



GIG
CYMRU
NHS
WALES

Iechyd Cyhoeddus
Cymru
Public Health
Wales

Screening Division Inequities Report 2020-21

Author: Bethan Bowden,

Data provided by Guy Stevens and the PHW Informatics Team

Date: June 2022

Version: 1

Distribution:

- Screening Division Senior Management Team
- HPSS Directorate Leadership Team
- Screening Inequities Group with LPHT partners
- Published on PHW website

Purpose and Summary of Document:

This report is a summary of information on equity of uptake in four adult screening programmes delivered by Public Health Wales for the year from April 2020 to the end of March 2021.

Publication Details:

Title: Screening Division Inequities Report 2020-21, Public Health Wales

Date: June 2022

ISBN: 978-1-83766-012-4

For more information about this report contact:

Sikha de Souza, Consultant in Public Health,
Screening Division, Floor 4, Public Health Wales, Number 2 Capital Quarter,
Tyndall Street, Cardiff, CF10 4BZ
Email: screening.feedback@wales.nhs.uk

Rydym yn croesawu gohebiaeth a galwadau ffôn yn Gymraeg. Byddwn yn ateb gohebiaeth yn Gymraeg heb oed /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 updated. 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.

© 2022 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/ 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.

1. Introduction

Across the national screening programmes in Wales, it is our aim that everyone eligible for screening has equitable access and opportunity to take up their screening offer using reliable information to make a personal informed choice. Screening saves lives, reduces complications and enables choice through early identification and treatment of health conditions. However, screening is not taken up equally across population groups resulting in disparities in outcomes and health inequities. Addressing inequity in uptake in the national screening programmes is a key objective for the Screening Division of Public Health Wales.

As part of our Screening Equity Strategy, we have committed to exploring what data we can analyse to understand patterns of uptake across Wales and identify groups or communities with low uptake for targeted action and interventions. Data on inequity of uptake has previously been presented in different reports produced by individual screening programmes. This inequity report is the first time that data from different programmes have been brought together in a report specifically focused on inequity of uptake across the division.

As part of a screening network with partners across Local Health Boards, Local Government and Third Sector it is vital that we share this data in a timely manner to inform their community led actions. We have committed to regular presentation of this data in an annual report as close to the point of analysis as possible. This report presents data on those invited for screening from April 2020 to March 2021. Allowing participants six months to take up their offer of screening, this reflects uptake as of October 2021.

Screening activity for 2020/21 was significantly impacted by the Covid-19 pandemic with a pause in screening programmes from March 2020 followed by phased reinstatement of services from June 2020. This has resulted in lower screening activity across all national adult screening programmes with substantially decreased uptake within the Diabetic Eye Screening Wales

programme. When exploring data by demographic factors the small numbers within subgroups were unreliable and therefore for this year, data for DESW has not been presented. Data is presented for the remaining adult screening programmes using either uptake to demonstrate the proportion of invited participants who took up their screening offer, or coverage that reflects the proportion of the population eligible for screening who have been screened within the appropriate time frame for that screening programme.

For 2020/21 inequity data focuses on the determinants and demographic factors that are currently collected within our routine data collection. As our data collection and understanding on inequities in screening develops, we aim to expand the range of factors which are explored within this report. As an evolving document we welcome feedback on the content and layout to inform future versions.

This report complements the Screening Equity Strategy where more detail can be found about our commitments to act to reduce inequities within the Division.

2. Background

Screening aims to detect the early stages of disease or prevent disease occurring. Through identification of people at higher chance of having a health condition more effective treatment options can be offered, or information provided to inform decision making about their future careⁱ. Screening can also reduce the chance of developing a serious condition, preventing ill-health and the harm that would have otherwise occurred. The Screening Division delivers the seven national screening programmes in Wales:

1. Breast Test Wales
2. Bowel Screening Wales,
3. Cervical Screening Wales

4. Newborn Bloodspot Screening Wales
5. Newborn Hearing Screening Wales
6. Diabetic Eye Screening Wales
7. Wales Abdominal Aortic Aneurysm Screening Programme

The Screening Division coordinates and manages the Antenatal Screening Wales clinical network with screening delivered by Health Boards in Wales as part of routine antenatal care during pregnancy.

Each of the programmes has a different eligible population cohort who are invited for screening at different time intervals (table 1).

Table 1: Invited Population Cohorts for National Screening Programmes in Wales

Programme	Population	Screening Interval
Antenatal Screening Wales	Pregnant women	As per routine antenatal care
Breast Test Wales	Women and people with breasts aged 50-70	Every 3 years
Bowel Screening Wales	People aged 58*-74	Every 2 years
Cervical Screening Wales	Women and people with a cervix aged 25-64	Every 3** years aged 25-49 Every 5 years aged 50-64
Newborn Bloodspot Screening Wales	Newborn babies around 5 days of life	One-off screen
Newborn Hearing Screening Wales	Newborn babies within first few weeks of life	One-off screen
Diabetic Eye Screening Wales	People with diabetes aged 12 years and over	Every year
Wales Abdominal Aortic Aneurysm Screening Programme	Men aged 65	One-off screen

*optimisation of bowel screening to 58 years in 2022 **reduction to 5 years from 2022

Screening currently collects information gained from General Practice registers in order to invite eligible participants. This means that we currently hold data to be able to examine inequity in uptake by **age** (as we collect date of birth), **gender**, and **geographical location** (as we know home address and also GP practice location). We can use address to derive an area based measure of **deprivation** using the Welsh Index of Multiple Deprivation (WIMD) ranking of Lower Super Output Area (LSOA) of residence. For this report, LSOAs were allocated into quintiles based on overall WIMD deprivation ranking, to provide an indication of the deprivation status of the LSOA in which person lives. In this report, Quintile 1 refers to those living in the least deprived fifth of LSOAs in Wales and Quintile 5 refers to those who were living in the most deprived fifth of LSOAs in Wales.

This report focuses on inequities within the adult screening programmes in Wales for 2020/21: Bowel Screening Wales; Breast Test Wales; Cervical Screening Wales and Wales Abdominal Aortic Aneurysm Screening Programme. Due to the impact of the Covid-19 pandemic screening activity is substantially reduced in 2020/21 compared to previous years. All adult screening programmes were paused from 19 March 2020 with a phased reinstatement of programmes beginning in June 2020 for Cervical Screening Wales, followed by Bowel Screening Wales in July 2020, Breast Test Wales and Wales Abdominal Aortic Aneurysm Screening Programme in August 2020 and Diabetic Eye Screening in September 2020. The temporary pause when participants could not be screened was followed by reduced capacity to invite participants for screening during the reinstatement of services. This has led to reduced screening activity across all the adult screening programmes but was most marked in Breast Test Wales and Wales Abdominal Aortic Aneurysm Screening Programme which require attendance at a designated screening venue or mobile site.

3. Headline summary

- In 2020/21, there is a social gradient in uptake of screening across all the adult screening programmes. People living in the **most deprived communities** in Wales were **less likely to take up their offer of screening** compared to those living in the least deprived communities.
- For programmes that invite people across age groups there is an inequity in uptake of screening offer with **people in younger age groups less likely to take up their offer of screening** than people in older age groups.
- For programmes that invite all genders to participate in screening there is an inequity of uptake with **men less likely to take up their offer than women** though the inequity gap is small.
- For programmes where people are invited more than once, **people who have previously attended are more likely to respond** to subsequent invitations.
- Screening activity was reduced for all programmes in 2020/21 compared to previous years due to the impact of the Covid-19 pandemic and phased return to screening in line with Welsh Government guidance. This was most marked for WAAASP and BTW and therefore data should be interpreted with caution.
- Further **exploration of other factors** known to impact upon uptake of screening such as ethnicity is needed to broaden understanding of screening inequities beyond our routine data collection. This should include antenatal and newborn screening programmes in addition to the adult and young people programmes presented in this report.
- Further exploration of **inequities across the whole screening pathway** is required to impact upon improving health outcomes for all groups and communities in Wales

4. Uptake/Coverage by geographical area

Screening is delivered as All-Wales programmes' across all seven Health Board geographical areas. Screening programmes are delivered using different access models including home based screening, primary care delivery and screening venues in healthcare centres and mobile clinics. To understand if screening is taken up equally across Wales, uptake/coverage has been explored by geographical location of eligible participants. Geographical location is defined using the home address of the invited participant then allocated to Health Board and Local Authority.

4.1 Bowel Screening Wales

Bowel Screening Wales (BSW) aims to reduce the number of people dying from bowel cancer in Wales through early identification of cancer when treatment is more likely to be successful and through the removal of pre-cancerous growths. People aged from 60 to 74 are invited to take part every two years, from 2022 this will be expand to invite those aged 58.

Following the pause in screening programmes in March 2020, bowel screening participants were invited as part of a phased restart from the end of July 2020. From August 2020 to March 2021 a total of **223,667 people were invited** to take part in bowel screening with **150,161 people taking up the offer** of a screening test. This compares to 276,226 participants invited for bowel screening from April 2019 to March 2020 with 188,105 authorised screening test results.

Uptake of bowel screening is reported as the proportion of invited participants that were screened within six months of invitation, making this the latest data available as of October 2021. The minimum standard for uptake across the programme is 60%. Across Wales **in 2020/21, uptake was 67.1%** increasing from an All-Wales uptake in 2019/20 of 61.5% and in 2018/19 of 57.3%.

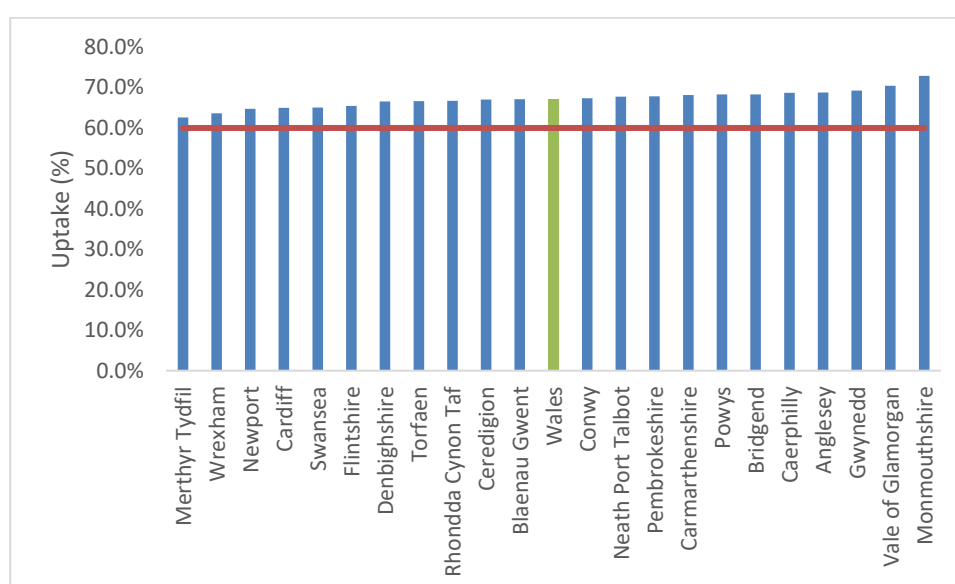
There is little geographical variation in uptake across Wales at Health Board level with uptake ranging from 66.1% in Swansea Bay University Health Board (SBUHB) to 68.3% in Powys Teaching Health Board (PTHB) (table 2).

Table 2: Uptake (%) of bowel screening by Health Board of residence, 2020/21

Health Board	Invited (n)	Screened (n)	Uptake (%)
Aneurin Bevan UHB	40408	27495	68.0
Betsi Cadwaladr UHB	51877	34576	66.6
Cardiff & Vale UHB	28471	19023	66.8
Cwm Taf Morgannwg UHB	29832	19891	66.7
Hywel Dda UHB	30892	20954	67.8
Powys Teaching HB	11513	7862	68.3
Swansea Bay UHB	26369	17423	66.1
All-Wales	223667	150161	67.1

However, greater geographical variation in uptake is noted at Local Authority area ranging from 62.6% in Merthyr Tydfil LA to 72.9% in Monmouthshire LA (figure 1).

Figure 1: Uptake (%) of bowel screening by Local Authority of residence, 2020/21



4.2 Breast Test Wales

Breast Test Wales (BTW) as the national breast screening programme aims to reduce mortality from breast cancer with women aged 50 to 70 invited for a mammogram every three years. Women over the age of 70 are able to self-refer into the screening programme. Breast Test Wales is divided into three geographical divisions with centres in Cardiff, Swansea, Llandudno and Wrexham. Eleven mobile units work across Wales to provide local screening to women who live some distance from a centre, visiting over 100 sites in every three year round of screening.

Following the pause in screening programmes in March 2020, there was a phased restart of breast screening from August 2020 to March 2021. A total of **63,854 people were invited** to take part in breast screening with **42,826 people taking up the offer** of a screening test. This compares to more than 145,428 people invited during 2018/19 with 114,968 people screened.

Uptake of breast screening is reported as the proportion of invited participants who attended and were screened within six months of invitation making this the latest data available as of October 2021. In 2020/21, **uptake across Wales was 67.1%** declining from uptake of 69.1% in 2018/19.

There is geographical variation in uptake across Wales at Health Board level. Uptake was lowest in PTHB at 23.5% though it should be noted that only a small number of women were invited because of the timing of the three year round, so this figure should be treated with caution. Uptake of breast screening was highest in Cwm Taf Morgannwg University Health Board (CTMUHB) at 76.0% (table 3).

Table 3: Uptake (%) of breast screening by Health Board of residence, 2020/21

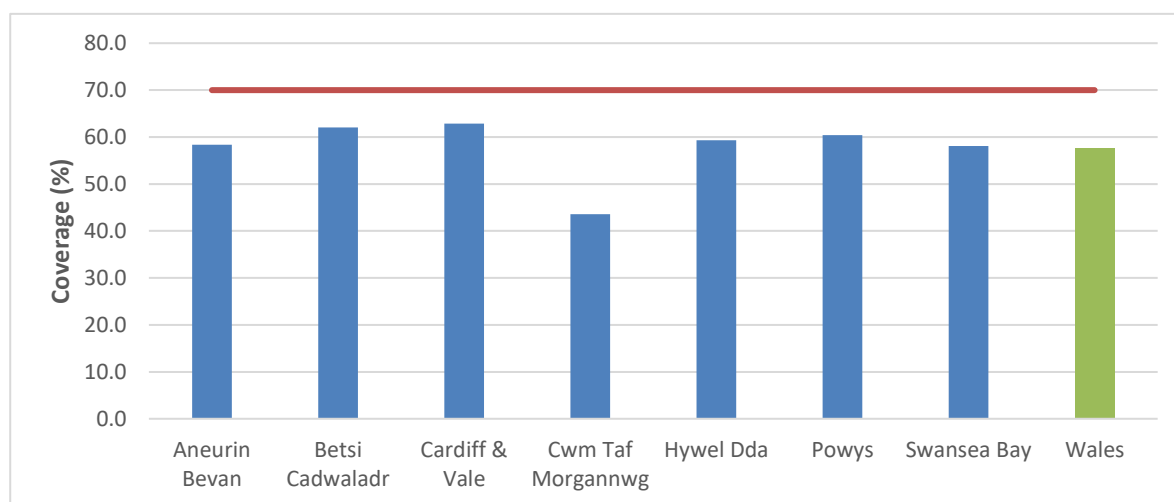
Health Board	Invited (n)	Screened (n)	Uptake (%)
Aneurin Bevan UHB	10262	7255	70.7
Betsi Cadwaladr UHB	18624	12703	68.2
Cardiff & Vale UHB	11989	8077	67.4
Cwm Taf Morgannwg UHB	4456	3387	76.0
Hywel Dda UHB	7801	4975	63.8
Powys Teaching HB	102	24	23.5
Swansea Bay UHB	9369	5565	59.4
All-Wales	63854	42826	67.1

Due to very low numbers of participants within some Local Authority areas data is not presented at this geographical granularity.

The service delivery model within Breast Test West invites participants based on their GP surgery of registration on a three year cycle. Following the reinstatement of screening services, participants who had been waiting the longest were prioritised for screening resulting in geographical variation due to location of overdue GP practices. The reduced breast screening activity in 2020/21 may lead to wider geographical variation than a typical pre-Covid year. To address this overall coverage of breast screening across Wales has been explored. Coverage is defined as the proportion of eligible participants who have been screened within the previous three years.

Across Wales, **coverage of breast screening as of October 2021 is 57.7%**, this compares to the minimum standard of 70%. There is geographical variation in uptake across Health Board areas in Wales ranging from lowest of 43.6% in CTMUHB to a highest of 62.8% in Cardiff and Vale University Health Board (CVUHB) (figure 2).

Figure 2: Coverage (%) of breast screening by Health Board of residence, 2020/21



4.3 Cervical Screening Wales

Cervical Screening Wales aims to reduce the incidence of, and morbidity and mortality from, invasive cervical cancer. Women and people with a cervix are invited every 3 years from the age of 25-49, with planned optimisation of the screening interval to 5 years for all ages from 2022. Women aged 50-64 are currently invited every 5 years.

Following the pause in screening programmes in March 2020, participants were invited for cervical screening as part of a phased restart from June 2020 to March 2021. Coverage of cervical screening across Wales is defined as the proportion of eligible participants who received an adequate test in the appropriate time period for their age. As of October 2021, **coverage across Wales is 69.5%**. This has declined from 73.2% reported in 2019/20. The minimum service standard for coverage is 70%

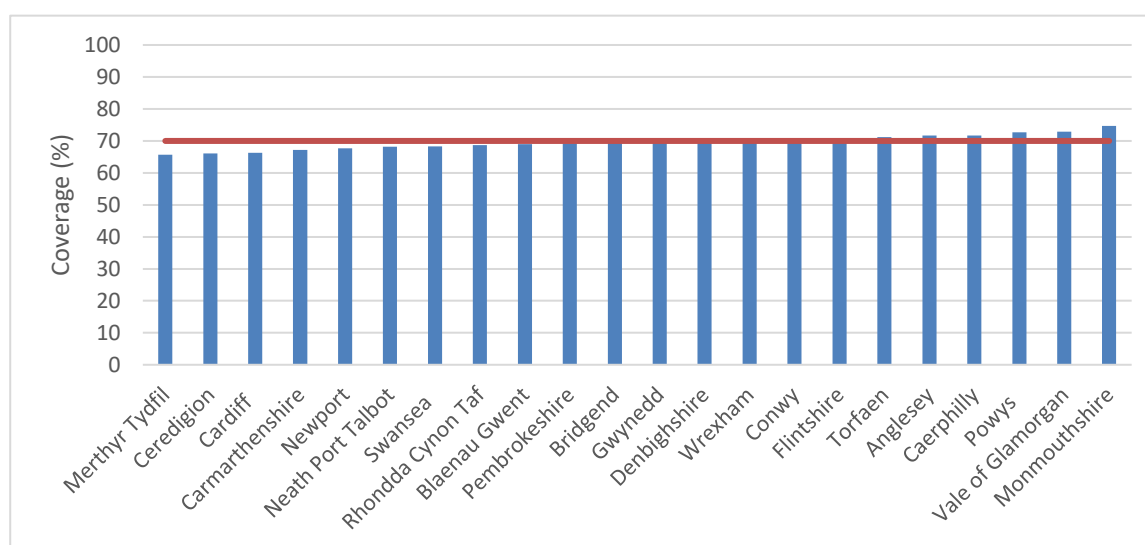
There was some geographical variation in coverage across Wales at Health Board level. Coverage was lowest in Hywel Dda University Health Board (HDUHB) at 67.7% and highest in PTHB at 72.7% (table 4).

Table 4: Coverage (%) of cervical screening by health board of residence, 2020/21

Health Board	Eligible (n)	Tested (n)	Coverage (%)
Aneurin Bevan UHB	145497	102826	70.7
Betsi Cadwaladr UHB	162889	114868	70.5
Cardiff & Vale UHB	125875	85541	68.0
Cwm Taf Morgannwg UHB	108003	74101	68.6
Hywel Dda UHB	88699	60021	67.7
Powys Teaching HB	30234	21982	72.7
Swansea Bay UHB	92960	63474	68.3
All-Wales	787407	547632	69.5%

There is greater variation in coverage of cervical screening at Local Authority area. Coverage of cervical screening is lowest in Merthyr Tydfil LA with an uptake of 65.7%, and highest in Monmouthshire LA of 74.7% (figure 3).

Figure 3: Coverage (%) of cervical screening by Local Authority of residence, 2020/21



4.4 Wales Abdominal Aortic Aneurysm Screening Programme (WAAASP)

Wales Abdominal Aortic Aneurysm Screening Programme (WAAASP) aims to halve abdominal aortic aneurysm (AAA) related mortality by 2025 in the eligible population. Men over the age of 65 are invited to attend for a one-off ultrasound screening.

Following the pause in screening programmes in March 2020, participants were invited for AAA screening as part of a phased restart from August 2020 to March 2021. A total of **4,209 men were invited** with **3,562 taking up their screening offer**. This compares to 17,045 eligible men invited by the programme in 2019/20 with 12256 attending their first scan and having a definitive result.

Uptake is reported as the proportion of eligible invited participants that were screened within six months of invitation making this the latest available data as of October 2021. Across Wales in 2020/21 **uptake of AAA screening was 84.6%**. This exceeds the minimum standard of 80%.

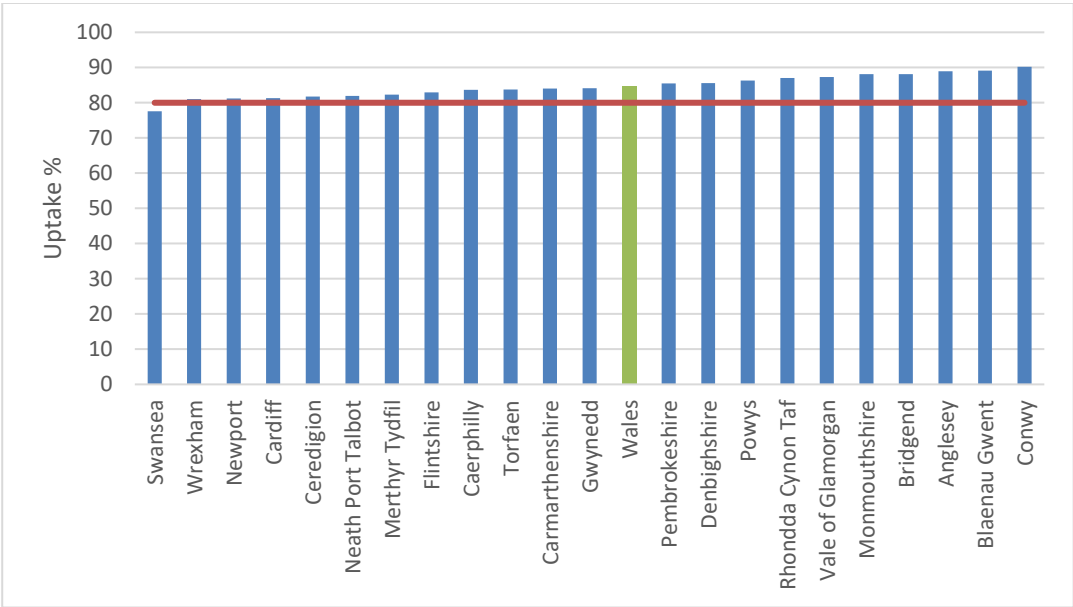
There is geographical variation across Health Board areas ranging from the lowest of 79.5% in Swansea Bay UHB (SBUHB) to a highest of 86.9% in CTMUHB (table 5).

Table 5: Uptake (%) of AAA screening by Health Board of residence, 2020/21

Health Board	Invited (n)	Tested (n)	Uptake (%)
Aneurin Bevan UHB	611	518	84.8
Betsi Cadwaladr UHB	1402	1201	85.7
Cardiff & Vale UHB	239	198	82.8
Cwm Taf Morgannwg UHB	527	458	86.9
Hywel Dda UHB	551	463	84.0
Powys Teaching HB	248	214	86.3
Swansea Bay UHB	552	439	79.5
All-Wales	4209	3562	84.6

Geographical variation in uptake of AAA screening also exists at a Local Authority level ranging from a lowest uptake in Swansea LA at 77.6% with the highest in Conway LA at 90.2% (figure 4).

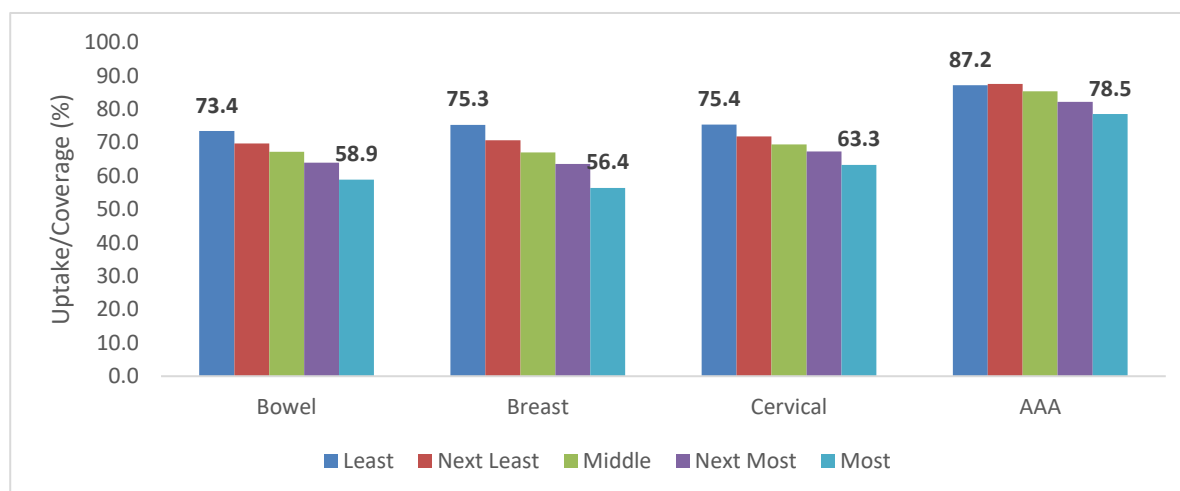
Figure 4: Uptake (%) of AAA screening by Local Authority of residence, 2020/21



5. Uptake by deprivation

In 2020/21, across all four adult screening programmes in Wales, people who live in **more deprived areas had lower uptake/coverage of screening** compared to people who live in less deprived areas. There is a social gradient with increasing deprivation associated with reducing uptake/coverage (figure 5).

Figure 5: Uptake/coverage (%) of screening programmes by deprivation quintile, 2020/21



The inequity gap, the difference between uptake/coverage in the least deprived communities compared to the most deprived communities ranged from 18.9% for Breast Test Wales, 14.5% for Bowel Screening Wales, 12.1% for Cervical Screening Wales with the lowest of 8.7% for WAAASP in 2020/21. Compared to 2018/19 the inequity gap has narrowed for Bowel and AAA screening but has widened for Breast and Cervical Screening (table 6).

Table 6: Inequity gap in uptake/coverage (%) by programme, 2020/21

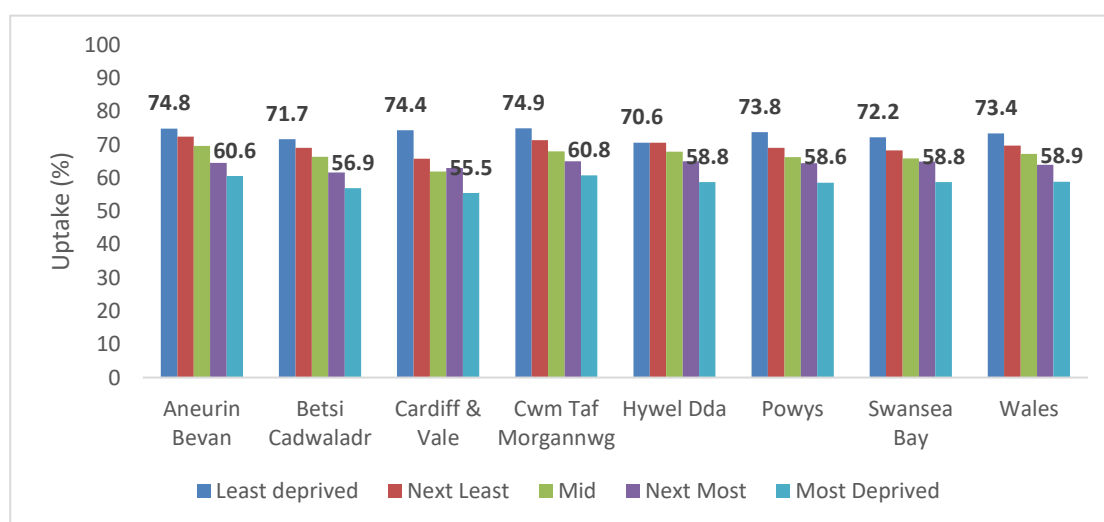
Programme	2020/21	2018/19	Change
Bowel	14.5%	16.5%	-2.0%
Breast	18.9%	15.9%	+3.0%
Cervical	12.1%	11.5%	+0.6%
AAA	8.7%	12.8%	-4.1%

Addressing the socio-economic gradient of uptake of screening is a key action to address health inequities. If those at greatest risk of health harms from conditions that are screened for such as bowel and cervical cancer are less likely to take up the screening offer this will exacerbating existing health inequities.

5.1 Uptake by deprivation in Bowel Screening Wales

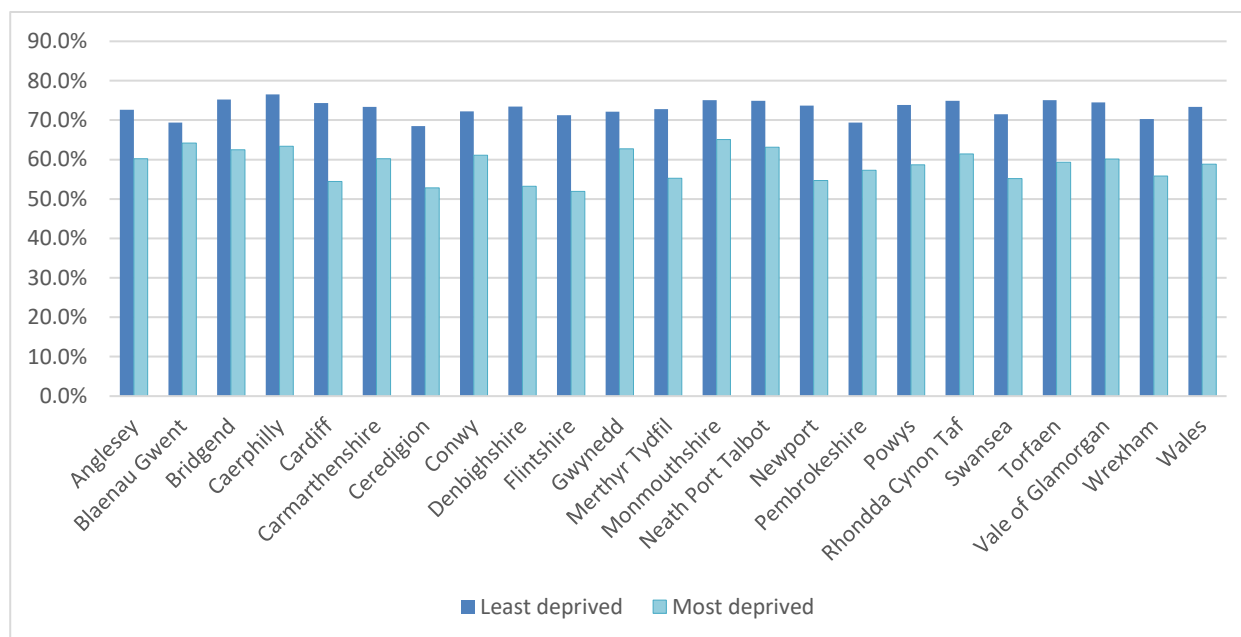
Across Wales in 2020/21, uptake of bowel screening was highest in the least deprived areas at 73.4% with lowest uptake in the most deprived areas at 58.9%. This trend is seen across all Health Board areas in Wales, with uptake of bowel screening highest in the least deprived areas and lowest in the most deprived areas. The inequity gap ranged from a highest of 18.9% in CVUHB to the lowest of 11.8% in HDUHB (figure 6).

Figure 6: Uptake (%) of bowel screening by deprivation quintile by Health Board area of residence, 2020/21



There is a social gradient for uptake of bowel screening for all the local authority areas in Wales with highest uptake in the least deprived areas and lowest uptake in the most deprived areas (figure 7).

Figure 7: Uptake (%) of bowel screening in the least and most deprived quintiles by Local Authority of residence, 2020/21

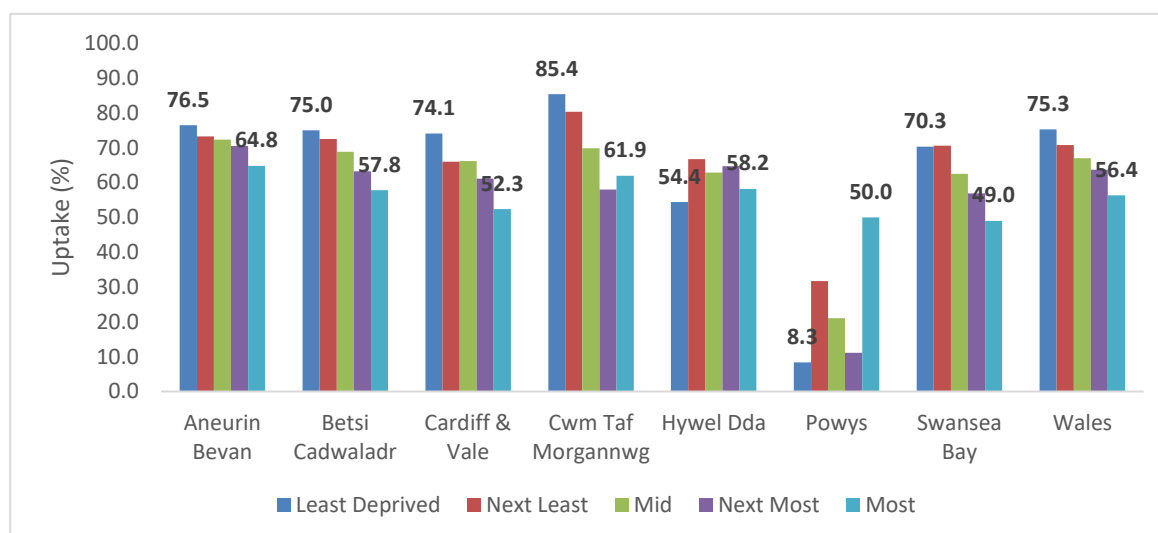


5.2 Uptake by deprivation in Breast Test Wales

Across Wales in 2020/21, uptake of breast screening was lowest in the most deprived areas at 56.4% and highest in the least deprived areas at 75.3%. This trend for decreasing uptake in breast screening with increased deprivation is demonstrated in Aneurin Bevan University Health Board (ABUHB), Betsi Cadwaladr University Health Board (BCUHB), CVUHB and SBUHB. The trend in the other health board areas is not linear, with CTMUHB having a small increase in uptake in their most deprived areas compared to the next most deprived communities.

In HDUHB and PTHB no clear pattern in uptake across the deprivation quintiles is seen. However, there are very small numbers in PTHB and in two of the LAs within HDUHB (Ceredigion LA and Pembrokeshire LA) that make the trend unreliable (figure 8).

Figure 8: Uptake of breast screening (%) by deprivation quintiles by Health Board area of residence, 2020/21



The inequity gap between the most deprived and the least deprived areas was greatest in CTMUHB at 23.5% which despite relatively high uptake in the most deprived quintile has the greatest uptake in Wales in the least deprived areas. The inequity gap is negative in PTHB and HDUHB though this is likely to represent small number providing unstable estimates.

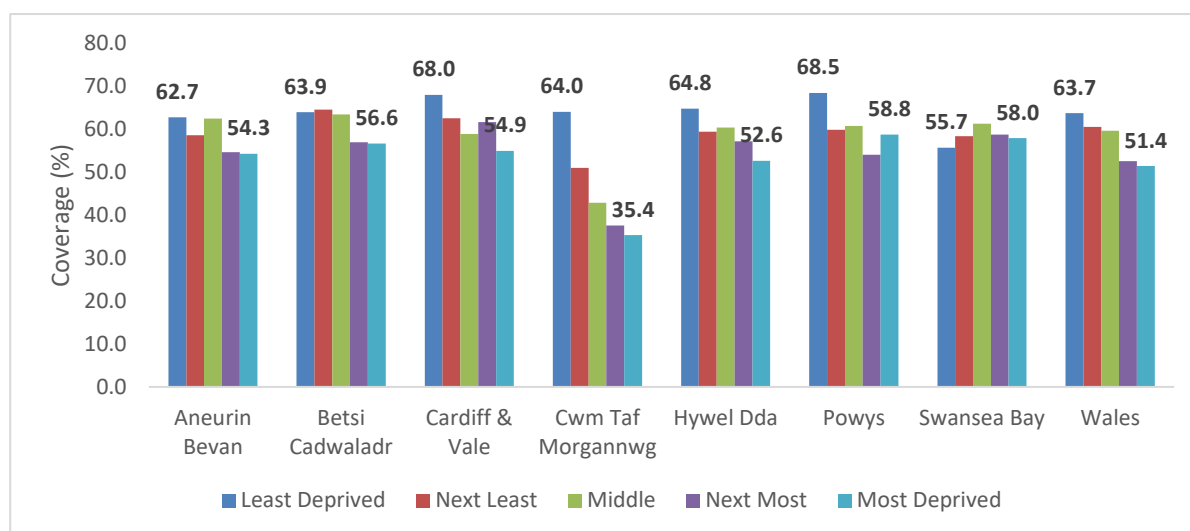
Due to small numbers within local authorities, it is not possible to present uptake by deprivation at this level. This will be presented in future reports when overall screening activity has increased.

5.3 Coverage by deprivation in Breast Test Wales

Across Wales, in 2020/21 coverage of breast screening was 57.7%. Coverage was lowest in the most deprived areas at 51.4% and highest in the least deprived areas at 63.7%. However, the trend is not replicated for all Health Board areas with a reversal of this trend in SBUHB with coverage lower in least and next least deprived quintiles (figure 9). The inequity gap between the most deprived and the least deprived areas was greatest in CTMUHB at 28.6%. The inequity gap is negative in SBUHB at -2.2%. Coverage is influenced by both uptake and round length that indicates the timeliness of participants call for screening within the appropriate time frame. As round length has increased

following the pause and reinstatement of screening services this will impact on coverage figures which should be therefore interpreted with caution.

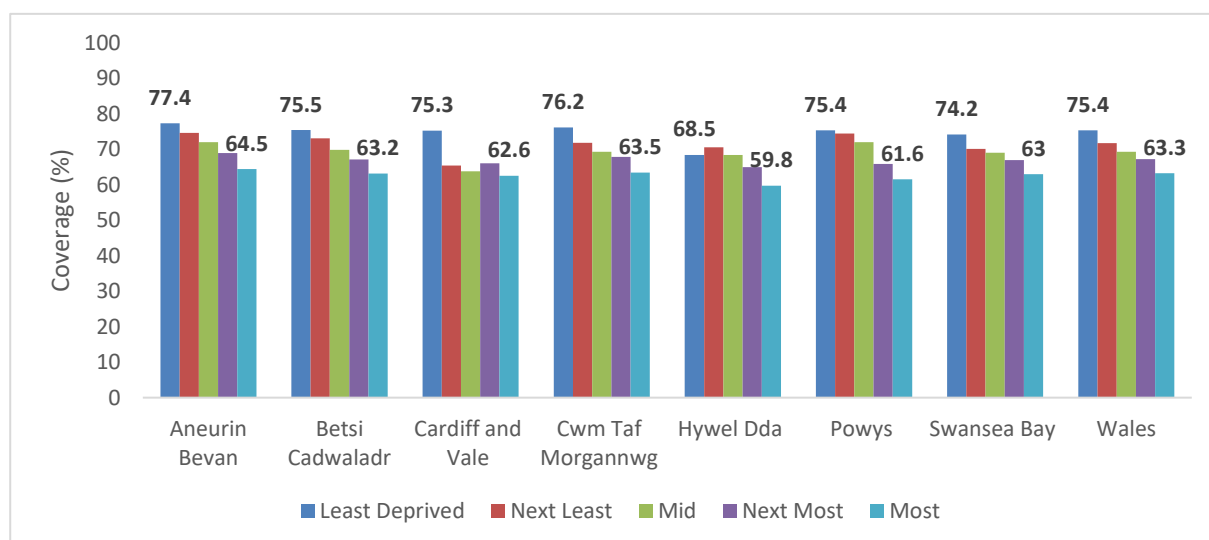
Figure 9: Coverage of breast screening by deprivation quintiles by Health Board area of residence, 2020/21



5.4 Coverage by deprivation in Cervical Screening Wales

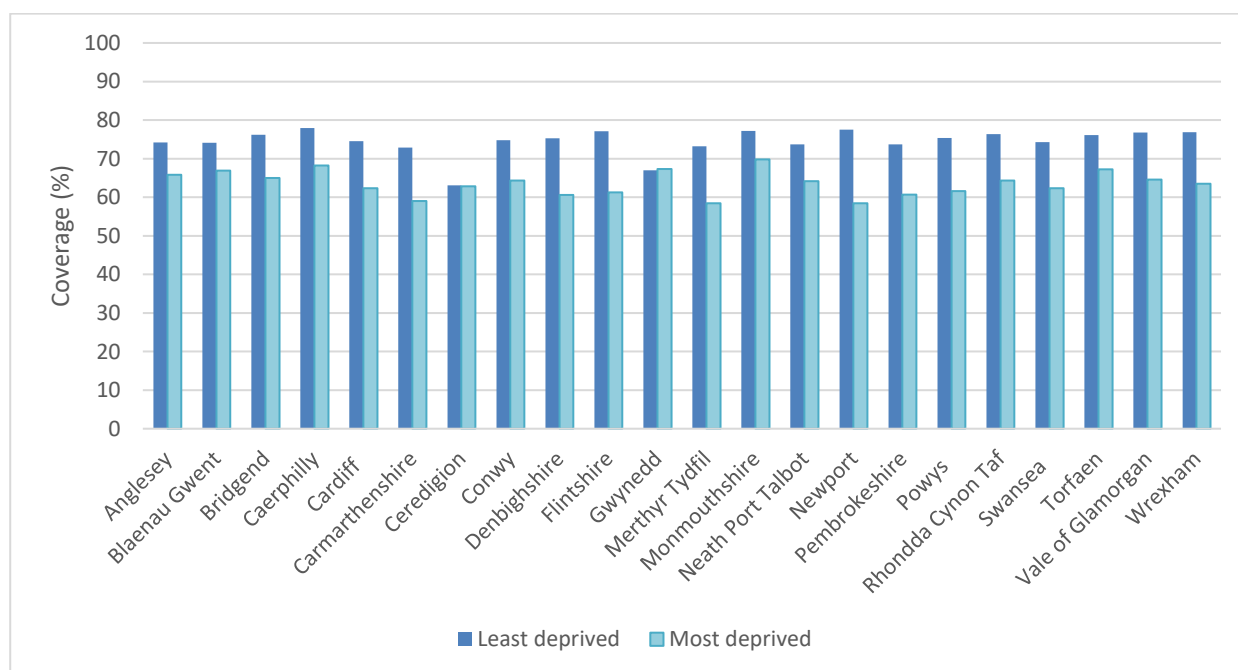
Across Wales, in 2020/21, coverage of cervical screening was highest in the least deprived areas at 75.4% with coverage lowest in the most deprived areas at 63.3%. The inequity gap, representing the difference between coverage in the least deprived communities compared to the most deprived communities was 12.1%. This trend was evident across all Health Board areas in Wales. The screening inequity gap in coverage between the most deprived and the least deprived areas is largest in ABUHB at 12.9% and lowest in HDUHB at 8.7% (figure 10).

Figure 10: Coverage (%) of cervical screening by deprivation quintiles by Health Board area of residence, 2020/21



There is a social gradient for coverage of cervical screening across the majority of local authority areas in Wales with highest uptake in the least deprived areas and lowest uptake in the most deprived. However, there are variations from this pattern in Gwynedd and Ceredigion Local Authority areas minimal variation in coverage across areas of deprivation is present (figure 11).

Figure 11: Coverage (%) of cervical screening in the least and most deprived quintiles by Local Authority of residence, 2020/21

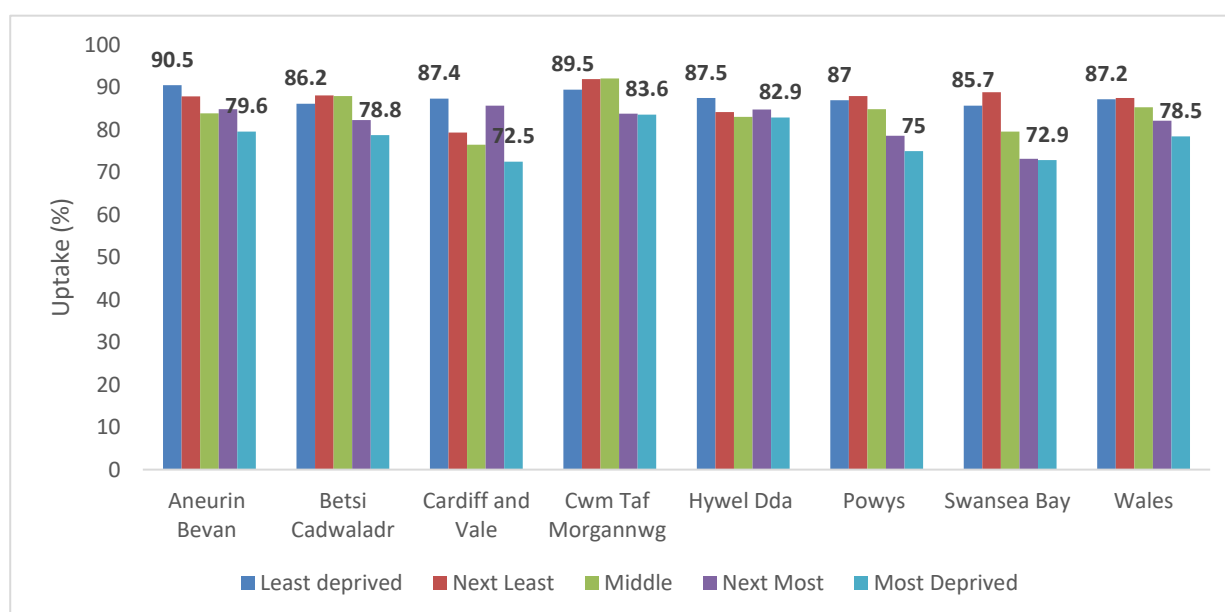


5.5 Uptake by deprivation in AAA screening

Across Wales, in 2020/21 uptake of Abdominal Aortic Aneurysm (AAA) screening was highest in the least deprived and next least deprived quintiles at 87.2% and 87.5% respectively with uptake lowest in the most deprived areas at 78.5%. The inequity gap, representing the difference between uptake in the least deprived communities compared to the most deprived communities was 8.7%.

However, the trend for a linear decline in uptake as deprivation increases is not demonstrated in all Health Board areas. In BCUHB and CTMUHB uptake is higher in the next least and mid deprivation quintiles in comparison to least deprived areas. In CVUHB uptake is higher in the next most deprived quintile compared to next least and mid quintiles (figure 12). Interpretation should consider the smaller number of invited participants during the restart of the programme. Small numbers due to breakdown into smaller geographical areas will be more susceptible to fluctuations in trend data.

Figure 12: Uptake (%) of AAA screening by deprivation quintiles by Health Board area of residence, 2020/21



The inequity gap in 2020/21 was greatest in CVUHB at 14.9%. However, in some health board areas such as HDUHB a narrower inequity gap of 4.6% is present.

Due to very small numbers for some Local Authority areas it is not possible within the 2020/21 report to present data at this geographical granularity as estimates within deprivation quintiles are unreliable. This will be presented in future reports when overall screening activity has increased.

6. Uptake by gender

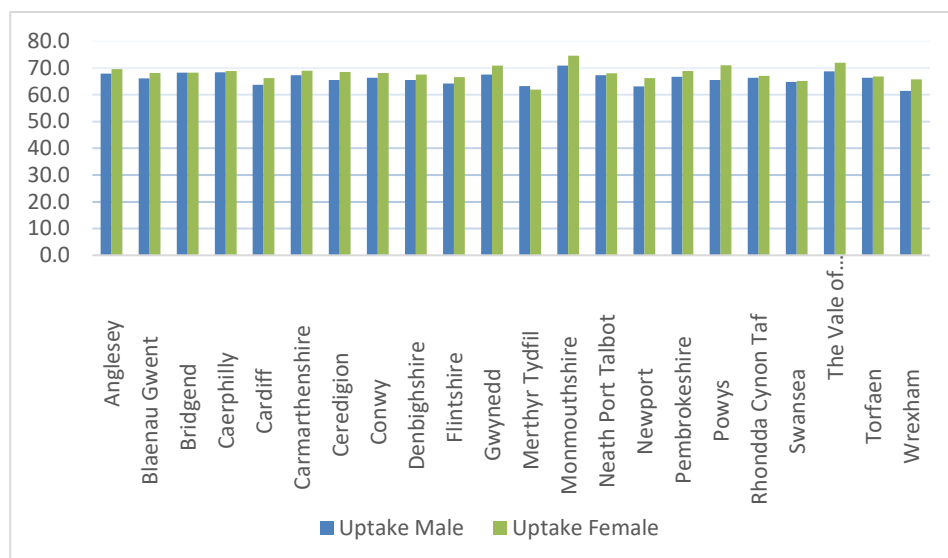
Bowel Screening Wales invites people of any gender to take part in bowel screening every two years. Across Wales, there is a **2% difference in uptake of bowel screening between males and females** with uptake in men lower at 66.1% compared to uptake in women at 68.1%. There is some variation by health board with no inequity gap seen in CTMUHB at 0.2% compared to a wider inequity gap in PTHB of 5.5% (table 7).

Table 7: Uptake (%) of bowel screening by gender, 2020/21

Health Board	Male	Female	Inequity Gap
Aneurin Bevan UHB	67.1	69.0	1.9
Betsi Cadwaladr UHB	65.3	67.9	2.6
Cardiff and Vale UHB	65.4	68.2	2.8
Cwm Taf Morgannwg UHB	66.6	66.8	0.2
Hywel Dda UHB	66.8	68.9	2.1
Powys Teaching HB	65.5	71.0	5.5
Swansea Bay UHB	65.8	66.3	0.5
All-Wales	66.1	68.1	2.0

Uptake by gender of bowel screening varied across Local Authority areas in Wales in 2020/21. Uptake was higher in women compared to men in most local authority areas with the largest inequity gap between men and women in Powys at 5.5% followed by Wrexham at 4.3%. However, in Merthyr Tydfil LA there was a reversal of this trend with higher uptake in men (63.2%) in comparison with women (61.9%). In Bridgend, Caerphilly, Neath Port Talbot, Rhondda Cynon Taf, Swansea and Torfaen LA areas the gap between uptake of men and women was less than 1% (figure 13).

Figure 13: Uptake (%) of bowel screening by gender by Local Authority of residence, 2020/21



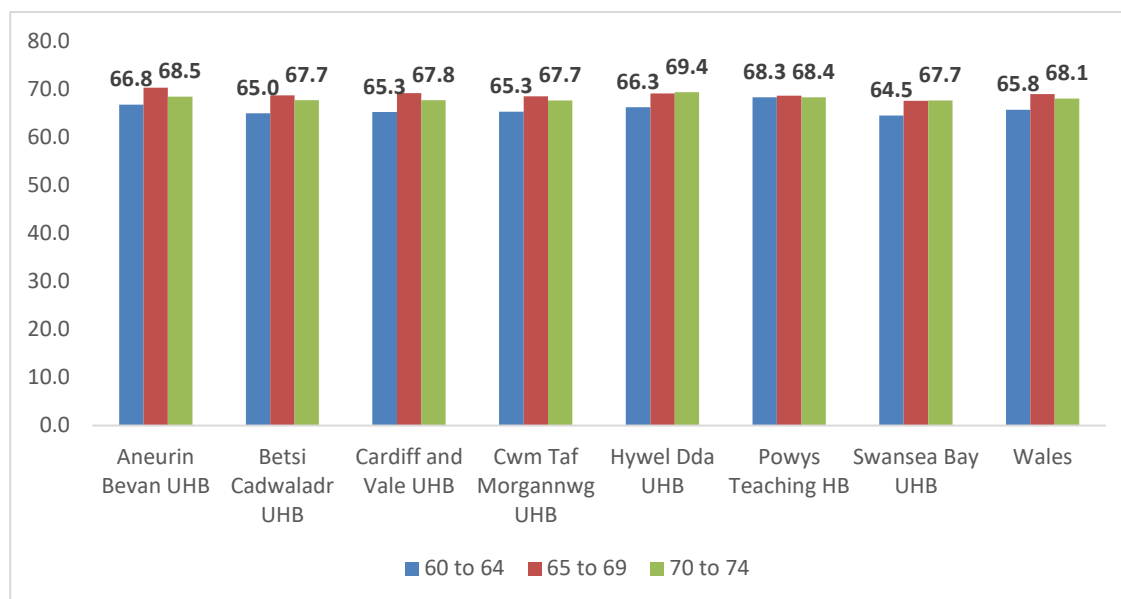
7. Uptake by age

The three cancer screening programmes invite participants on an interval basis, uptake/coverage can therefore be explored for different age groups. The age of invited participants will also influence what type of invite the individual has received as the youngest age groups will be invited for the first time and older age groups will be invited for a recall appointment.

7.1 Uptake by age in Bowel Screening Wales

Across Wales in 2020/21, **uptake of bowel screening is lowest in the youngest age group (60 to 64 years) eligible for screening** at 65.8% compared to 69% for those aged 65 to 69 year and 68.1% for those aged 70 to 74. This trend is seen in all Health Board areas across Wales apart from PTHB where uptake is equivalent across all age groups invited (figure 14).

Figure 14: Uptake of bowel screening by health board by age groups, 2020/21



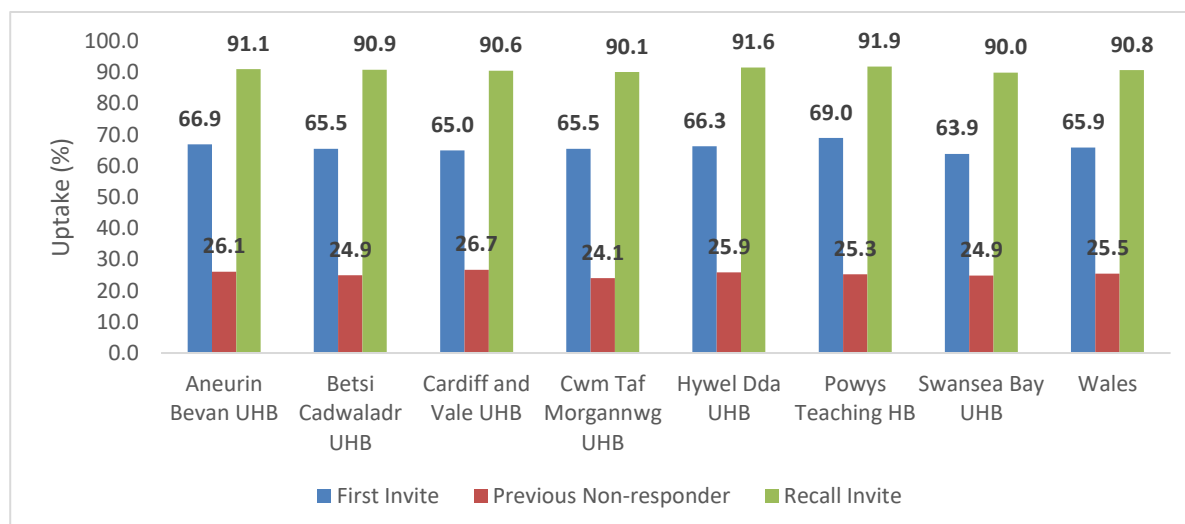
7.1.1 Uptake by type of invitation

In 2020/21, **people invited for bowel screening for the first time had a lower uptake** at 65.9% in Wales in comparison with people invited who had previously undertaken bowel screening at 90.8%. Across Health Board areas in Wales, uptake for people invited for the first time ranged from 63.9% in SBUHB to 69% in PTHB.

Across all Health Board areas uptake by invitation was highest in those who had responded to a previous screening invitation at 90.8%. There was little geographical variation across health boards ranging from 90% in SBUHB to 91.9% in PTHB.

Uptake of a screening invite was lowest in those who had previously not responded to their invite at 25.5% across Wales. There was little variation in uptake at Health Board level ranging from 24.1% in CTMUHB to 26.7% in CVUHB.

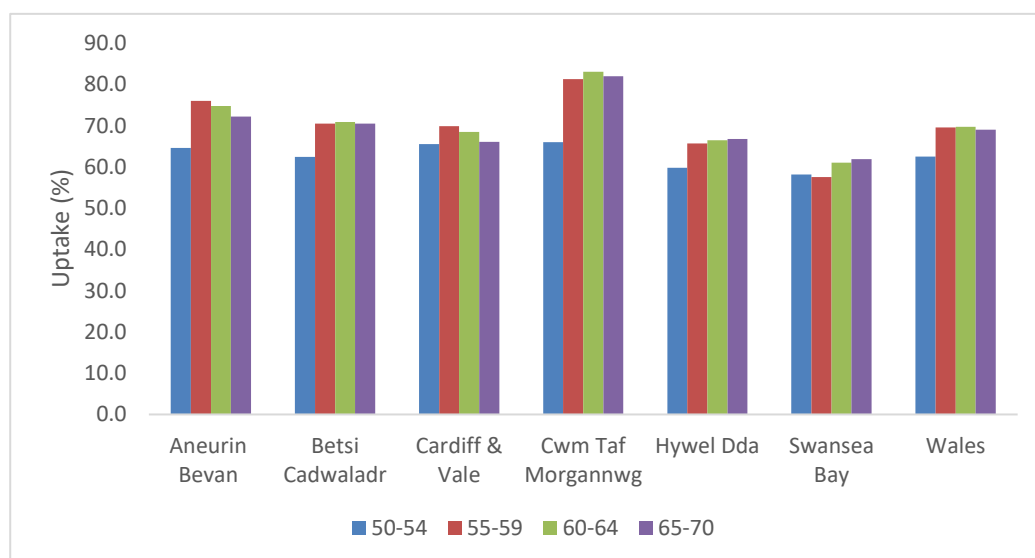
Figure 15: Uptake (%) of bowel screening by invite type by Health Board of residence, 2020/21



7.2 Uptake by age in Breast Test Wales

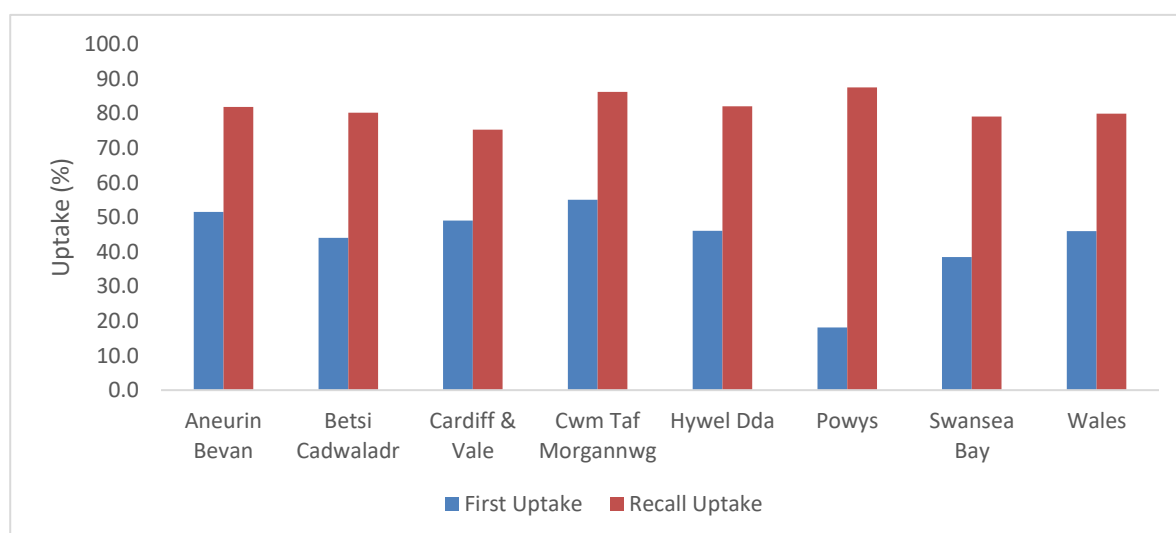
Across Wales in 2020/21, **uptake of breast screening is lowest in the youngest age group (50-54 years)** eligible for screening at 62.5% compared to the older age groups (65 years and over) at 69%. The trend for lower uptake in younger age groups is present across Health Boards in Wales. This trend is most marked in CTMUHB with uptake in those aged 50-54 at 59.8% compared to 65.7% in the next age group (figure 16). Data is not presented for PTHB as with only 102 women invited for screening during 2020/21 the small numbers make analysis of underlying trends difficult.

Figure 16: Uptake (%) of breast screening by age group by Health Board of residence, 2020/21



The younger age group will include those invited for the first time. Difference in uptake is noted between women invited for the first time and recall women who had taken up a previous screening offer. During 2020/21, **uptake for first invitation women was 46% compared to 80% for women who were recalled** having previously taken up a screening invitation. This trend was noted across all health board areas (figure 17).

Figure 17: Uptake (%) of breast screening by invitation type by Health Board area of residence, 2020/21



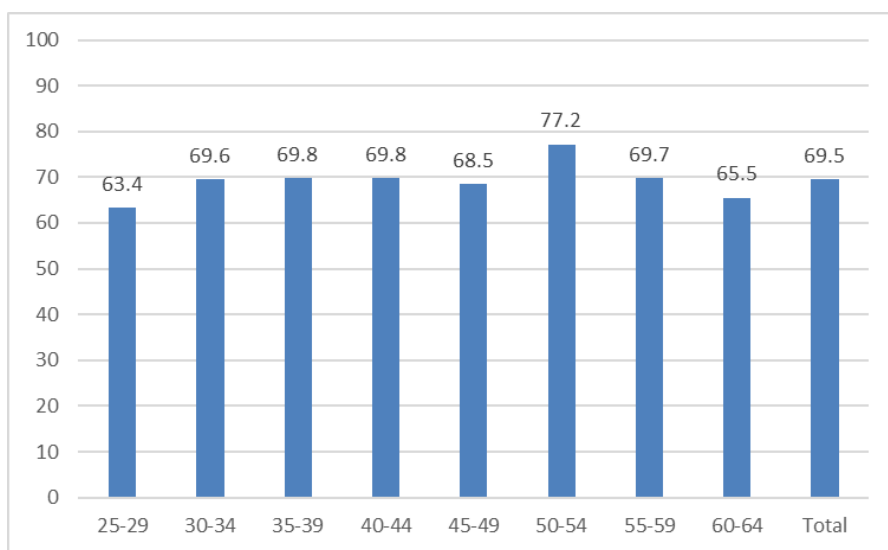
It should be noted from January 2021 there was a change in the invitation process for women invited for the first time, moving to a pilot of open

appointments rather than fixed time appointments which makes this data not comparable to previous years. The impact of open invitations on uptake for prevalent women is being explored as part of an evaluation of the pilot.

7.3 Coverage by age in Cervical Screening Wales

Across Wales in 2020/21, **coverage of cervical screening is lowest in the youngest age group (25-29 years)** eligible for screening. Coverage of eligible participants aged 25-29 is 63.4% compared to 77.2% in participants aged 50-54 (figure 18).

Figure 18: Coverage of cervical screening by age group in Wales, 2020/21



The trend for lower uptake in younger age groups is present across all Health Boards in Wales. This trend is most marked in Cardiff and Vale UHB with a 7.3% gap in coverage between those aged 25-29 at 58.8% compared to 66.1% in the next age group (figure 19).

8. Discussion

This first report from the Screening Division to focus on inequity in screening participation, has demonstrated that the offer of screening is not taken up equitably across the adult screening programmes in Wales. People living in the more deprived areas of Wales have lower uptake of screening for all the adult screening programmes in Wales compared to people living in the least deprived areas. There is a social gradient, with increasing deprivation resulting in decreasing participation in screening. As people from more deprived communities have higher rates of cancer mortality from bowel, breast and cervical cancer¹, the people who are at greatest risk have the lowest uptake of preventative screening that can save lives and reduce complications.

There is lower uptake in people from the youngest age cohorts for bowel, breast and cervical screening. The difference in uptake for the youngest age cohorts in breast and cervical screening compared to the overall uptake was 6.1% and 4.6% respectively. The difference in uptake for bowel screening is smaller at 1.8%. Within the bowel screening programme there is a small difference in uptake by gender with men less likely to take up their offer than women.

The data presented within this report is routinely collected as part of programme delivery. It is therefore limited to factors which are currently recorded within existing information systems. To ensure that our action to address screening inequities is data driven we require further understanding of screening uptake in communities where research and engagement tells us that uptake may be low such as minority ethnic communities and the trans community. Developing inclusion of this data will be taken forward as part of the Screening Inequity Strategy.

The lower level of screening activity in 2020/21 compared to pre-pandemic levels requires caution in presenting data at lower geographical areas. Data at level of GP cluster and practice is important for colleagues within Primary Care to focus actions and activities. As screening activity increases future

reports will aim to provide more granular data to inform targeted action. In addition to annual reporting, the Screening Division aim to provide real time monitoring of screening activity through a data dashboard available to NHS Wales colleagues.

The report findings confirm existing evidence of inequity of uptake in other UK screening programmes and supports insights gathered as part of screening engagement. This demonstrates the continued need to understand barriers to screening for people such as from more deprived communities in Wales. These barriers are complex, not just limited to access to programmes as they exist across programmes delivered at screening centres, primary care and home based screening. The Screening Inequity Strategy has highlighted commitments to address potential barriers including ensuring appropriate health literacy for communications with participants and clear messages on the role and purpose of screening.

Within the screening division the data presented in this report will inform our planning to increase uptake in areas of low uptake and also be also to evaluate service changes within programmes to ensure that any changes in delivery doesn't worsen existing inequities. Through our collaborative working with colleagues in Local Health Boards we also aim for this data to inform targeted community led approaches coordinated across Primary Care and Public Health.

This report has focused on uptake which is only the start of the screening journey. The overarching aim of screening is to improve health outcomes for the people of Wales through reduced morbidity and mortality. As we work to improve health inequities across the screening pathway we will also develop how we can incorporate data at different stages of the clinical pathway including access and availability of diagnostic tests and treatment to inform the response needed to reduce health inequities.

Definitions

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

Eligible

Resident in Wales and registered with GP and defined as within appropriate population cohort who were invited in time period.

Uptake

Participants were counted as having responded to their invitation if they were invited during the April – March time period and attended within six months of invitation

Coverage

Proportion of eligible population who were invited and screened within the appropriate time period

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.

ⁱ NHS Screening. 2022. NHS Screening. Available online at: [NHS screening - NHS \(www.nhs.uk\)](https://www.nhs.uk). Last accessed 17/01/2022