



Bowel Screening Wales Annual Statistical Report 2020-21



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

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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

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This report is a detailed summary of information on work undertaken by Bowel Screening Wales for the year from April 2020 to the end of March 2021.

Publication Details:

Title: Bowel Screening Wales Annual Statistical Report 2020-21

Date: published August 2024

ISBN: 978-1-83766-435-1

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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.

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 2020-21. BSW was launched in October 2008 with the aim of reducing the number of people dying from bowel cancer in Wales.

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 2020-21 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 Audit¹ 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 recommendation was made to temporarily pause some of the national screening programmes in Wales, including Bowel Screening, in response to the COVID-19 pandemic. Invitations were paused on 20 March 2020. Any screening kits received in the laboratory after 3 April 2020 were not tested, as screening colonoscopy procedures had ceased across Wales, so this affected of the data presented for this reporting period. Screening restarted in August.

1.1 'Key messages' for the public

- Bowel screening reduces your risk of dying from bowel cancer
- During this reporting period, men and women aged 60 to 74 were 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 2020 NBOCAP <https://www.nboca.org.uk/content/uploads/2020/12/NBOCA-2020-Annual-Report.pdf>

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

Due to the COVID-19 pandemic and the pause in the offer of endoscopy at the start of the pandemic, we paused invitations on 20 March 2020.

Prior to 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. This report includes reporting on older test kits (the Faecal Occult Blood or FOBt test) submitted by participants during this year and rejected by the laboratory.

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. 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 (SPs), 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 2020 to March 2021.

- Bowel screening coverage as at 1 October 2021 was 63.2%, an increase from the previous year when coverage was 58.9%
- Coverage on 1 October 2021 ranged from 62.5% in Swansea Bay University Health Board to 63.7% in Aneurin Bevan University Health Board and Hywel Dda University Health Board.
- Bowel screening uptake for participants invited between April 2020 and March 2021 was 67.1%, an increase from the previous year when uptake was 61.5%
- Uptake in 2020-21 ranged from 66.1% in Swansea Bay University Health Board to 68.3% in Powys Teaching Health Board
- Coverage and uptake rates were higher in females. Coverage was 65.1% in females compared to 63.8% in males, uptake was 68.1% in females compared to 66.1% in males
- Coverage and uptake rates were also higher in those living in the least deprived areas (69.3% and 73.4% respectively in the least deprived areas compared to 55.1% and 58.9% respectively in the most deprived areas)

For the period April 2020 to March 2021:

- 223,667 participants were invited for bowel screening, with an average uptake for screening of 67.1%
- 152,191 tests were authorised of which 4.3% were rejected as they could not be tested
- 145,619 tests were given a definitive result, of which 98.2% were negative and 1.8% were positive
- 100% of all guaiac Faecal Occult Blood (FOBT) tests submitted by participants were rejected due to the introduction of FIT testing into the programme from September 2019
- 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, 26.8% 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. This is a decrease from 49.1% in the previous year
- Attendance at the first diagnostic procedure was 93.1%
- At the first diagnostic procedure, the cancer detection rate was 11.6%, polyp detection rate was 73.6% and the adenoma detection rate was 57.7%
- 211 participants were diagnosed with cancer and 1,342 participants had polyps detected and removed
- Across Wales, 95% 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 2021

| 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 | 102,606 | 65,314 | 63.7 | 51,987 | 33,581 | 64.6 | 50,619 | 31,733 | 62.7 |
| Betsi Cadwaladr UHB | 132,870 | 83,473 | 62.8 | 67,712 | 43,478 | 64.2 | 65,158 | 39,995 | 61.4 |
| Cardiff and Vale UHB | 73,443 | 46,248 | 63.0 | 37,182 | 24,010 | 64.6 | 36,261 | 22,238 | 61.3 |
| Cwm Taf Morgannwg UHB | 76,420 | 48,203 | 63.1 | 38,906 | 24,796 | 63.7 | 37,514 | 23,407 | 62.4 |
| Hywel Dda UHB | 79,144 | 50,446 | 63.7 | 40,202 | 26,169 | 65.1 | 38,942 | 24,277 | 62.3 |
| Powys Teaching HB | 29,677 | 18,867 | 63.6 | 14,911 | 9,837 | 66.0 | 14,766 | 9,030 | 61.2 |
| Swansea Bay UHB | 67,488 | 42,185 | 62.5 | 34,618 | 21,938 | 63.4 | 32,870 | 20,247 | 61.6 |
| Unknown | 11,033 | 7,110 | 64.4 | 5,642 | 3,671 | 65.1 | 5,391 | 3,439 | 63.8 |
| All Wales | 572,681 | 361,846 | 63.2 | 291,160 | 187,480 | 64.4 | 281,521 | 174,366 | 61.9 |

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 2021

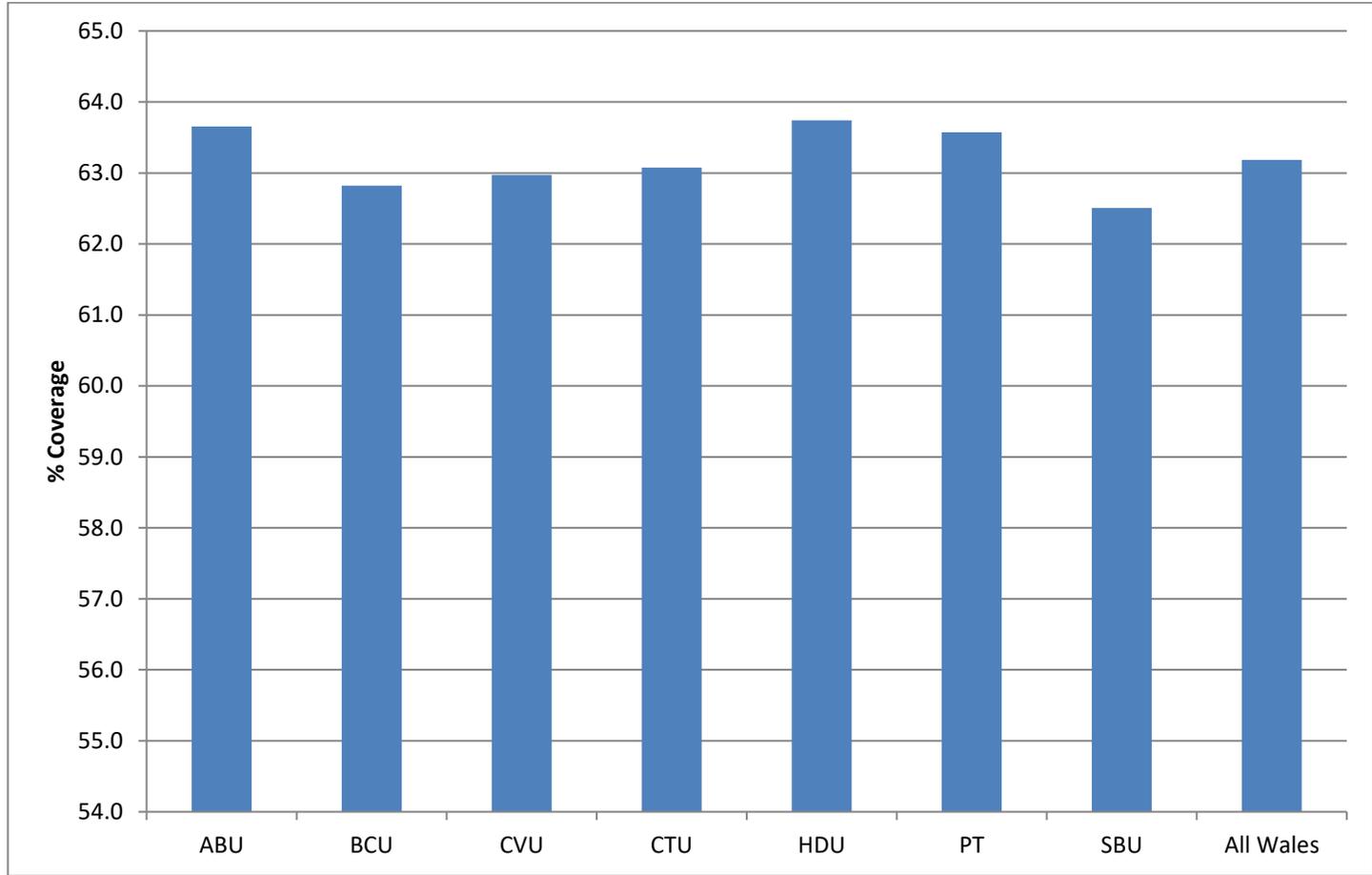


Table 1b: Bowel Screening Coverage (within 2.5 years) by Deprivation Quintile and Health Board of residence, as at 1 October 2021

| Health Board | Q1 – least deprived | Q2 | Q3 | Q4 | Q5 – most deprived | Total |
|-----------------------|---------------------|-------------|-------------|-------------|--------------------|-------------|
| Aneurin Bevan UHB | 70.0 | 67.3 | 65.2 | 60.8 | 56.5 | 63.7 |
| Betsi Cadwaladr UHB | 68.1 | 65.1 | 62.3 | 58.2 | 52.7 | 62.8 |
| Cardiff and Vale UHB | 70.0 | 62.3 | 59.8 | 58.4 | 52.1 | 63.0 |
| Cwm Taf Morgannwg UHB | 70.8 | 67.5 | 63.8 | 61.7 | 57.3 | 63.1 |
| Hywel Dda UHB | 66.5 | 66.5 | 63.8 | 60.9 | 55.1 | 63.7 |
| Powys Teaching HB | 70.2 | 63.8 | 62.8 | 58.8 | 55.1 | 63.6 |
| Swansea Bay UHB | 68.6 | 65.6 | 62.5 | 60.8 | 55.0 | 62.5 |
| Unknown | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 64.4 |
| All Wales | 69.3 | 65.4 | 63.3 | 60.3 | 55.1 | 63.2 |

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 2021

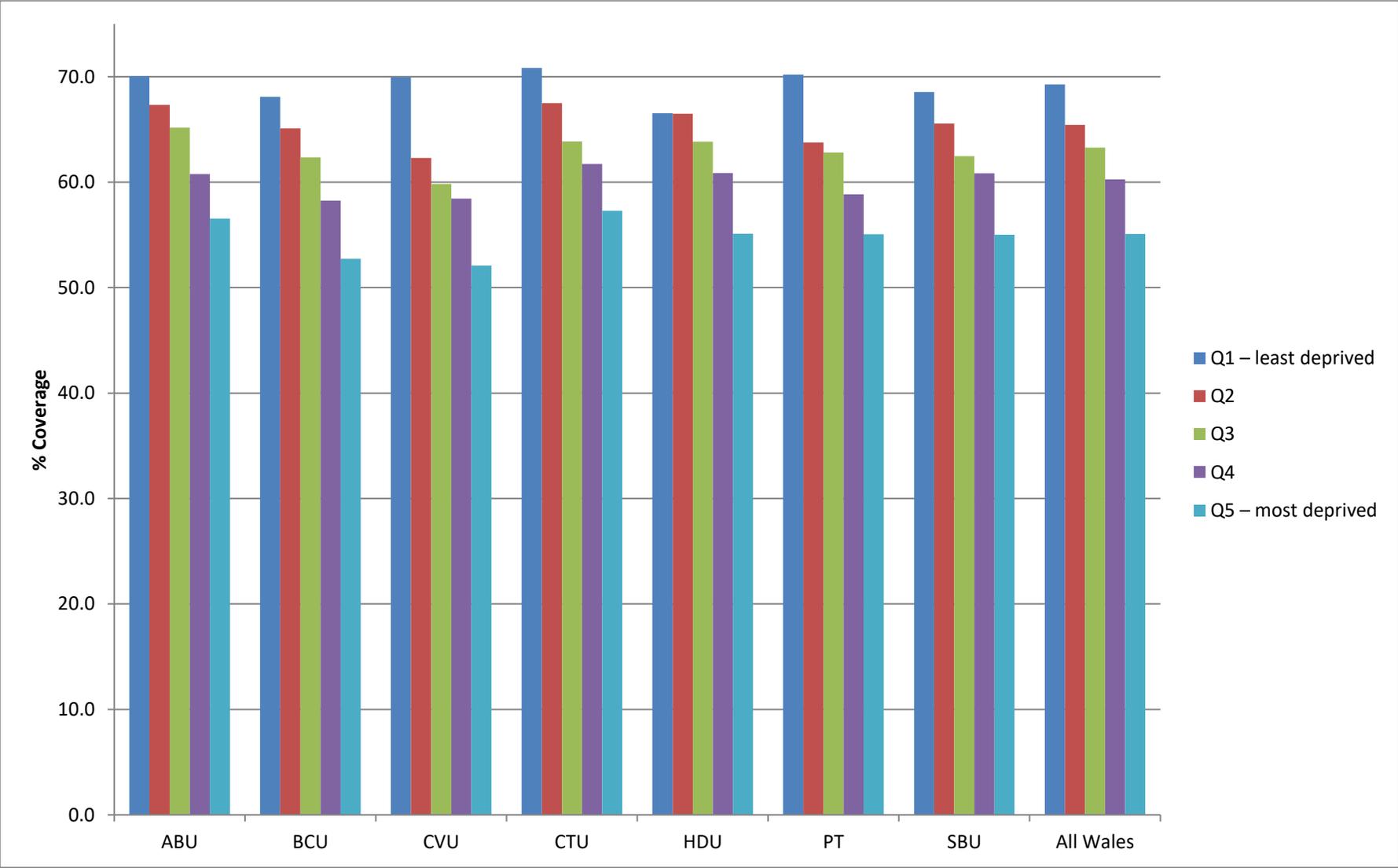


Table 1c: Bowel Screening Uptake by Health Board of residence, 2020-21

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 | 40,408 | 27,495 | 68.0 | 20,507 | 14,145 | 69.0 | 19,901 | 13,350 | 67.1 |
| Betsi Cadwaladr UHB | 51,877 | 34,576 | 66.6 | 26,424 | 17,954 | 67.9 | 25,453 | 16,622 | 65.3 |
| Cardiff and Vale UHB | 28,471 | 19,023 | 66.8 | 14,466 | 9,863 | 68.2 | 14,005 | 9,160 | 65.4 |
| Cwm Taf Morgannwg UHB | 29,832 | 19,891 | 66.7 | 15,265 | 10,195 | 66.8 | 14,567 | 9,696 | 66.6 |
| Hywel Dda UHB | 30,892 | 20,954 | 67.8 | 15,875 | 10,930 | 68.9 | 15,017 | 10,024 | 66.8 |
| Powys Teaching HB | 11,513 | 7,862 | 68.3 | 5,770 | 4,098 | 71.0 | 5,743 | 3,764 | 65.5 |
| Swansea Bay UHB | 26,369 | 17,423 | 66.1 | 13,492 | 8,947 | 66.3 | 12,877 | 8,476 | 65.8 |
| Unknown | 4,305 | 2,937 | 68.2 | 2,163 | 1,500 | 69.3 | 2,142 | 1,437 | 67.1 |
| All Wales | 223,667 | 150,161 | 67.1 | 113,962 | 77,632 | 68.1 | 109,705 | 72,529 | 66.1 |

Uptake includes participants invited for bowel screening during April 2020 to March 2021.

Graph 1c: Bowel Screening Uptake by Health Board of residence, 2020-21

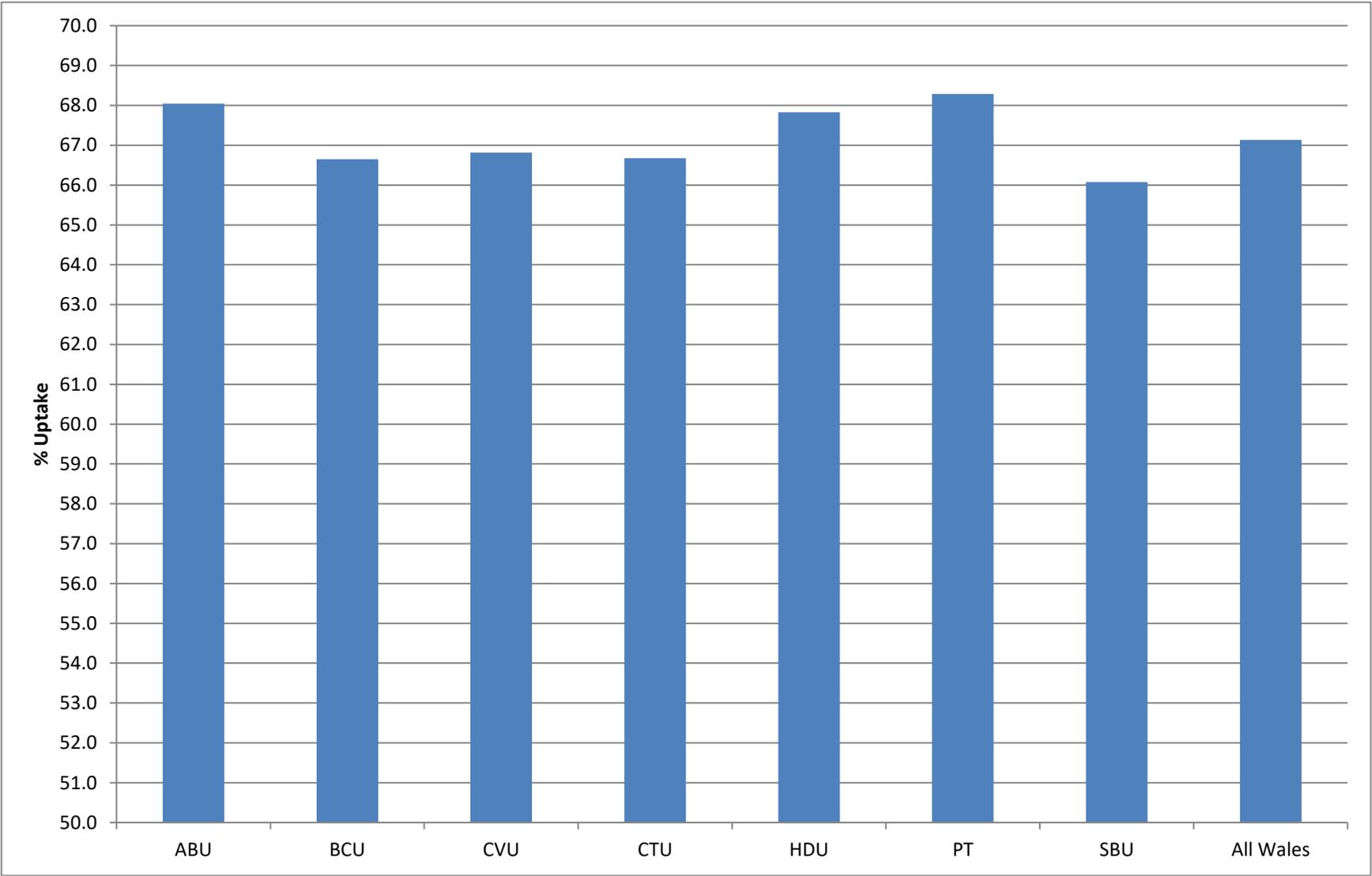


Table 1d: Bowel Screening Uptake, %, by Deprivation Quintile and Health Board of residence, 2020-21

| Health Board | Q1 – least deprived | Q2 | Q3 | Q4 | Q5 – most deprived | Total |
|-----------------------|---------------------|-------------|-------------|-------------|--------------------|-------------|
| Aneurin Bevan UHB | 74.8 | 72.4 | 69.6 | 64.5 | 60.6 | 68.0 |
| Betsi Cadwaladr UHB | 71.7 | 69.1 | 66.4 | 61.7 | 56.9 | 66.6 |
| Cardiff and Vale UHB | 74.4 | 65.8 | 61.9 | 63.0 | 55.5 | 66.8 |
| Cwm Taf Morgannwg UHB | 74.9 | 71.4 | 68.0 | 65.0 | 60.8 | 66.7 |
| Hywel Dda UHB | 70.6 | 70.6 | 67.9 | 65.0 | 58.8 | 67.8 |
| Powys Teaching HB | 73.8 | 69.1 | 66.3 | 64.4 | 58.6 | 68.3 |
| Swansea Bay UHB | 72.2 | 68.3 | 65.9 | 64.9 | 58.8 | 66.1 |
| Unknown | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 68.2 |
| All Wales | 73.4 | 69.7 | 67.2 | 64.0 | 58.9 | 67.1 |

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.

Graph 1d: Bowel Screening Uptake, %, by Deprivation Quintile and Health Board of residence, 2020-21

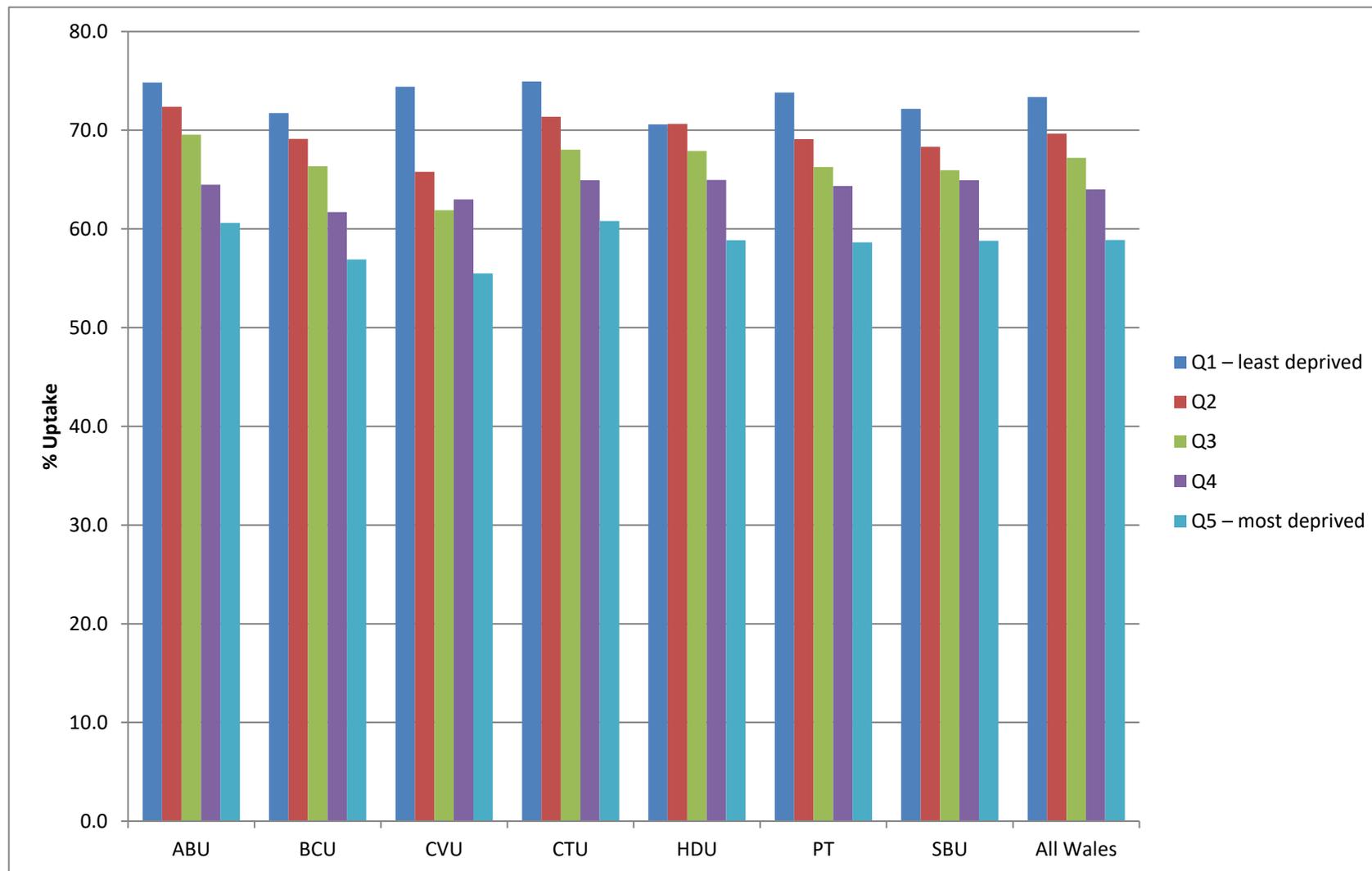


Table 1e: All Wales Bowel Screening Uptake, %, by month of invite, 2020-21

| Invite Year | Invite Month | Invited | Tested | Uptake % |
|--------------|--------------|---------------|---------------|-------------|
| 2020 | Apr | 1 | 0 | 0.0 |
| 2020 | May | 2 | 1 | 50.0 |
| 2020 | Jun | 11 | 5 | 45.5 |
| 2020 | Jul | 0 | 0 | 0.0 |
| 2020 | Aug | 25483 | 17927 | 70.3 |
| 2020 | Sep | 23020 | 15928 | 69.2 |
| 2020 | Oct | 35071 | 23441 | 66.8 |
| 2020 | Nov | 30638 | 20881 | 68.2 |
| 2020 | Dec | 19848 | 12793 | 64.5 |
| 2021 | Jan | 36843 | 24304 | 66.0 |
| 2021 | Feb | 23160 | 15057 | 65.0 |
| 2021 | Mar | 29590 | 19824 | 67.0 |
| Total | | 223667 | 150161 | 67.1 |

Table 1f: All Wales Bowel Screening Uptake by Type of Recall, 2020-21

| Year | Prevalent Round - 1st Invite | | | Prevalent Round - Subsequent invite(s) | | | Incident Round | | |
|---------|------------------------------|--------|----------|--|--------|----------|----------------|---------|----------|
| | Eligible | Tested | % Uptake | Eligible | Tested | % Uptake | Eligible | Tested | % Uptake |
| 2020-21 | 49,434 | 32,585 | 65.9 | 62,147 | 15,826 | 25.5 | 112,086 | 101,750 | 90.8 |

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 |
| 2020-21 | 572,681 | 361,846 | 63.2 | 223,667 | 150,161 | 67.1 |

Only eight 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, 2020-21

| 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 | 9,013 | 5,071 | 6,054 | 20,138 | 9,035 | 4,849 | 5,785 | 19,669 |
| Betsi Cadwaladr UHB | 11,486 | 6,481 | 7,989 | 25,956 | 11,492 | 6,067 | 7,651 | 25,210 |
| Cardiff and Vale UHB | 6,717 | 3,506 | 3,993 | 14,216 | 6,760 | 3,375 | 3,755 | 13,890 |
| Cwm Taf Morgannwg UHB | 6,845 | 3,698 | 4,408 | 14,951 | 6,790 | 3,485 | 4,077 | 14,352 |
| Hywel Dda UHB | 6,888 | 3,983 | 4,717 | 15,588 | 6,592 | 3,855 | 4,453 | 14,900 |
| Powys Teaching HB | 2,495 | 1,478 | 1,709 | 5,682 | 2,492 | 1,465 | 1,765 | 5,722 |
| Swansea Bay UHB | 6,092 | 3,262 | 3,895 | 13,249 | 5,902 | 3,185 | 3,640 | 12,727 |
| Unknown | 1,060 | 546 | 532 | 2,138 | 1,108 | 508 | 546 | 2,162 |
| All Wales | 50,596 | 28,025 | 33,297 | 111,918 | 50,171 | 26,789 | 31,672 | 108,632 |

Table 2b: Total participants invited for bowel screening – by age and Health Board of residence, 2020-21

| Health Board | Participants | | | |
|-----------------------|----------------|---------------|---------------|----------------|
| | 60-64 years | 65-69 years | 70-74 years | Total Invited |
| Aneurin Bevan UHB | 18,048 | 9,920 | 11,839 | 39,807 |
| Betsi Cadwaladr UHB | 22,978 | 12,548 | 15,640 | 51,166 |
| Cardiff and Vale UHB | 13,477 | 6,881 | 7,748 | 28,106 |
| Cwm Taf Morgannwg UHB | 13,635 | 7,183 | 8,485 | 29,303 |
| Hywel Dda UHB | 13,480 | 7,838 | 9,170 | 30,488 |
| Powys Teaching HB | 4,987 | 2,943 | 3,474 | 11,404 |
| Swansea Bay UHB | 11,994 | 6,447 | 7,535 | 25,976 |
| Unknown | 2,168 | 1,054 | 1,078 | 4,300 |
| All Wales | 100,767 | 54,814 | 64,969 | 220,550 |

Note: 10 people less than 60 years old and, due to COVID 19 recovery, 5,772 people over 74 years old, 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 |
| All Wales - FOB | 0 | 270 | 0 | 0 | 0 | 270 | 0.0% | 100.0% | 0.0% | 0.0% | 0.0% |

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 |
| All Wales - FIT | 0 | N/A | N/A | 0 | 0 | 1 | 0.0% | 100.0% | N/A | 0.0% | 0.0% |

Note: All non-liquid FIT tests were rejected following implementation in October 2019 and these tables relate to FOBT kits returned by participants during this reporting period but issued prior to October 2019.

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

| Health Board | Rejected | Negative | Positive | Total | Rejected | Negative | Positive |
|------------------------|--------------|----------------|--------------|----------------|-------------|--------------|-------------|
| Aneurin Bevan UHB | 1,225 | 26,048 | 542 | 27,815 | 4.4% | 98.0% | 2.0% |
| Betsi Cadwaladr UHB | 1,390 | 33,060 | 618 | 35,068 | 4.0% | 98.2% | 1.8% |
| Cardiff and Vale UHB | 908 | 18,143 | 307 | 19,358 | 4.7% | 98.3% | 1.7% |
| Cwm Taf Morgannwg UHB | 853 | 18,932 | 397 | 20,182 | 4.2% | 97.9% | 2.1% |
| Hywel Dda UHB | 941 | 19,862 | 343 | 21,146 | 4.5% | 98.3% | 1.7% |
| Powys Teaching HB | 335 | 7,485 | 120 | 7,940 | 4.2% | 98.4% | 1.6% |
| Swansea Bay UHB | 803 | 16,605 | 303 | 17,711 | 4.5% | 98.2% | 1.8% |
| Unknown | 117 | 2,803 | 51 | 2,971 | 3.9% | 98.2% | 1.8% |
| All Wales - FIT | 6,572 | 142,938 | 2,681 | 152,191 | 4.3% | 98.2% | 1.8% |

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

| Health Board | Rejected | Negative | Positive | Total | Rejected | Negative | Positive |
|-----------------------|--------------|----------------|--------------|----------------|-------------|--------------|-------------|
| Aneurin Bevan UHB | 1,263 | 26,048 | 542 | 27,853 | 4.5% | 98.0% | 2.0% |
| Betsi Cadwaladr UHB | 1,450 | 33,060 | 618 | 35,128 | 4.1% | 98.2% | 1.8% |
| Cardiff and Vale UHB | 937 | 18,143 | 307 | 19,387 | 4.8% | 98.3% | 1.7% |
| Cwm Taf Morgannwg UHB | 880 | 18,932 | 397 | 20,209 | 4.4% | 97.9% | 2.1% |
| Hywel Dda UHB | 986 | 19,862 | 343 | 21,191 | 4.7% | 98.3% | 1.7% |
| Powys Teaching HB | 356 | 7,485 | 120 | 7,961 | 4.5% | 98.4% | 1.6% |
| Swansea Bay UHB | 843 | 16,605 | 303 | 17,751 | 4.7% | 98.2% | 1.8% |
| Unknown | 128 | 2,803 | 51 | 2,982 | 4.3% | 98.2% | 1.8% |
| All Wales | 6,843 | 142,938 | 2,681 | 152,462 | 4.5% | 98.2% | 1.8% |

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, 2020-21

| Days | Liquid FIT | |
|--------------|-------------------|--------------------------------|
| | Number authorised | Percentage of total authorised |
| Same day | 141,620 | 93.1% |
| 1 | 6,696 | 4.4% |
| 2 | 2,823 | 1.9% |
| 3 | 1,047 | 0.7% |
| 4 | 0 | 0.0% |
| 5 | 2 | 0.0% |
| 6 | 3 | 0.0% |
| 7-13 days | 0 | 0.0% |
| 14 days + | 0 | 0.0% |
| TOTAL | 152,191 | 100.0% |

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, 2020-21

| Health Board | Booked index procedure | Attended index procedure | % Attended |
|-----------------------|------------------------|--------------------------|--------------|
| Aneurin Bevan UHB | 395 | 380 | 96.2% |
| Betsi Cadwaladr UHB | 395 | 367 | 92.9% |
| Cardiff and Vale UHB | 245 | 219 | 89.4% |
| Cwm Taf Morgannwg UHB | 292 | 276 | 94.5% |
| Hywel Dda UHB | 262 | 255 | 97.3% |
| Powys Teaching HB | 86 | 76 | 88.4% |
| Swansea Bay UHB | 241 | 209 | 86.7% |
| Unknown | 42 | 41 | 97.6% |
| All Wales | 1,958 | 1,823 | 93.1% |

3.6 Detection rates

Table 6: All Wales Cancer / Polyp / Adenoma detection rates at index colonoscopy/ flexible sigmoidoscopy, 2020-21

| | Number Detected | Total Index Procedures | Percentage Detected |
|------------------------|-----------------|------------------------|---------------------|
| Cancer detection rate | 211 | 1,823 | 11.6% |
| Polyp detection rate | 1,342 | 1,823 | 73.6% |
| Adenoma detection rate | 1,052 | 1,823 | 57.7% |

3.7 Waiting times for index colonoscopy/ flexible sigmoidoscopy appointment within four weeks of Booking SP Appointment

During the April 2020 to March 2021 year, 1908 participants were offered an index procedure and 512 (26.8%) were offered a procedure date within 4 weeks of booking their Specialist Screening Practitioner (SSP) assessment appointment. Another 841 (44.1%) were offered a procedure date between 4 and 8 weeks and 555 (29.1%) were offered a procedure date more than 8 weeks after booking their SSP assessment appointment. Waiting times have decreased since 2019-20 where 49.1% of participants were offered an index procedure within four weeks.

3.8 Attendance at CT scans

Across Wales, 95% of booked CT scans were attended; this varies between 90.3% and 100% across Health Boards for the year April 2020 to March 2021.

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

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 Graham Brown | Consultant in Public Health Medicine |
| 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 (Welsh translation) |

This report was not published as official statistics.