Rhaglen Sgrinio Ymlediadau Aortig Abdomenol Cymru
Wales Abdominal Aortic Aneurysm Screening Programme

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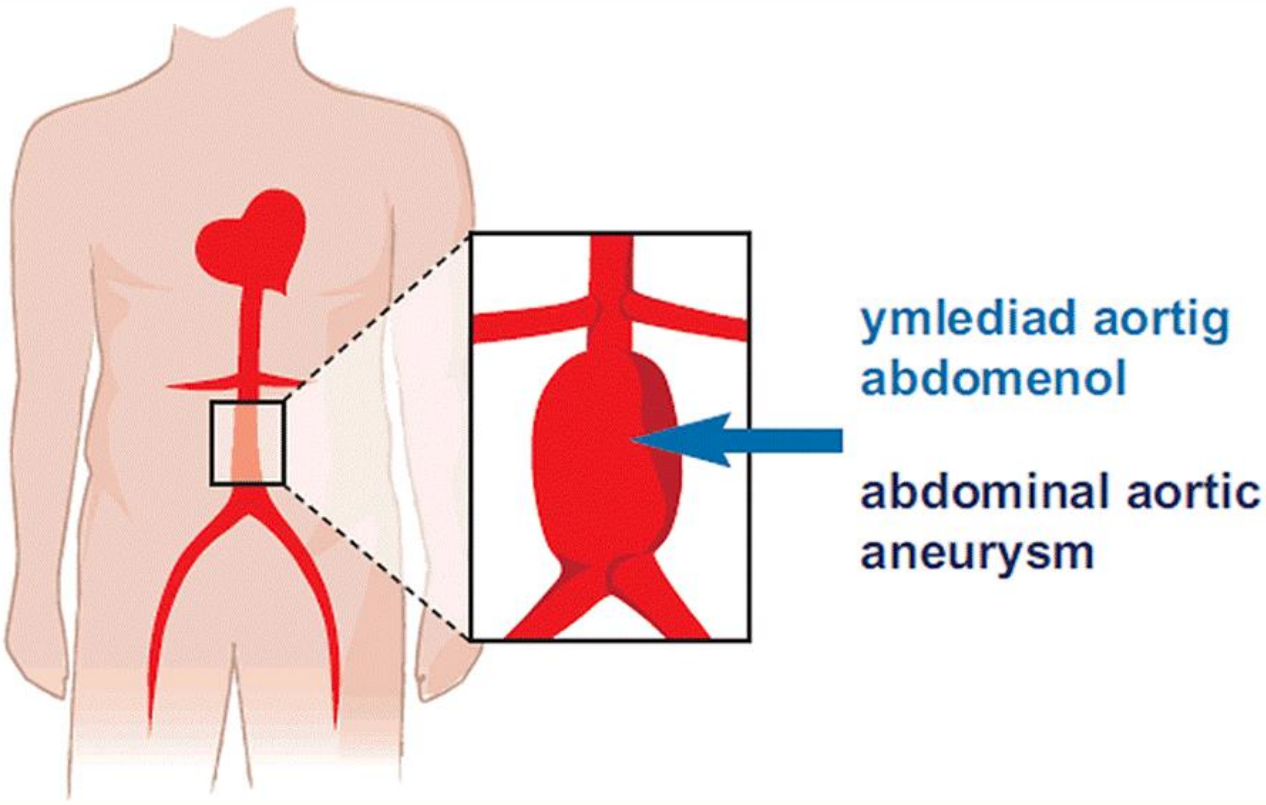
Public Health Wales

Wales Abdominal Aortic Aneurysm Screening Programme

Annual Statistical Report

2020-21



Screening Division of Public Health Wales Publication

About us

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

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

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

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

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

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

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

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

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

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

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

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

Further information

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

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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 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 supress numbers lower than five when the data is potentially sensitive.

This document is also available in Welsh.

Contents

Tables and Graphs

1 Introduction

This is the sixth annual statistical report published by the Wales Abdominal Aortic Aneurysm Screening Programme (WAAASP).

WAAASP was launched in May 2013 and aims to halve abdominal aortic aneurysm (AAA) related mortality by 2025 in the eligible population through a systematic screening programme for 65 year-old men resident in Wales. Since 1 May 2015, men who have never been for an NHS AAA screening scan, and who have not been offered AAA screening as they turned 65 before it was available in Wales, can contact the local screening offices to request an AAA screening scan.

Research evidence has shown that a high-quality screening programme can reduce deaths from ruptured aortic aneurysm by around 50% in men aged 65 – 74 years[1]. In February 2007, the UK National Screening Committee approved the introduction of AAA screening for men aged 65 using abdominal ultrasound scanning provided:

- Invited men were given clear information about the risks of elective surgery, and
- Vascular networks were in place to treat individuals referred from screening

In March 2020, the difficult decision was made to pause some of the national screening programmes in Wales, including WAAASP, in response to the COVID-19 pandemic. The decision to pause primary screening affected clinics scheduled for after 17 March, and the decision to pause self-referrals was taken on 24 March. Screening restarted in August, and the pause will have affected some measures such as uptake.

1.1 'Key messages' for the public

- Undertaking the screening test reduces the risk of dying from an AAA. Finding an AAA early gives the man the best chance of treatment and survival
- The aorta is the main blood vessel that supplies blood to the body. An AAA is a swelling of the aorta in the abdomen, which if left undetected, may split or rupture

[1] Ashton HA, Buxton MJ, Day NE, Kim LG, Marteau TM, Scott RAP et al. (2002) Multicentre Aneurysm Screening Study Group. The Multicentre Aneurysm Screening Study (MASS) into the effect of abdominal aortic aneurysm screening on mortality in men: a randomised controlled trial. *Lancet*;360 (9345):1531-9

- AAA screening involves a simple ultrasound scan to measure the abdominal aorta
- AAA screening is a free NHS test carried out in community clinics
- Taking part in AAA screening is the man's choice

1.2 Programme delivery

The Screening Division of Public Health Wales is responsible for managing, delivering and quality assuring the programme. The programme employs a Head of Programme, Programme Manager, Quality Assurance Vascular Surgical Lead, Clinical Imaging Advisor, Quality, Education and Training Lead, three clinical skills trainers and an All-Wales Administration Coordinator with support from a secretarial and administration team. Although an all-Wales programme, there is regional coordination by three Regional Coordinators and a team of 19 screeners who deliver the screening in the community.

1.3 Screening pathway

- 65 year-old men resident in Wales and registered with a GP are invited for a one-off ultrasound scan to check whether they have an AAA
- The test involves a simple scan of the abdominal aorta, measuring the widest part of the aorta
- Ultrasound scanning is performed in 66 community clinics throughout Wales, including community hospitals, health clinics, primary resource centres and GP practices. Screening is undertaken in HMP Berwyn, HMP Parc, HMP Usk and HMP Prescoed
- Men with an abdominal aortic diameter of less than 3cm are discharged from the programme
- Men with a small or medium AAA are included in the surveillance programme and are offered:
    - small AAA (3 - 4.4cm) an annual scan
    - medium AAA (4.5 - 5.4cm) a scan every three months
    - a phone appointment with the AAA surveillance nurse to discuss the result and its health implications
    - encouragement to make an appointment with their GP for lifestyle and health advice, blood pressure monitoring and best medical therapy
- Men with a large AAA of 5.5cm or more (or a growth of 1cm or more in 12 months) are referred to the regional elective Vascular Network Multi-professional team (Multi-disciplinary Team or MDT)

- Men with a non-visualised aorta are usually offered a second appointment with WAAASP. If the second appointment is unsuccessful, the man is referred to a medical imaging department to measure his abdominal aorta

More information is available at www.aaascreening.wales.nhs.uk

2 Headline statistics

This report covers the time period from April 2020 to March 2021. Due to the Covid-19 pandemic AAA screening was paused for five months on 18 March 2020.

Uptake is defined as those invited in the year 2021-21 receiving a scan by 30 June 2021. Uptake has been significantly affected by the pause in AAA screening. As no clinics were operating from 18 March, men invited towards the end of the financial year who did not attend their first appointment had reduced opportunity to reschedule or be invited for a second appointment.

- The uptake for participants invited between April 2020 and March 2021 was 84.6%, ranging from 79.5% in Swansea Bay University Health Board to 86.9% in Cwm Taf Morgannwg University Health Board

- Uptake figures are higher in those men living in the least deprived areas (87.5%, Quintile 2) compared to the most deprived areas (78.5%, Quintile 5)

- Uptake of AAA screening decreased in 2019-20 to below the 80% target at 71.9%, although this reflects the impact of the COVID pandemic on the last few months of the financial year; However, uptake has since increased back to above the 80% target.

In April 2020 – March 2021:

- 4,209 eligible men were invited by the programme. Of these, 3,562 men attended for their first WAAASP scan and had a definitive scan result

- Of the men who attended for their screening, 44 men had an AAA (1.1%) detected by the screening programme

- 44 men scanned needed a referral to the elective vascular network MDT. 90.9% of these men were referred within two working days of the scan being taken

- 37 men had open or endovascular surgery. This is a different cohort to the men who were scanned and referred in the year. Two (5.4%) of these had their surgery completed within four or eight weeks of the referral being received, depending on the size of the AAA detected

- 525 (47.0%) surveillance scans were taken within standard from a possible 1,117 opportunities (medium AAA on quarterly surveillance within 11 to 15 weeks, small AAA on annual surveillance within 50 to 56 weeks of their previous successful scan)

- 99 self-referred men were screened with six AAA (6.1%) detected

3 Data

3.1 Uptake

Standard: A minimum of 80% of invited men attending AAA screening are tested.

At an all-Wales level, uptake for 2020/21 was 84.6%. This is a significant increase from 71.9% in 2019/20 when the standard was not met. This reflects the impact of the COVID pandemic on uptake..

Table 1a: AAA screening uptake by health board of residence

Health Board	Invited	Tested	% Uptake
Aneurin Bevan University	611	518	**84.8**
Betsi Cadwaladr University	1,402	1,201	**85.7**
Cardiff & Vale University	239	198	**82.8**
Cwm Taf Morgannwg University	527	458	**86.9**
Hywel Dda University	551	463	**84.0**
Powys Teaching	248	214	**86.3**
Swansea Bay University	552	439	**79.5**
Unknown	79	71	**89.9**
All Wales	**4,209**	**3,562**	**84.6**

Note: uptake stated (of those eligible and invited in the year, number tested by 30 June 2021). Unknown refers to men who cannot be allocated to a health board, however they are included in the all-Wales total.

The following table shows uptake each month throughout the year. It demonstrates consistent good performance at the start of the year, followed by low uptake at the start of 2020.

Table 1aa: AAA screening uptake by month of invite

Year	Month	Invited	Tested	% Uptake
2020	April	0	0	0
2020	May	0	0	0
2020	June	0	0	0
2020	July	0	0	0
2020	August	0	0	0
2020	September	149	128	85.9
2020	October	284	250	88.0
2020	November	369	323	87.5
2020	December	615	528	85.9
2021	January	755	652	86.4
2021	February	972	810	83.3
2021	March	1,065	871	81.8
Total		4,209	3,562	84.6

Graph 1a: AAA screening uptake by health board of residence (%)

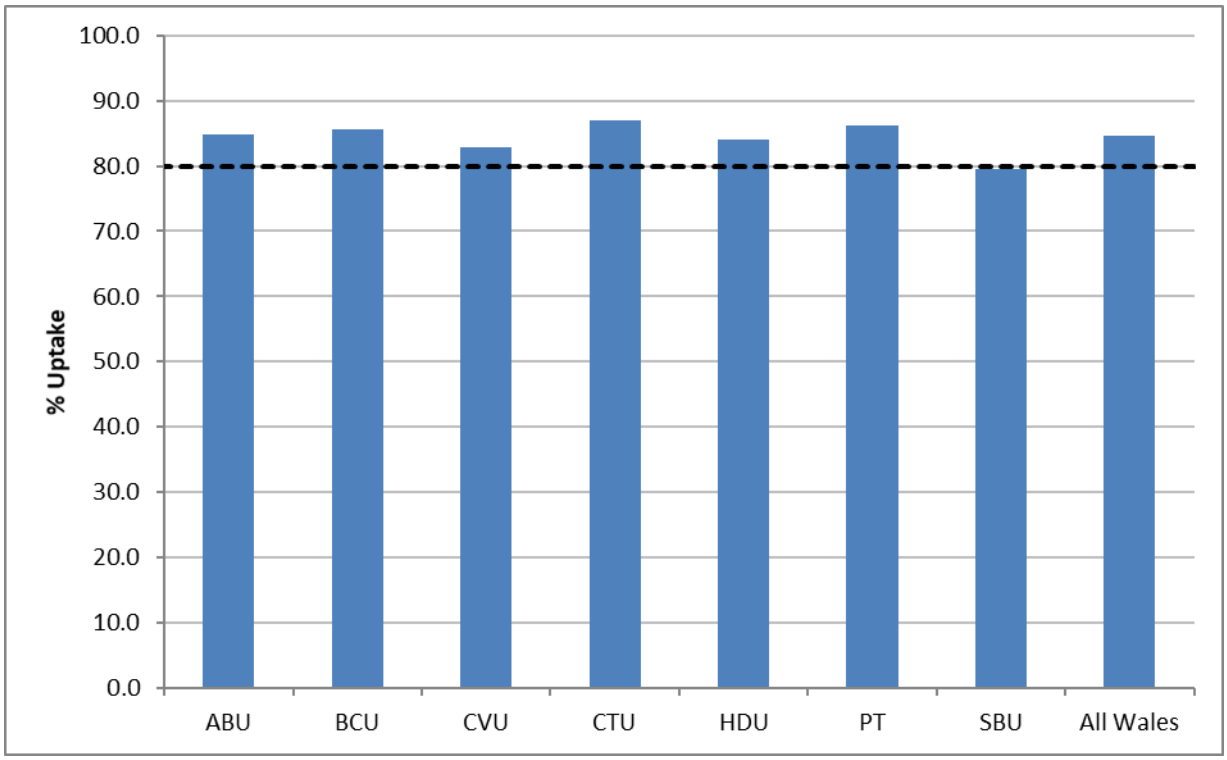
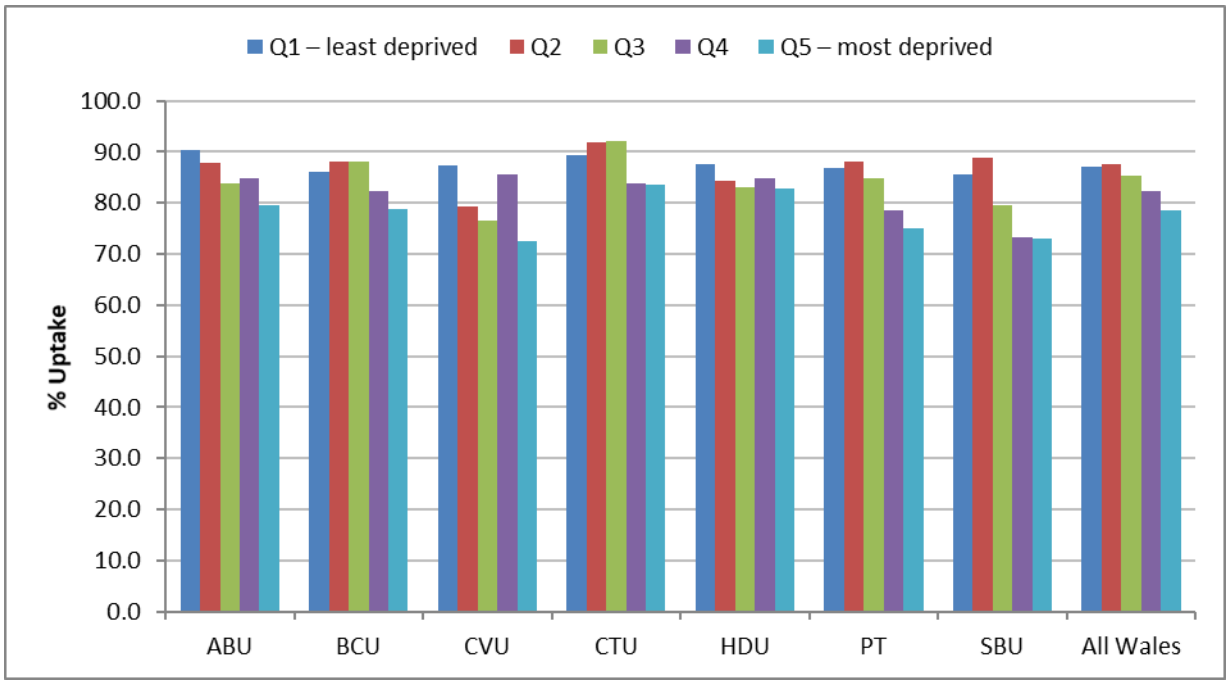


Table 1b: AAA screening uptake by deprivation quintile and health board of residence (%)

Health Board	Q1 – least deprived	Q2	Q3	Q4	Q5 – most deprived	Total
Aneurin Bevan University	90.5	87.9	83.9	84.9	79.6	**84.8**
Betsi Cadwalader University	86.2	88.1	88.0	82.3	78.8	**85.7**
Cardiff & Vale University	87.4	79.4	76.5	85.7	72.5	**82.8**
Cwm Taf Morgannwg University	89.5	92.0	92.1	83.8	83.6	**86.9**
Hywel Dda University	87.5	84.2	83.1	84.8	82.9	**84.0**
Powys Teaching	87.0	88.0	84.9	78.6	75.0	**86.3**
Swansea Bay University	85.7	88.9	79.6	73.2	72.9	**79.5**
Unknown	-	-	-	-	-	**89.9**
All Wales	**87.2**	**87.5**	**85.3**	**82.2**	**78.5**	**84.6**

Note: Unknown refers to men who cannot be allocated to a health board, however they are included in the all-Wales total.

Graph 1b: AAA screening uptake by deprivation quintile and health board of residence (%)



This shows that, in general across all the health boards, uptake decreases as deprivation score increases. It should be noted that Quintile 5 in Powys is composed of small numbers.

3.2 Non-visualised

Standard: ≤3% of consented appointments resulting in a non-visualised aorta.

Table 2: Non-visualised rate by health board of residence

Health Board	Scans	Non-visualised	Non-visualised Rate (%)
Aneurin Bevan University	812	14	**1.7**
Betsi Cadwaladr University	1,515	20	**1.3**
Cardiff & Vale University	471	8	**1.7**
Cwm Taf Morgannwg University	742	16	**2.2**
Hywel Dda University	675	0	**0.0**
Powys Teaching	361	5	**1.4**
Swansea Bay University	579	0	**0.0**
Unknown	109	3	**2.8**
All Wales	**5,264**	**66**	**1.3**

Note: non-visualised data refers to the number of completed appointments where the abdominal aorta was not seen.

3.3 Men who self-refer

Since 1 May 2015, men aged over 65 who have not received an NHS ultrasound screening scan for AAA can self-refer by contacting the screening programme to request an appointment. It is anticipated that the number of men self-referring for AAA screening will decline as the programme matures.

During 2020-21, there were 99 self-referred men scanned with six (6.1%) AAA detected. This only includes men who have not previously been invited by the programme.

3.4 Abdominal aortic aneurysms detected

Standard: Of those screened, it is expected that 1% will have an AAA (≥3cm).

Table 3: Number of those screened that have an AAA (≥3cm) detected by health board of residence

Health Board	Attended	AAA Total	Detection Rate (%)
Aneurin Bevan University	564	6	**1.1**
Betsi Cadwaladr University	1,201	11	**0.9**
Cardiff & Vale University	318	4	**1.3**
Cwm Taf Morgannwg University	581	4	**0.7**
Hywel Dda University	514	7	**1.4**
Powys Teaching	306	5	**1.6**
Swansea Bay University	448	4	**0.9**
Unknown	86	3	**3.5**
All Wales	**4,018**	**44**	**1.1**

Note: Men with AAA (≥3cm) detected are only counted on first definitive scan not surveillance scans. Non-visualised is not a definitive scan result. Unknown refers to men who cannot be allocated to a health board, however they are included in the all-Wales total.

3.5 AAA surveillance uptake

The surveillance uptake for this time period 2020-21, includes both men with a medium AAA detected, who are invited for quarterly surveillance, and men with a small AAA detected, who are invited for annual surveillance.

During 2020-21, 525 surveillance appointments were attended (47.0%) within standard from a possible 1,117 opportunities (men with medium AAA on quarterly surveillance should be re-scanned within 11 to 15 weeks, and men with small AAA on annual surveillance should be re-scanned within 50 to 56 weeks of their previous successful scan).

3.6 Referral to multi-disciplinary team

During 2020-21, 44 men were scanned and needed a referral to the elective vascular network MDT. This does not include referrals to on call vascular services (i.e. those with a very large AAA detected). Of the total referred, 90.9% were referred within two working days of the scan being taken.

37 men had open or endovascular surgery. This is a different cohort to the men who were scanned and referred in the year. Two (5.4%) of these had their surgery completed within four or eight weeks of the referral being received, depending on size of AAA detected. Compliance with this timeliness standard has been discussed at the joint WAAASP and EVN MDT Coordinators meetings. The MDT coordinators submit an exception report for all men who breach the timeliness of repair standard and/ or have the repair in a spoke hospital rather than the agreed centralisation site.

There is a decrease in compliance of this standard from the previous Annual Statistical Report. In 2019-20, 12 men (24.0%) had their surgery within the timeliness standard. The reasons for the delay in treatment during both years are multifactorial and include:

- Men with co-morbidities
- Reduction in theatre capacity
- Delays in pre-operative diagnostic tests
- Variation in progress in the development of the regional elective vascular networks

4 Definitions

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

Eligible
For uptake calculations, eligible men were those resident in Wales who were invited in the time period. Men who were registered manually (such as self-referrals) are excluded. Men invited who were ceased from the programme in the time period due to being out of cohort are removed.

Uptake
Men were counted as having responded to their invitation if they were invited during the April – March time period and attended by 30 June 2020.

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.

Result
A definitive scan result excludes those where the final outcome is that the abdominal aorta could not be visualised.

5 Production team

The production team for this report are all employed within Public Health Wales and are listed below.

Jeremy Surcombe	Head of Wales Abdominal Aortic Aneurysm Screening Programme
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