Board of residence, 2019-20

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

	Total			Female			Male		
Health Board	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake	Eligible	Responded	% Uptake
Aneurin Bevan UHB	48,802	30,165	61.8	24,782	15,495	62.5	24,020	14,670	61.1
Betsi Cadwaladr UHB	63,997	38,979	60.9	32,757	20,351	62.1	31,240	18,628	59.6
Cardiff and Vale UHB	34,687	21,152	61.0	17,664	11,032	62.5	17,023	10,120	59.4
Cwm Taf Morgannwg UHB	36,551	22,713	62.1	18,600	11,635	62.6	17,951	11,078	61.7
Hywel Dda UHB	37,816	23,536	62.2	19,088	12,153	63.7	18,728	11,383	60.8
Powys Teaching HB	14,392	8,880	61.7	7,302	4,629	63.4	7,090	4,251	60.0
Swansea Bay UHB	32,143	19,664	61.2	16,638	10,309	62.0	15,505	9,355	60.3
Unknown	4,657	2,897	62.2	2,379	1,500	63.1	2,278	1,397	61.3
<b>All Wales</b>	<b>273,045</b>	<b>167,986</b>	<b>61.5</b>	<b>139,210</b>	<b>87,104</b>	<b>62.6</b>	<b>133,835</b>	<b>80,882</b>	<b>60.4</b>

Uptake includes participants invited for bowel screening during April 2019 to March 2020.

**Graph 1c:** Bowel Screening Uptake by Health Board of residence, 2019-20

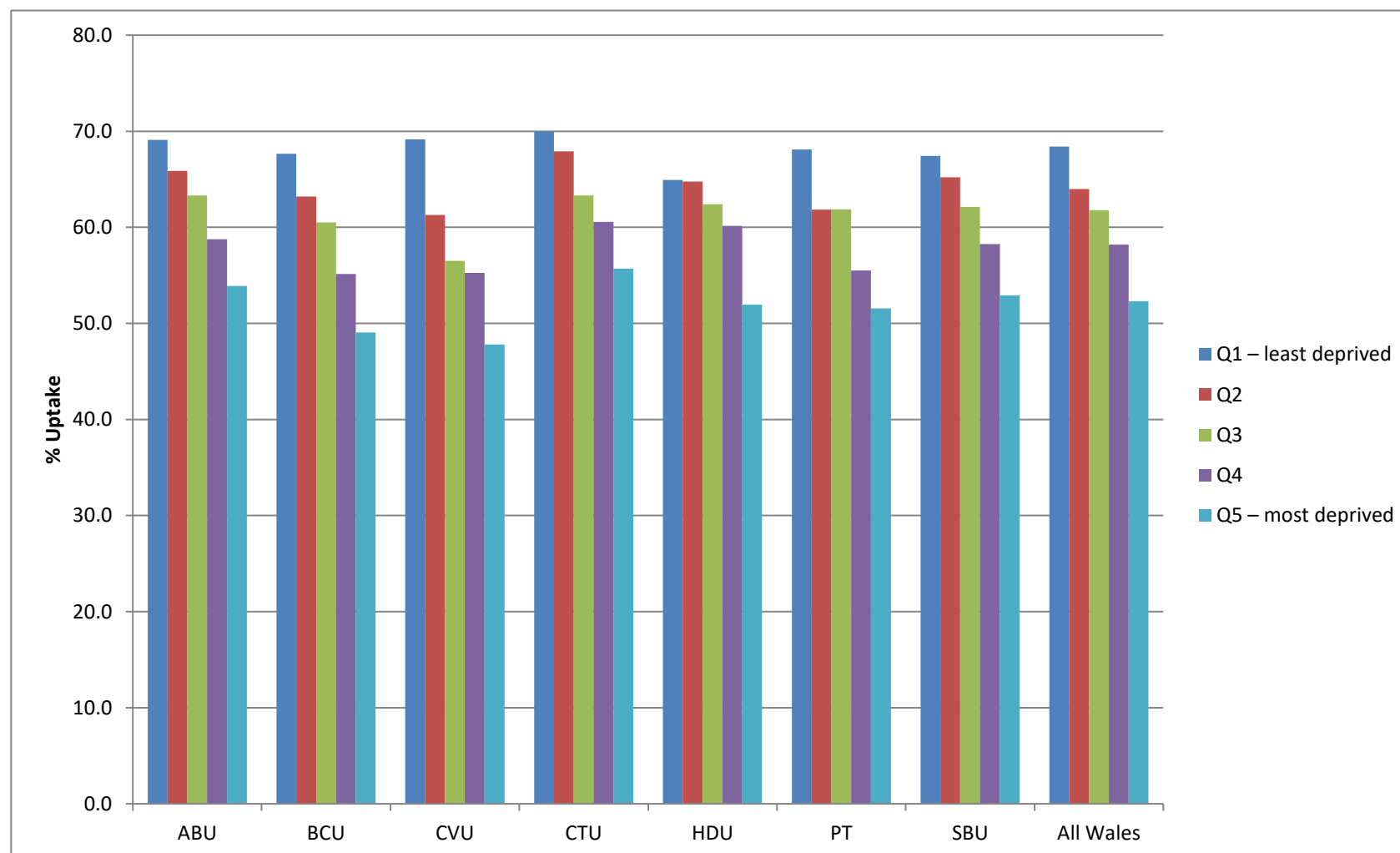
**Table 1d:** Bowel Screening Uptake, %, by Deprivation Quintile and Health Board of residence, 2019-20

Health Board	Q1 – least deprived	Q2	Q3	Q4	Q5 – most deprived	Total
Aneurin Bevan UHB	69.1	65.9	63.3	58.8	53.9	<b>61.8</b>
Betsi Cadwaladr UHB	67.7	63.2	60.5	55.1	49.1	<b>60.9</b>
Cardiff and Vale UHB	69.2	61.3	56.5	55.3	47.8	<b>61.0</b>
Cwm Taf Morgannwg UHB	70.0	67.9	63.3	60.6	55.7	<b>62.1</b>
Hywel Dda UHB	64.9	64.8	62.4	60.2	51.9	<b>62.2</b>
Powys Teaching HB	68.1	61.8	61.9	55.5	51.6	<b>61.7</b>
Swansea Bay UHB	67.4	65.2	62.1	58.3	52.9	<b>61.2</b>
Unknown	0.0	0.0	0.0	0.0	0.0	<b>62.2</b>
<b>All Wales</b>	<b>68.4</b>	<b>64.0</b>	<b>61.8</b>	<b>58.2</b>	<b>52.3</b>	<b>61.5</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 2019-20 to 61.5% compared to 57.3% 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, 2019-20

**Table 1e:** All Wales Bowel Screening Uptake, %, by month of invite, 2019-20

Invite Year	Invite Month	Invited	Tested	Uptake %
2019	Apr	18,599	10,777	57.9
2019	May	29,553	16,895	57.2
2019	Jun	22,326	13,192	59.1
2019	Jul	21,481	13,002	60.5
2019	Aug	25,290	15,735	62.2
2019	Sep	21,617	14,248	65.9
2019	Oct	22,508	14,389	63.9
2019	Nov	27,066	16,928	62.5
2019	Dec	16,805	10,663	63.5
2020	Jan	21,058	13,177	62.6
2020	Feb	23,822	15,257	64.0
2020	Mar	22,920	13,723	59.9
<b>Total</b>		<b>273,045</b>	<b>167,986</b>	<b>61.5</b>

This table was added this year to examine whether the pandemic had an effect on participation at the start of 2020, as was seen in some other programmes, and whether the pause in March 2020 affected uptake. There is no evidence of a significant effect on uptake due to the pandemic, although uptake does dip below standard in March.

**Table 1f:** All Wales Bowel Screening Uptake by Type of Recall, 2019-20

	Prevalent Round - 1st Invite			Prevalent Round - Subsequent invite(s)			Incident Round		
Year	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake	Eligible	Tested	% Uptake
2019-20	45,436	26,670	58.7	85,964	17,119	19.9	141,645	124,197	87.7

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

Year	Eligible	Tested	% Coverage	Eligible	Tested	% Uptake
2012-13				266,693	128,583	48.2
2013-14	528,794	264,446	50.0	280,192	147,378	52.6
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

Only six years of coverage data is presented because of a change in definition in 2013-14.

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 and male participants invited for bowel screening – by age and Health Board of residence, 2019-20

Health Board	Female				Male			
	60-64 years	65-69 years	70-74 years	Female Total Invited	60-64 years	65-69 years	70-74 years	Male Total Invited
Aneurin Bevan UHB	10,221	6,542	8,235	<b>24,998</b>	10,331	6,403	7,611	<b>24,345</b>
Betsi Cadwaladr UHB	13,096	8,854	11,082	<b>33,032</b>	12,805	8,325	10,518	<b>31,648</b>
Cardiff and Vale UHB	7,651	4,706	5,488	<b>17,845</b>	7,788	4,491	5,037	<b>17,316</b>
Cwm Taf Morgannwg UHB	7,672	4,888	6,206	<b>18,766</b>	7,522	4,817	5,867	<b>18,206</b>
Hywel Dda UHB	7,860	5,104	6,307	<b>19,271</b>	7,641	5,218	6,127	<b>18,986</b>
Powys Teaching HB	2,921	2,050	2,406	<b>7,377</b>	2,833	1,976	2,395	<b>7,204</b>
Swansea Bay UHB	6,934	4,334	5,494	<b>16,762</b>	6,717	4,110	4,919	<b>15,746</b>
Unknown	1,069	671	659	<b>2,399</b>	1,000	674	651	<b>2,325</b>
<b>All Wales</b>	<b>57,424</b>	<b>37,149</b>	<b>45,877</b>	<b>140,450</b>	<b>56,637</b>	<b>36,014</b>	<b>43,125</b>	<b>135,776</b>

**Table 2b:** Total participants invited for bowel screening – by age and Health Board of residence, 2019-20

Health Board	Participants			
	60-64 years	65-69 years	70-74 years	Total Invited
Aneurin Bevan UHB	20,552	12,945	15,846	<b>49,343</b>
Betsi Cadwaladr UHB	25,901	17,179	21,600	<b>64,680</b>
Cardiff and Vale UHB	15,439	9,197	10,525	<b>35,161</b>
Cwm Taf Morgannwg UHB	15,194	9,705	12,073	<b>36,972</b>
Hywel Dda UHB	15,501	10,322	12,434	<b>38,257</b>
Powys Teaching HB	5,754	4,026	4,801	<b>14,581</b>
Swansea Bay UHB	13,651	8,444	10,413	<b>32,508</b>
Unknown	2,069	1,345	1,310	<b>4,724</b>
<b>All Wales</b>	<b>114,061</b>	<b>73,163</b>	<b>89,002</b>	<b>276,226</b>

Note: Forty three people outside the age bands were invited between the reporting periods.



### 3.3 Authorised tests

**Table 3a:** Bowel screening tests authorised by test result and Health Board of residence – Guaiac Faecal Occult Blood (FOBt)

Health Board	Number of tests authorised - FOBt						Percentage - FOBt				
	Spoilt	Rejected	Equivocal	Negative	Positive	Total	Spoilt	Rejected	Equivocal	Negative	Positive
Aneurin Bevan UHB	203	521	439	14,218	27	<b>15,408</b>	1.3%	3.4%	3.0%	99.8%	0.2%
Betsi Cadwaladr UHB	198	604	593	18,553	34	<b>19,982</b>	1.0%	3.0%	3.1%	99.8%	0.2%
Cardiff and Vale UHB	117	379	310	10,197	14	<b>11,017</b>	1.1%	3.4%	2.9%	99.9%	0.1%
Cwm Taf Morgannwg UHB	166	371	337	10,576	29	<b>11,479</b>	1.4%	3.2%	3.1%	99.7%	0.3%
Hywel Dda UHB	101	356	345	11,310	34	<b>12,146</b>	0.8%	2.9%	3.0%	99.7%	0.3%
Powys Teaching HB	40	173	116	4,328	10	<b>4,667</b>	0.9%	3.7%	2.6%	99.8%	0.2%
Swansea Bay UHB	125	353	345	9,179	15	<b>10,017</b>	1.2%	3.5%	3.6%	99.8%	0.2%
Unknown	11	43	31	1,354	2	<b>1,441</b>	0.8%	3.0%	2.2%	99.9%	0.1%
<b>All Wales - FOB</b>	<b>961</b>	<b>2,800</b>	<b>2,516</b>	<b>79,715</b>	<b>165</b>	<b>86,157</b>	<b>1.1%</b>	<b>3.2%</b>	<b>3.1%</b>	<b>99.8%</b>	<b>0.2%</b>

**Table 3b:** Bowel screening tests authorised by test result and Health Board of residence – secondary, confirmatory, test kit

Health Board	Number of tests authorised - secondary, confirmatory, test kit						Percentage - secondary, confirmatory, test kit				
	Spoilt	Rejected	Equivocal	Negative	Positive	Total	Spoilt	Rejected	Equivocal	Negative	Positive
Aneurin Bevan UHB	N/A	N/A	0	256	120	<b>398</b>	1.5%	4.0%	N/A	68.1%	31.9%
Betsi Cadwaladr UHB	N/A	N/A	0	340	155	<b>530</b>	2.1%	4.5%	N/A	68.7%	31.3%
Cardiff and Vale UHB	N/A	N/A	0	204	74	<b>290</b>	1.4%	2.8%	N/A	73.4%	26.6%
Cwm Taf Morgannwg UHB	N/A	N/A	0	215	93	<b>319</b>	0.9%	2.5%	N/A	69.8%	30.2%
Hywel Dda UHB	N/A	N/A	0	210	94	<b>316</b>	1.3%	2.5%	N/A	69.1%	30.9%
Powys Teaching HB	N/A	N/A	0	66	32	<b>102</b>	1.0%	2.9%	N/A	67.3%	32.7%
Swansea Bay UHB	N/A	N/A	0	201	74	<b>286</b>	1.7%	2.1%	N/A	73.1%	26.9%
Unknown	N/A	N/A	0	N/A	N/A	<b>29</b>	3.4%	6.9%	N/A	53.8%	46.2%
<b>All Wales - FIT</b>	<b>35</b>	<b>75</b>	<b>N/A</b>	<b>1,506</b>	<b>654</b>	<b>2,270</b>	<b>1.5%</b>	<b>3.3%</b>	<b>N/A</b>	<b>69.7%</b>	<b>30.3%</b>

**Table 3c:** Bowel screening tests authorised by test result and Health Board of residence – Liquid FIT

Health Board	Number of tests authorised – Liquid FIT						Percentage - Liquid FIT				
	Spoilt	Rejected	Equivocal	Negative	Positive	Total	Spoilt	Rejected	Equivocal	Negative	Positive
Aneurin Bevan UHB	0	362	N/A	17,182	350	<b>17,894</b>	0.0%	2.0%	N/A	98.0%	2.0%
Betsi Cadwaladr UHB	0	455	N/A	22,295	416	<b>23,166</b>	0.0%	2.0%	N/A	98.2%	1.8%
Cardiff and Vale UHB	0	315	N/A	11,835	224	<b>12,374</b>	0.0%	2.5%	N/A	98.1%	1.9%
Cwm Taf Morgannwg UHB	0	311	N/A	12,989	267	<b>13,567</b>	0.0%	2.3%	N/A	98.0%	2.0%
Hywel Dda UHB	0	302	N/A	13,312	238	<b>13,852</b>	0.0%	2.2%	N/A	98.2%	1.8%
Powys Teaching HB	0	106	N/A	5,042	84	<b>5,232</b>	0.0%	2.0%	N/A	98.4%	1.6%
Swansea Bay UHB	0	243	N/A	11,351	234	<b>11,828</b>	0.0%	2.1%	N/A	98.0%	2.0%
Unknown	0	42	N/A	1,699	24	<b>1,765</b>	0.0%	2.4%	N/A	98.6%	1.4%
<b>All Wales - FIT</b>	<b>0</b>	<b>2,136</b>	<b>N/A</b>	<b>95,705</b>	<b>1,837</b>	<b>99,678</b>	<b>0.0%</b>	<b>2.1%</b>	<b>N/A</b>	<b>98.1%</b>	<b>1.9%</b>

**Table 3d:** Total bowel screening tests authorised by test result and Health Board of residence – Total

Health Board	Number of tests authorised – TOTAL						Percentage – TOTAL				
	Spoilt	Rejected	Equivocal	Negative	Positive	Total	Spoilt	Rejected	Equivocal	Negative	Positive
Aneurin Bevan UHB	209	899	439	31,656	497	<b>33,700</b>	0.6%	2.7%	1.3%	98.5%	1.5%
Betsi Cadwaladr UHB	209	1,083	593	41,188	605	<b>43,678</b>	0.5%	2.5%	1.4%	98.6%	1.4%
Cardiff and Vale UHB	121	702	310	22,236	312	<b>23,681</b>	0.5%	3.0%	1.4%	98.6%	1.4%
Cwm Taf Morgannwg UHB	169	690	337	23,780	389	<b>25,365</b>	0.7%	2.7%	1.4%	98.4%	1.6%
Hywel Dda UHB	105	666	345	24,832	366	<b>26,314</b>	0.4%	2.5%	1.4%	98.5%	1.5%
Powys Teaching HB	41	282	116	9,436	126	<b>10,001</b>	0.4%	2.8%	1.2%	98.7%	1.3%
Swansea Bay UHB	130	602	345	20,731	323	<b>22,131</b>	0.6%	2.7%	1.6%	98.5%	1.5%
Unknown	12	87	31	3,067	38	<b>3,235</b>	0.4%	2.7%	1.0%	98.8%	1.2%
<b>All Wales</b>	<b>996</b>	<b>5,011</b>	<b>2,516</b>	<b>176,926</b>	<b>2,656</b>	<b>188,105</b>	<b>0.5%</b>	<b>2.7%</b>	<b>1.4%</b>	<b>98.5%</b>	<b>1.5%</b>

Note: Spoilt and rejected rates are calculated as a percentage of the total results.

Equivocal rates are calculated as a percentage of the equivocal, negative and positive results.

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

From January 2019 we introduced a new screening test into the bowel screening programme in Wales, the liquid FIT kit. This was introduced in a phased manner, with 1 in 28 random screening participants issued with the new liquid FIT kit from January to March 2020.

Table 3b – shows previous pathway which used FIT test as secondary confirmatory test. Values that are below 30 have been suppressed (N/A). 2,270 kits authorised of which 30.3% were positive and 69.7% were negative.

### 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, 2019-20

	FOB/ cFIT		Liquid FIT		Overall	
Days	Number authorised	Percentage of total authorised	Number authorised	Percentage of total authorised	Number authorised	Percentage of total authorised
Same day	26,267	29.7%	95,365	95.7%	121,632	64.7%
1	20,979	23.7%	3,705	3.7%	24,684	13.1%
2	15,800	17.9%	11	0.0%	15,811	8.4%
3	8,660	9.8%	595	0.6%	9,255	4.9%
4	6,302	7.1%	1	0.0%	6,303	3.4%
5	5,994	6.8%	0	0.0%	5,994	3.2%
6	3,409	3.9%	1	0.0%	3,410	1.8%
7-13 days	940	1.1%	0	0.0%	940	0.5%
14 days +	76	0.1%	0	0.0%	76	0.0%
<b>TOTAL</b>	<b>88,427</b>	<b>100.0%</b>	<b>99,678</b>	<b>100.0%</b>	<b>188,105</b>	<b>100.0%</b>

Across Wales in 2019-20, 99.5% of all tests were authorised and a result letter issued to the participant within a week (7 calendar days) of receipt by the laboratory. This is an increase from the 83.9% seen last year.

### 3.5 Attendance at colonoscopy

**Table 5:** Attendance at index colonoscopy/ flexible sigmoidoscopy by Health Board of residence, 2019-20

Health Board	Booked index procedure	Attended index procedure	% Attended
Aneurin Bevan UHB	340	319	93.8%
Betsi Cadwaladr UHB	452	422	93.4%
Cardiff and Vale UHB	241	227	94.2%
Cwm Taf Morgannwg UHB	339	328	96.8%
Hywel Dda UHB	299	288	96.3%
Powys Teaching HB	98	89	90.8%
Swansea Bay UHB	242	208	86.0%
Unknown	23	21	91.3%
<b>All Wales</b>	<b>2,034</b>	<b>1,902</b>	<b>93.5%</b>

### 3.6 Detection rates

**Table 6:** All Wales Cancer / Polyp / Adenoma detection rates at index colonoscopy/ flexible sigmoidoscopy, 2019-20

	Number Detected	Total Index Procedures	Percentage Detected
Cancer detection rate	240	1,902	12.6%
Polyp detection rate	1,414	1,902	74.3%

Adenoma detection rate	1,114	1,902	58.6%
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### 3.7 Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment within four weeks of Booking SP Appointment

During the April 2019 to March 2020 year, 2043 participants were offered an index procedure and 1003 (49.1%) were offered a procedure date within 4 weeks of booking their Specialist Screening Practitioner (SSP) assessment appointment. Another 747 (36.6%) were offered a procedure date between 4 and 8 weeks and 293 (14.3%) were offered a procedure date more than 8 weeks after booking their SSP assessment appointment. Waiting times have decreased since 2018-19 where 41.0% of participants were offered an index procedure within four weeks.

### 3.8 Attendance at CT scans

Across Wales, 93.9% of booked CT scans were attended; this varies between 80.0% and 100% across health boards for the year April 2019 to March 2020.

## 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 60 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.

## Test kit Types

Faecal Occult Blood test (FOBT) – A guaiac-based test card that was issued as the primary screening test for the majority of screening participants during this period.

Secondary screening test – A confirmatory, second test issued to participants who demonstrated small amounts of blood when tested with the FOBT kit (those with equivocal results).

Liquid Faecal Immunochemical Test (liquid FIT) – A new test kit introduced from January 2019 to a small proportion of the screening population (i.e. 1 in 28 participants).

## Spoilt test

A spoilt test is a test that is rendered unavailable for testing either by the participant or the laboratory for reasons defined in the Bowel Screening Wales and Laboratory Quality Manuals e.g. no date on the test or the test not completed well by the participant. These rates are calculated as a proportion of the total bowel screening tests authorised in the reporting period.

## 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.

### **Equivocal test**

These rates are calculated as a proportion of the un-spoilt 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.

### **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 and Pre-Release List

### Production Team

Steve Court	Head of Programme - Bowel Screening Wales
Dr Sharon Hillier	Director of Screening Division
Dr Sikha de Souza	Consultant in Public Health Medicine
Dr Ardiana Gjini	Consultant in Public Health Medicine
Helen Clayton	Lead Informatics and Data Services Manager
Richard Wakely	Senior Informatics and Data Analyst
Holly Vizard	Informatics and Data Analyst
Guy Stevens	Deputy Informatics & Data Services Manager
Hannah Lindsay	Communications Manager
Diane Rawlings	Personal Assistant
Rhys George	Cofus CTF (Welsh translation)

This report was not published as official statistics.