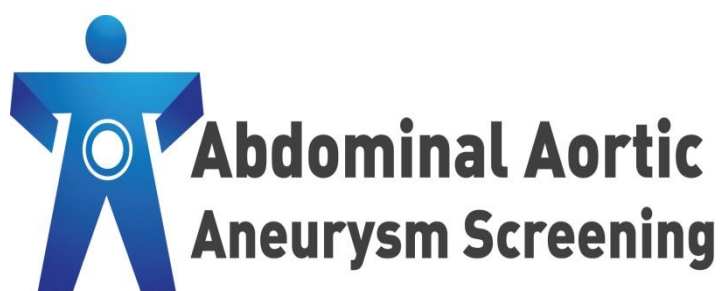

Northern Ireland Abdominal Aortic Aneurysm (AAA) Screening Programme

Annual Report 2016-17



About this publication

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- NI AAA Screening Programme Co-ordinating Group

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Section 1:

Summary and Highlights for 2016-17

This is the fifth annual report for the Northern Ireland Abdominal Aortic Aneurysm (AAA) Screening Programme since it was introduced in June 2012. It has been produced jointly by the Belfast Health and Social Care Trust and the Public Health Agency.

The Belfast Health and Social Care Trust is responsible for the management and delivery of the programme, whilst the Public Health Agency (PHA) is responsible for commissioning and quality assuring it. The two organisations work closely together to provide an effective, safe and accessible service.

All men registered with a GP in Northern Ireland are invited for screening in the year they turn 65. Men over the age of 65, who have never been screened before, can self-refer by contacting the screening programme office on 02890 631828.

Throughout 2016-17, the programme continued to work on developing existing services. The 2015-16 annual report set out a number of core objectives for the programme. These objectives have either been met in full or are on target, as evidenced throughout this report.

Overall performance of the programme remained high (refer to Section 5 for more detail). Of note:

- Almost **9,000** men in their 65th year were invited to attend for screening
- Uptake remained high with **84%** of those invited attending for screening, up slightly from the previous year's 83%
- **830** men over 65 who had never been screened before self-referred to the programme and were screened
- **107** men screened had a newly detected AAA
- **24** men had a large aneurysm and were referred to the vascular team to consider treatment options

The 2015-16 annual report set out a number of future developments for the programme to focus on in 2016-17. Progress on this work is outlined below.

- A date is being secured for English NHS AAA Screening Programme colleagues to undertake an **External Quality Assurance** visit to the Northern Ireland AAA Screening Programme.
- **Information leaflet translations** have been updated, including the general information leaflet and the three results leaflets (for men screen-detected with a small, medium or large AAA). These can be found in printable PDF format on the programme website – www.aaascreening.info. The languages available are: Chinese complex, Chinese simple, Polish and Portuguese. Slovakian and Lithuanian translations of the former versions of the leaflets remain available. A link to the English AAA Screening Programme's general invitation leaflet in additional language formats is also included.
- An **easy read information leaflet** on AAA Screening for adults with a learning disability was finalised in Spring 2017 in conjunction with a wide range of stakeholders, including service users.
- Continued promotion of the programme at available opportunities including attending **Men's Sheds, Healthy Living Fairs and Positive Ageing events**; between October and December 2016, the programme also made contact with and sent promotional materials to almost 20 groups who specifically **work within ethnic minority communities**.
- Partnership working continued with the **Healthy Living Centres** with the programme running a further seven screening clinics within identified local areas between April and October 2016.
- The programme continued to liaise with both **Magilligan and Maghaberry prisons** to offer screening to eligible men. Throughout the year, a number of men eligible for screening attended their local clinic accompanied by prison staff. A specific clinic also took place within Maghaberry prison in April 2016.
- Programme staff used local events throughout the year to continue to promote the programme. One example of this was during the Belfast Trust's 'Safetember' event in September 2016 when staff set up **promotional stands** for the programme in the foyers of four hospital sites.
- Throughout the year, the programme continued to **work with GPs and other primary care teams** to raise awareness of the programme and promote the self-referral pathway. Over 35% of all self-referrals during 2016-17 were as a direct result of information provided by GPs and other health professionals - men were advised by their GP to contact the programme or they contacted us after seeing a poster in the GP surgery / hospital / pharmacy.

- 2016-17 saw the introduction of **screening in John Mitchel Place** in the centre of Newry; it had been specifically identified as a geographical area with a significant population who would be eligible for screening, rather than these men having to travel to either Bessbrook or Kilkeel.
- From August 2016, the screening programme started to **upload all results letters for men with a detected AAA to their own individual Electronic Care Record (ECR)**; this ensures that all healthcare providers who review a patient's ECR will see an alert highlighting that the man has an AAA.

Section 2:

Introduction

As the new public health lead for the NI AAA Screening Programme, I would first like to pay tribute to my predecessor, Dr Adrian Mairs. He made a significant contribution both to the implementation of the programme in 2012 and its subsequent consolidation and development. Now in its fifth year of screening, I am delighted to be part of a team of highly skilled and dedicated individuals delivering a first-class screening programme. On their behalf, we wish Adrian continued success in his new role as Assistant Director for Screening and Professional Standards within the PHA.

The programme continues to make a huge difference to the lives of men screen-detected with an AAA through its surveillance and treatment pathways. This positive impact has been maximized by the engagement of service users in ongoing personal and public involvement and co-production activities from the programme's inception. It is also only through collaborative working with service users that we continue to be able to update existing information resources and produce new ones. This year that has included production of a new alert card for men diagnosed with a small or medium AAA. An easy read information leaflet has also been developed for people with learning difficulties or those who may find reading and writing difficult.

I hope you enjoy reading more about additional developments within the programme. Please also let us know if there are areas of particular interest you would like to be considered for next year's report.

Dr Stephen Bergin
Consultant in PHM /
Public Health Lead
Public Health Agency



Mr Paul Blair
Consultant Vascular
Surgeon / Clinical Lead
NI AAA Screening
Programme



As Clinical Lead for the NI AAA Screening Programme, I am pleased to present this annual report outlining some of the work that has taken place during 2016-17.

The continued success of the programme requires the support and hard work of the screening staff and a wide range of healthcare individuals to ensure our service users receive an excellent service.

Men diagnosed with a large AAA requiring intervention can be reassured that they will receive careful assessment and treatment in the Regional Vascular Unit in the Belfast Trust. The unit currently performs the largest volume of infra-renal AAA repairs in the UK with excellent outcomes published annually in the National Vascular Registry and available on the HQIP website (<https://www.hqip.org.uk/>).

The annual Service User events have provided a welcome opportunity for staff to receive feedback on many aspects of the service and have resulted in improvements in a variety of areas particularly with regard to information before and after surgery.

We are very grateful to our local GPs for their engagement with the programme, particularly their help with additional cardiovascular secondary prevention measures recommended for service users.

Finally a word of thanks to our clinical teams who continue to deliver quality healthcare in a timely manner, despite the current strain on resources in our local NHS.

Section 3:

Background and Programme Objectives

What is an AAA?

The aorta is the main vessel that circulates blood from the heart, through the abdomen to the rest of the body. Over time, the walls of the aorta can weaken, causing it to balloon out. This results in an abdominal aortic aneurysm (AAA).

AAAs usually cause no symptoms, therefore most people who have one will not feel anything. As the aneurysm grows so too does the risk of it rupturing if left untreated. Rapidly expanding or ruptured aneurysms do produce symptoms (typically severe abdominal, back or flank pain, low blood pressure or shock and a mass in the abdomen which pulsates; however only a minority of patients have all of these features). Patients with a ruptured AAA have a very low chance of survival. In contrast, those detected who undergo planned surgery for a non-ruptured AAA have an excellent rate of survival.

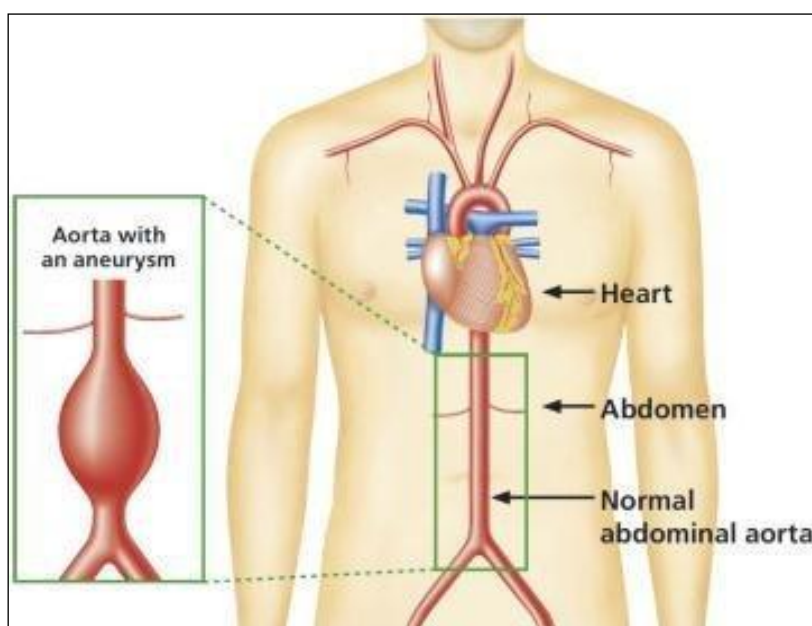


Image courtesy of English NHS AAA Screening Programme

AAAs are more common in men aged 65 and older. Other factors known to increase the risk of developing an AAA are smoking, high blood pressure and high blood cholesterol. Close relatives of someone who has been diagnosed with an AAA are also more likely to develop one.

Aim of the Northern Ireland AAA Screening Programme

The overall aim of the Northern Ireland AAA Screening Programme is to reduce deaths from ruptured abdominal aortic aneurysms through early detection, monitoring and treatment.

On average, compared to men, women are six times less likely to develop an AAA. In addition, women tend to develop an AAA ten years later than men. The NI AAA Screening Programme is therefore targeted at men in keeping with the recommendations of the UK National Screening Committee.¹

Programme Objectives

The Public Health Agency and the Belfast Health and Social Care Trust work together to meet the programme's core objectives. These include:

- Monitoring delivery of the programme against national quality standards and taking appropriate action where performance is not on target
- Ensuring appropriate failsafe systems are in place at each stage of the screening process
- Ensuring all staff are appropriately trained on all aspects of the programme, including the Health and Social Care organisations' mandatory training
- Actively engaging with stakeholders at relevant events and opportunities, particularly in those geographical areas where uptake rates are lower than the programme average
- Continuing to explore opportunities for Personal and Public Involvement (PPI)
- Ensuring information materials remain relevant and up-to-date, with a particular emphasis on promoting self-referral for men aged 65 or over who have never attended for AAA screening
- Ongoing review and development of the Northern Ireland AAA Screening Programme website, with engagement of stakeholders as appropriate
- Continuing to develop and formalise an appropriate quality assurance structure and function in collaboration with the English NHS AAA Screening Programme

¹ Abdominal aortic aneurysm: the UK NSC policy on abdominal aortic aneurysm screening in men over 65. UK Screening Portal. Available at: www.screening.nhs.uk/aaa Accessed 24 August 2017.

- Continuing to build on existing relations with the other three UK AAA Screening Programmes (England, Scotland and Wales)
- Identifying and addressing health inequalities to ensure all eligible men can make an informed decision about whether or not to attend for screening
- Identifying and disseminating examples of regional and national best practice with regard to all elements of programme delivery
- Promoting and participating in research initiatives, as appropriate

Section 4:

Programme Delivery and the Screening Pathway

The programme is run by a multidisciplinary team of staff (see **Appendix 1**). All staff play an important role at various stages in the screening pathway.

The programme office is based in the Royal Victoria Hospital within the Belfast Trust.

Seven screening technicians run clinics on a daily basis. During 2016-17, there were 23 clinic locations across Northern Ireland, including health and wellbeing centres and community hospitals (see **Appendix 2**).

Eligibility for Screening

All men in Northern Ireland who are registered with a GP are eligible for screening in the year they turn 65 (1 April to 31 March). This includes those men in prison or other secure accommodation. Any man who already has a known AAA can transfer to the care of the screening programme. However, if a man has previously had surgery for an AAA he does not require screening.

Men over the age of 65 and registered with a GP, who have not previously been scanned as part of the programme or been told they have an aneurysm, are also eligible for screening. These men can contact the screening programme office on 02890 631828 to request an appointment.

Details of all men registered with their GP who are eligible to be invited for screening are transferred to the Belfast Trust IT system on an annual basis. Daily updates are then automatically provided with changes to any demographic information.

The Screening Pathway

Appendix 3 provides an overview of the whole screening pathway. The key stages within the pathway are:

- Screening Invitation
- The Scan
- The Result
- Surveillance
- Referral and Treatment

Screening Invitation

The programme office sends all eligible men an invitation letter to attend a local screening clinic. This includes those men registered with a GP during the year in which they turn 65 and those eligible men over the age of 65 who have self-referred to the screening programme.)

Invitations for men on surveillance are also sent:

- Men who have a small aneurysm detected will be invited back every *twelve months* for a surveillance scan.
- Men who have a medium aneurysm detected will be invited back every *three months* for a surveillance scan.

The Scan

The screening test involves a simple ultrasound scan of the abdomen. It is quick and painless. The screening technician measures the widest part of the abdominal aorta. The whole process usually lasts less than fifteen minutes.



The Result

All men will be informed of their results verbally at the clinic. Both the man and his GP will then be sent a letter confirming the result. If a man is identified as having an aneurysm his GP practice will also be informed by telephone the same day.

There are **FIVE** possible results from screening:

- **NORMAL: aortic diameter less than 3cm**

Over 98% of men will have a normal result. This means that the aorta is not enlarged (there is no aneurysm). No treatment or monitoring is needed and the men will be discharged from the screening programme. They will not need to be screened again.

- **SMALL AAA: aortic diameter measuring between 3cm and 4.4cm**

Men who have a small aneurysm detected will be invited back every twelve months for a surveillance scan to monitor the size of the aneurysm. Some small aneurysms will grow in size over time and become medium or large aneurysms.

- **MEDIUM AAA: aortic diameter measuring between 4.5cm and 5.4cm**

Men who have a medium aneurysm detected will be invited back every three months for a surveillance scan to monitor the size of the aneurysm. Some medium-sized aneurysms will grow over time to become large aneurysms.

- **LARGE AAA: aortic diameter measuring 5.5cm or over**

Men who have a large aneurysm detected are referred to a vascular surgeon within the Royal Victoria Hospital at the Belfast Health and Social Care Trust for further investigation and to discuss treatment options. All men referred are required to be seen at outpatients within two weeks of the initial scan.

- **NON-VISUALISATION:** sometimes the aorta cannot be fully visualised and a man will be invited to come back on a different day for another scan.

Surveillance

As indicated above, if a man has either a small or medium-sized aneurysm he will be invited back for surveillance appointments on a regular basis to monitor its size.

Men under surveillance are also offered an appointment with a vascular nurse specialist for additional support and advice. The nurse will contact every man who has an AAA detected within two working days and offer either a face to face appointment or a telephone consultation. The nurse will explain the significance of having an AAA and offer lifestyle advice (including advice on smoking cessation) and advice on blood pressure control (if relevant) to help decrease the risk of the aneurysm growing. The man will also be asked to attend his GP to have measurements taken for his height, weight and blood pressure and to discuss the need for any medication.

Referral and Treatment

The Northern Ireland AAA Screening Programme refers all men with a large aneurysm to the vascular service within the Belfast Health and Social Care Trust. Vascular units are required to meet national standards set by the Vascular Society of Great Britain and Ireland (VSGBI)². The regional vascular service in the Royal Victoria Hospital within the Belfast Trust meets these standards.

² https://www.vascularsociety.org.uk/_userfiles/pages/files/Document%20Library/VSGBI-AAA-QIF-2011-v4.pdf

All men referred to the vascular service are required to be seen by a consultant vascular surgeon within two weeks of the scan when the large AAA was detected. During this period, the man will have a CT scan to confirm the size of the aneurysm and get more detailed imaging to help decide the best option for treatment. All men diagnosed with a large AAA are discussed at a weekly vascular multidisciplinary team meeting (MDT) and also undergo vascular pre-assessment by a specialist nurse and vascular anaesthetist. The vascular consultant will then discuss treatment options at outpatient review. The two main treatment options are open surgery or endovascular (EVAR) surgery. Open surgery requires a longer hospital stay and initial recovery period. Endovascular treatment, with a stent graft, allows for quicker recovery but has a longer follow-up period with X-ray surveillance. The decision regarding the choice of operation depends on many factors and is discussed in detail by the vascular team. The nominated consultant will then discuss the appropriate options with the man to enable him to make an informed choice. For some men further investigation and optimisation of underlying medical issues may be required prior to treatment of their AAA.

End Point of Screening Programme for Men

As outlined within Public Health England guidance³, active inclusion in the screening programme ends when:

- the scan is found to be within normal limits
- an AAA reaches 5.5cm diameter on ultrasound and the man has been referred to the vascular unit
- the director of the local screening programme or the GP decides referral for treatment should be considered based on other factors (for example, symptoms or co-morbidities)
- after three consecutive scans showing an aortic diameter less than 3cm on ultrasound where the initial scan was 3cm or greater
- after 15 scans at one-year intervals the AAA remains below 4.5cm
- if the man declines to be in the screening programme, fails to attend consecutive appointments as per local policy, moves out of the area and becomes the responsibility of another screening programme (if one exists) or dies

³ <https://www.gov.uk/government/publications/aaa-screening-standard-operating-procedures>

Section 5:

Programme Performance

The current population of Northern Ireland is just over 1.86 million. Within this, the number of men aged 65 and over in 2016 was 133,381 of which 8,961 were men aged 65⁴.

During its fifth year, the Northern Ireland AAA Screening Programme invited all men who turned 65 between 1 April 2016 and 31 March 2017 for screening.

This section of the report focuses on the performance of the programme. Data included covers the 2016-17 cohort, the self-referrals and others offered screening through the programme as at end of March 2017⁵. All data outlined within this report have been provided by the Belfast Trust programme team and quality assured by the Public Health Agency.

Eligible Cohort

The table below outlines the number of men who were eligible to be offered AAA screening by the programme from the 2016-17 cohort.

Table 1: 2016-17 AAA Screening cohort

Category / Men:	Number:
Identified Screening cohort for 2016-17 (all men who had their 65 th birthday during the year 1 April 2016 – 31 March 2017)	9,192
Cohort not eligible for screening (these men were not eligible for screening as they either (a) died before being offered an appointment; (b) were no longer registered with a GP; (c) had previously had surgery for an AAA; or (d) had previous imaging to confirm they did not have an AAA)	231
Eligible screening cohort 2016-17	8,961

Self-referrals

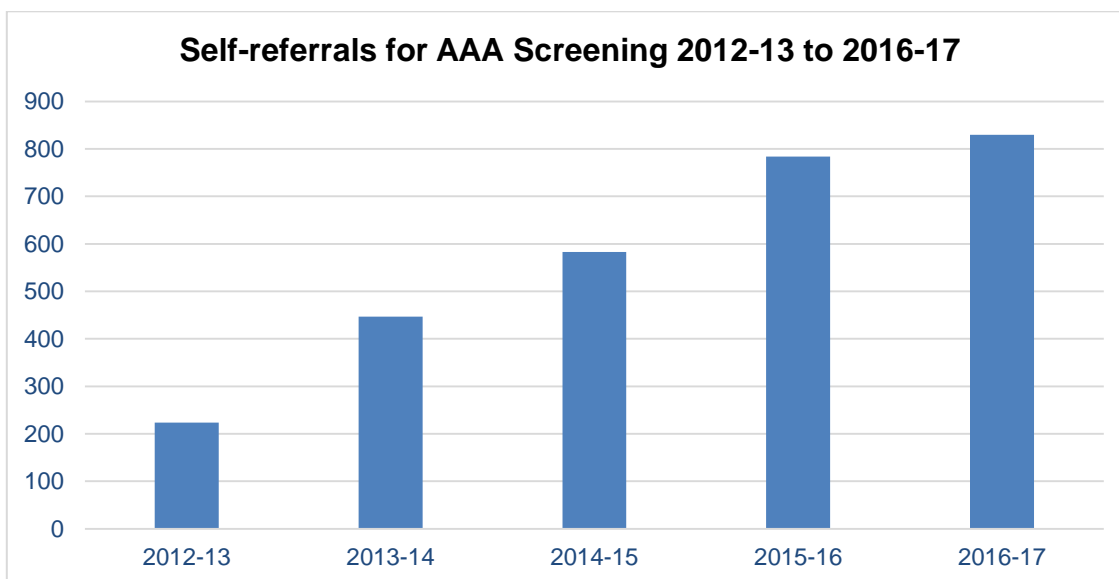
Men over 65 who have never been screened can self-refer to the programme and request a screening appointment. During 2016-17, 830 men self-referred. The

⁴ www.NISRA.gov.uk

⁵ Data for the 2016-17 cohort are as at 30/06/2017 to allow time for screening episodes to be completed; data for self-referrals and men on surveillance is as at 31/03/2017

figure below shows the increasing number of self-referrals the programme has had since it started.

Figure 1: Self-referrals for AAA Screening 2012-13 to 2016-17



Screening and Uptake

All men who turned 65 between 1 April 2016 and 31 March 2017, and who were registered with a GP in Northern Ireland, were sent at least one screening appointment by the end of March 2017. All men who did not attend their first appointment were offered a further appointment by the end of June 2017. Table 2 below shows the number of men actually screened during the year

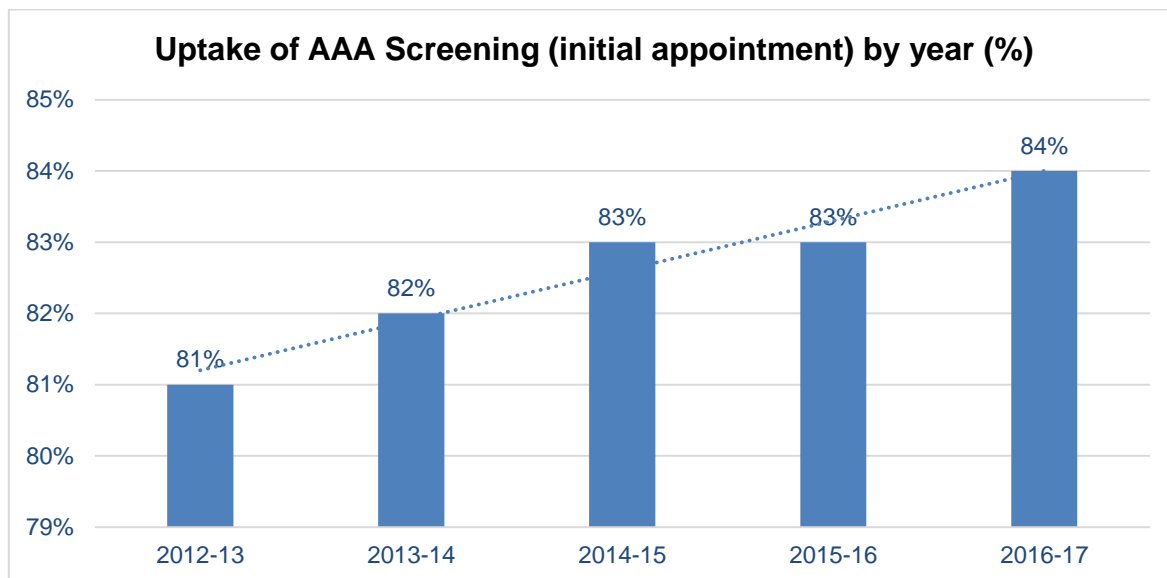
Table 2: Number of men screened in 2016-17 and uptake rate

			TOTAL⁶
2016-17 eligible men and self-referrals aged 65 and over			<u>9,791</u>
Those screened:			
Total men 65 and over screened for the first time	2016-17 cohort	7,528	8,358
	Self-referrals	830	
Uptake of initial screening (calculated using 2016-17 cohort only)			84%

Uptake for 2016-17 was 84%, the highest since the programme started. Figure 2 below shows the uptake rates by screening year.

⁶ A detailed breakdown of some data is not provided to ensure no patient is identifiable

Figure 2: Uptake of AAA Screening for initial appointment by year



The table below outlines the number of men screened by Trust areas across NI. Please note that for this purpose a Trust is allocated based on the postcode of a man's GP rather than the man's postcode.

Table 3: Uptake rates for AAA Screening by Trust for 2016-17

TRUST	Eligible Men Invited	Number Screened	Uptake
Belfast	1,849	1,471	80%
Northern	2,211	1,887	85%
South Eastern	1,714	1,504	88%
Southern	1,660	1,386	84%
Western	1,515	1,280	85%
TOTAL	8,949	7,528	84%

AAAs Detected and Prevalence

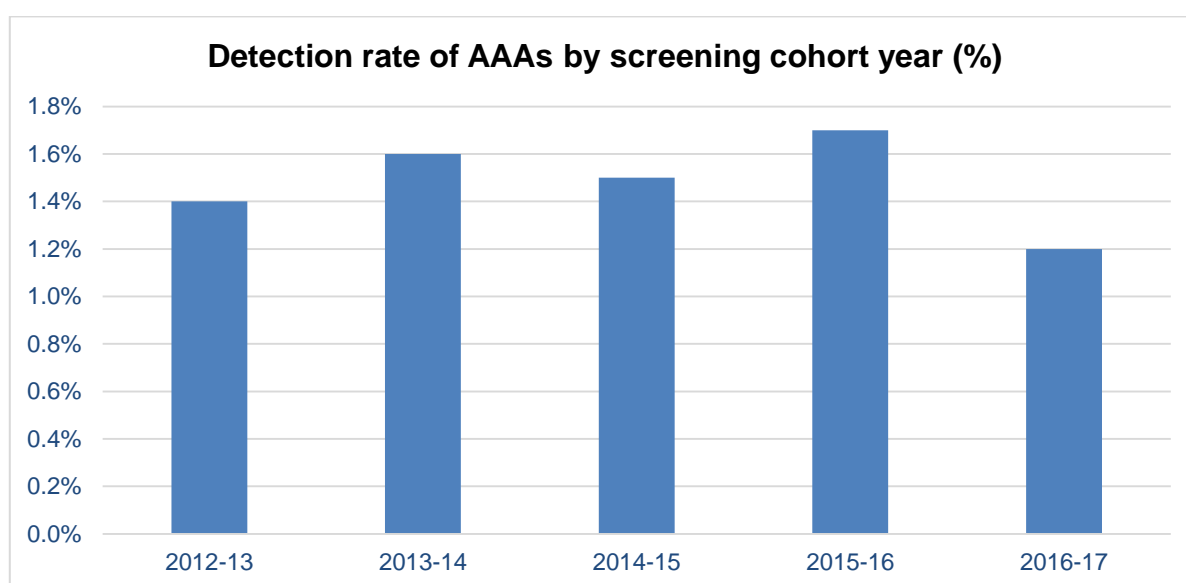
Table 4 below outlines the number of AAAs detected during the 2016-17 screening year, broken down by cohort men and self-referrals. It also notes the number of overall referrals for large AAAs to the Vascular Unit within the Belfast Trust and the prevalence rate.

Table 4: Number of AAAs detected by the Screening Programme 2016-17

Detected AAAs:			
AAAs newly detected by the programme	2016-17 cohort	94	107
	Self-referrals	13	
Referrals to the Vascular Unit			24
Prevalence (calculated using 2016-17 cohort only)			1.2%

Figure 3 below outlines the AAA detection rate for the programme, broken down by year. The prevalence of AAA (aortas measuring 3.0cm in diameter or wider) was 1.2% compared to 4.7% reported in the 20-year-old randomised trial, probably reflecting the reduction in smoking rates and the increase in use of statins during that time. AAA screening should remain cost effective unless the prevalence of AAA in 65-year-old men falls below 0.35%.⁷

Figure 3: Detection rate of AAAs by screening cohort year



Surgery by Type

The vascular team within the Belfast Trust performed surgery on 23 men referred by the programme during 2016-17. Of these, 52% had an elective open repair of their abdominal aortic aneurysm, compared to 48% having endovascular surgery.

⁷ Impact of the first 5 years of a national abdominal aortic aneurysm screening programme [Jacomelli J, Summers L, Stevenson A, Lees T, Earnshaw JJ Br J Surg.](#) 2016 Aug

Performance against key Pathway Standards for 2016-17

The table below compares the programme's overall performance against key national pathway standards for 2016-17.

Table 5: Performance against key Pathway Standards for 2016-17

	Programme Performance	Pathway Standard - Acceptable	Pathway Standard - Achievable
Uptake for initial screening	84%	≥ 75%	≥ 85%
Uptake for surveillance	98%	≥ 90%	≥ 95%
Definitive outcome of scan (screening encounters where aorta could not be visualised)	1.2%	≤3%	≤1%
Timely referral (men with AAA ≥ 5.5cm referred within one working day)	100%	≥ 95%	100%
Timely intervention (men with aorta ≥ 5.5cm seen by a vascular specialist within two weeks)	96%	≥ 90%	≥ 95%
Timely treatment (men with AAA ≥ 5.5cm deemed fit for intervention and not declining, operated on by a vascular specialist within eight weeks)	83%	≥ 60%	≥ 80%
30 day mortality (following elective surgery on screen-detected AAAs)	0%	n/a	n/a

Along with the above national pathway standards, the NI programme has adopted an additional standard outlined below in relation to AAAs measuring over 7cm.

Timely treatment (men with AAA >7cm deemed fit for intervention and not declining, operated on by a vascular specialist within four weeks)	100%
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Section 6:

Health Inequalities

Population screening programmes need high levels of participation to achieve their desired public health impact. Informed personal choice is central to the screening strategy and the decision to have a screening test or not is for the individual involved. However, many people chose not to take a decision about screening, are not aware of the offer or do not attend their appointment or complete the self-test.

Health inequalities are systematic, avoidable and unjust differences in health and wellbeing between different groups of people. The Marmot Review Fair Society, Healthy Lives (2010) highlighted the social gradient of health inequalities, i.e. the more disadvantaged the person's social position, the worse their health.

Studies on inequalities in AAA screening have found a number of factors:

- the Multicentre Aneurysm Screening Study (MASS) found that higher age and social deprivation are associated with poorer screening attendance and having an AAA⁸
- a Scottish analysis found that both urban residence and social deprivation were associated with lower uptake among men invited for AAA screening⁹

The table and chart below show the uptake rates for initial AAA Screening appointments in Northern Ireland (NI) broken down by areas of deprivation for the 2016-17 screening year. Please note data below was run from a live system on 31 May 2018 and therefore differs slightly to section 5, which is as at 30 June 2017.

Table 6: % men in NI who attended for screening¹⁰ by deprivation 2016-17

Geography		No. eligible	No. screened	% screened (uptake)
NIMDM 2017 Quintile (SOA)	1 (most deprived)	1,552	1,213	78.16%
	2	1,829	1,542	84.31%
	3	1,858	1,613	86.81%
	4	1,876	1,657	88.33%
	5 (least deprived)	1,842	1,642	89.14%
	Unknown	7	7	100.00%
	Northern Ireland	8,964	7,674	85.61%¹¹

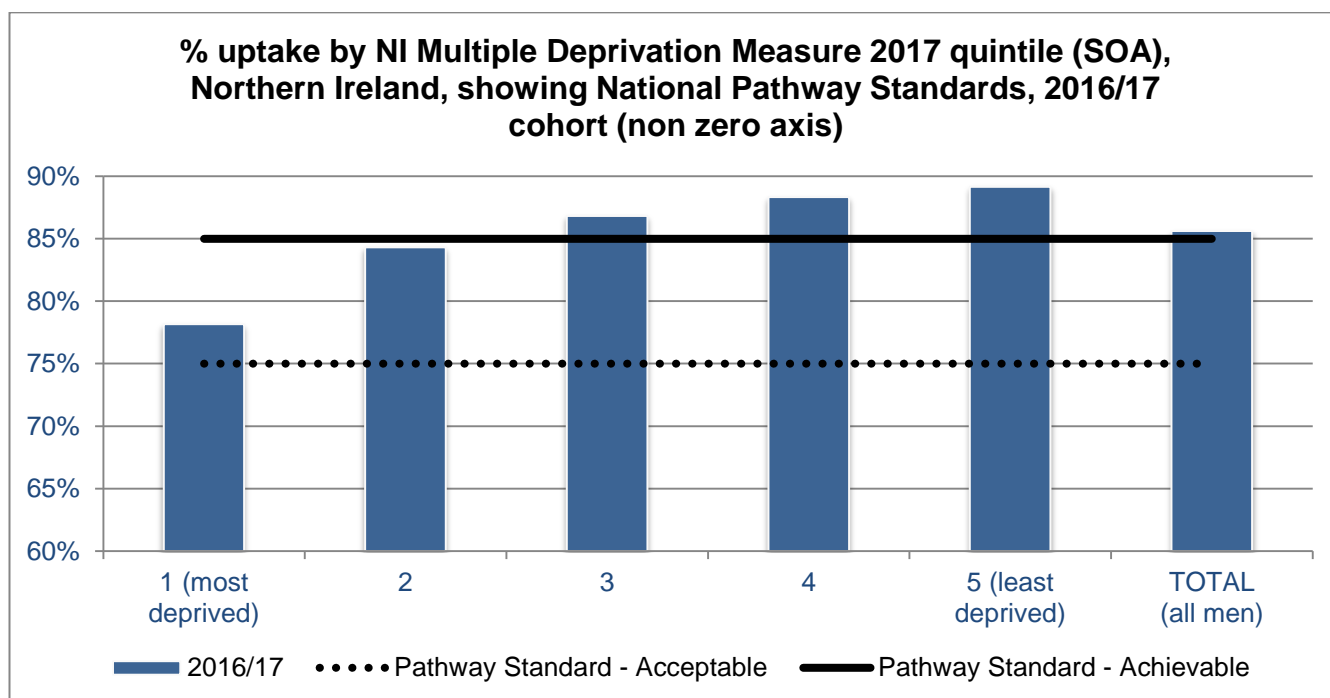
⁸ http://journals.sagepub.com/doi/abs/10.1177/096914130301100112?url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org&rfr_dat=cr_pub%3Dpubmed&

⁹ <https://onlinelibrary.wiley.com/doi/pdf/10.1002/bjs.9803>

¹⁰ Data relates to 2016-17 cohort only and does not include self-referrals

¹¹ 2016-17 data was run from the live AAA IT system on 31 May 2018. Data shown is extracted from a live system and so differs slightly from other published data due to different run dates, i.e. year-end uptake for 2016-17 as at 30 June 2017 was 84%

Figure 4: % uptake by NI Multiple Deprivation Measure 2017 quintile (SOA), Northern Ireland, showing National Pathway Standards, 2016/17



Source: AAA Screening Programme, Public Health Agency and Belfast Health and Social Care Trust

Data refers to men invited in the year they turn 65 years of age; self-referrals are not included

National Pathway Standards: Acceptable uptake: $\geq 75\%$, Achievable uptake: $\geq 85\%$

Northern Ireland Statistics and Research Agency, NI Multiple Deprivation Measure 2017

<https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017>

There is a clear difference in screening uptake by deprivation quintile. Uptake in areas of Northern Ireland considered most deprived was 78% in 2016-17, rising to almost 89% in least deprived areas.

Notes:

Geographic data is based on the postcode of residence of the man invited / attending for screening. Previously published AAA data and other data in this annual report is analysed using the postcode of the GP Practice at which the man being screened is registered.

Deprivation data is based on the Northern Ireland Multiple Deprivation Measure 2017 at Super Output Area level (NISRA)

<https://www.nisra.gov.uk/statistics/deprivation/northern-ireland-multiple-deprivation-measure-2017-nimdm2017>

Section 7:

Personal and Public Involvement (PPI)

Personal and Public Involvement (PPI) is enabling the public to influence the planning, commissioning and delivery of health and social care (HSC) services. It includes actively engaging with communities, specifically those who use services such as screening.

The Public Health Agency is the lead organisation responsible for the implementation of PPI policy across all HSC organisations within Northern Ireland.

During 2016-17, the Northern Ireland AAA Screening Programme completed several PPI projects in collaboration with key stakeholders and service users. As well as the annual Service User Event, these included development of a wallet card for men screen-detected with an AAA and the production of an easy-read information leaflet. Further details on all these initiatives are outlined below.

Completed PPI Projects

- The **fifth service user event for men** screen-detected with an AAA and their wives/companions was held in April 2017. In order to ensure the programme continues to identify and meet the evolving needs of its eligible population, the 2017 Service User Event was extended to all men screen-detected with an AAA since the programme's inception in 2012. This was a development from previous events when only men who had been screened in the previous year's cohort were invited (and in line with service user suggestions at the 2016 event).

The morning workshop was attended by a record number of individuals, with almost 100 participants. More than 70 of these were service users, including many who had taken part in events in previous years. The workshop was facilitated by staff from the PHA and Belfast HSC Trust. It included:

- updates on programme activity and developments during 2016-17
- two group discussions
- lifestyle advice from the Vascular Nurse Specialists (in keeping with requests at the 2016 event)
- a question and answer session with the programme leads

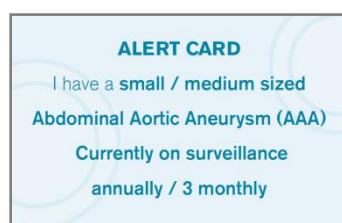
Attendees also learned that their request for a wallet card had been actioned. The Programme was further delighted to welcome the Chair of

the Public Health Agency, Mr Andrew Dougal, who took part in group discussions and the closing feedback session.

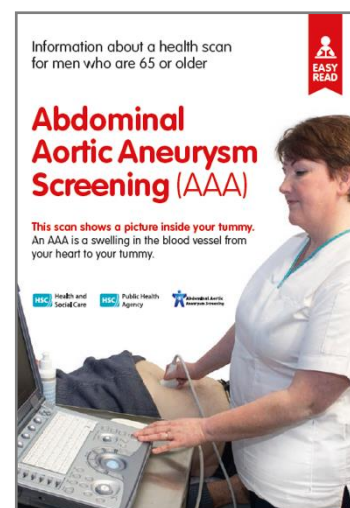


The Chair of the PHA Board, Mr Andrew Dougal, with attendees at the 2017 Service User Event in Belfast

- In response to service users' needs, the programme began issuing **Alert Cards** in early 2017 for men under surveillance (following detection of a small or medium AAA after their initial scan). The card (pictured below) is business card-sized with one side containing information on the size of a man's AAA and how frequently he attends for surveillance; the other carries programme contact details. Men are encouraged to carry these cards and present them to an HSC professional when attending hospital or medical appointments.



- The programme aims to ensure screening is equally available to all men who are eligible. To facilitate this, **easy read versions of the general information leaflet are now available**, in PDF and hard copy formats. These provide information in a format that is suitable for individuals who may have learning disabilities or find reading and writing difficult. The programme is indebted to the wide range of service users within the learning-disabled community, HSC professionals and other key stakeholders who contributed to the project.



- Local newspapers featured an article on **Mr Brian Topping and his wife Naomi** after Brian was screen-detected with a large AAA. Following successful surgery Brian is now fully recovered and enjoying a normal, active life once again. A video, produced with the kind co-operation of Brian and Naomi, recounts Brian's experience of being diagnosed with an aneurysm over 5.5 cm. It is available on the AAA Screening Programme website at www.aaascreening.info.



- Communication colleagues at the PHA, who were instrumental in the production of the new video, also took the opportunity of promoting Brian and Naomi's story via social media. Messaging around Brian's story and the video was published on Facebook, reaching 7,305 people, with 2,700 views of the video. The post got 27 likes and 27 shares. Our thanks to Gary McKeown, Communications Manager, and his colleagues for their help and input.

Section 8:

Role of Primary Care

Primary Care teams are integral to the successful delivery of the NI AAA Screening Programme.

During 2016-17, further editions of the newsletter, 'The AAA Team', were produced. This newsletter, aimed at healthcare professionals, is an important vehicle for the programme to continually engage with primary care teams.

Since the programme began in 2012, the considerable contribution and partnership working with primary care team has been invaluable, particularly in the areas outlined below.

Supporting men with a screen-detected AAA

When an aneurysm is detected, the programme informs the man's GP practice by telephone on the same day. This is followed up in writing.

GPs are then asked to arrange to take measurements for height, weight, BMI and blood pressure, and consider commencing the man on anti-platelet and statin therapy (unless contra-indicated).

For men with a large AAA, GPs are also asked to make a standard referral to the vascular team for further intervention / treatment and to arrange an urgent blood test (U&E).

GPs are the key providers of aftercare for men who have undergone surgical repair.

Providing information to facilitate screening appointments for eligible men

The programme continually liaises with primary care on a range of issues such as:

- Ensuring patient records are accurate – information is downloaded into the programme's IT system on eligible men registered with GPs; programme staff liaise with practices about any discrepancies
- Seeking information about particular needs of men invited for screening, e.g. a physical or sensory disability, limited mobility or a learning disability

- this helps facilitate the screening appointment and allows appropriate arrangements to be made, e.g. extra time for the appointment if required
- Organising an appropriate interpreter or signer when required to facilitate an appointment

Promoting screening

People often rely on the advice of primary care teams when making health decisions. It is therefore important that these teams are well informed about the programme and can discuss the benefits and harms of AAA screening to enable eligible men to make an informed choice.

GPs are notified when a man does not attend his screening appointment. Some GP practices, upon being informed of non-attendance, will either talk to the men opportunistically about screening or proactively contact men to specifically encourage attendance.

Primary care teams have continued to actively promote the programme during 2016-17 to those over 65 and eligible to self-refer. Approximately 35% of all men who self-referred to the programme in 2016-17 did so after being advised of the programme by their GP / pharmacist, or after seeing a poster in the practice waiting area. In particular, GPs have recommended screening to eligible men who have a strong family history of AAAs.

Following the review of the programme's information materials, new packs for healthcare professionals were distributed to all GP practices and pharmacies across NI. Over the course of the next few months, the number of self-referrals increased. Men frequently reported that they had picked up a leaflet in their local pharmacy or their GP surgery or their GP had recommended screening.

Section 9:

Programme Promotion

Evidence of the successful promotion of the programme in 2016-17 is demonstrated by the 830 men who self-referred for AAA screening.

The whole programme team continues to look for opportunities and be involved in a range of activities to raise awareness of AAA screening. A number of highlights are noted below.

Newington Day Centre – clinic

As part of Men's Health week in June 2016, the programme ran a clinic in Newington Day Centre. This non-clinical setting encouraged men who regularly attended the Day Centre to consider screening, men who may not otherwise have been screened. The programme scanned a total of 17 men on the day with a number of others making appointments to be screened at a later date in another venue.

Providing outreach clinics in partnership with Health Promotion teams and the Healthy Living Alliance

During 2016-17, links continued with Health Promotion teams across Trusts and the Healthy Living Alliance. (The Healthy Living Alliance provides services and support to communities experiencing disadvantage and health inequalities, using a neighbourhood-based, community-led approach.) This partnership enabled the programme to run seven clinics identified by the Healthy Living Alliance across NI. Over 100 men were screened across these clinics, men who may not otherwise have been aware of AAA screening.

The clinics provided an opportunity to raise the profile of AAA screening among the local community. It also consolidated links to the voluntary sector and community staff who work in the area and who are keen to continue to work to promote screening locally.

Maximising promotional opportunities at existing screening locations

On an ongoing basis, screening technicians ensure promotional materials are available at all 23 venues across NI where they run clinics. They ensure all the venues are well stocked with posters, promotional packs and leaflets. They also continue to engage with staff in the venues and nearby GP surgeries, dental practices and pharmacies to make sure they were aware of the work of the programme.

Promotion at other healthcare venues and events

As part of the Trust's 'Safetember' event in September, programme staff set up promotional stands in the foyers of four hospital sites within the Trust – Royal Victoria Hospital, Belfast City Hospital, the Mater Hospital and Musgrave Park Hospital. To reach as many eligible men as possible, stands were planned at times when foyers were expected to be busiest, either during visiting times or when outpatient clinics were running.

Men's Sheds

Partnerships have continued to be developed between AAA screening and a number of Men's Sheds across the country.

Men's Sheds originated in Australia to help improve the health and wellbeing of all males. Typically, a Shed is a larger version of what a man might have in his back garden – a place where he feels at home, pursuing practical interests on his own terms. The men share tools and resources to work on projects they've chosen at their own pace in a safe, friendly and inclusive venue. Many Sheds also welcome information sharing initiatives on a wide range of topics including healthcare. Some Sheds target older men to reduce the potential risks of social exclusion and any reduced access to healthcare they might encounter with aging.

During 2016-17, staff attended a number of Men's Sheds local meetings to talk about the programme to members; in addition, promotional materials were sent to further Sheds for inclusion in their local newsletters.

Other promotional activities

The team was also involved in a range of other events such as:

- Working with groups in local areas to submit promotional articles to local press, e.g. the Ulster Gazette, the Newry Reporter
- Attending events at local libraries to promote the programme
- Attending a range of events within local areas, e.g. vintage rally in Greencastle
- Attending events such as those for International Men's Day, Men's Health Fayres and Older People's events

Section 10:

Governance and Accountability

The Public Health Agency

The Public Health Agency has a number of key functions in relation to screening programmes including:

- Leading on the implementation of screening policy, including the introduction of new screening programmes and any changes required to existing screening programmes
- Ensuring the delivery of high quality, safe, effective and equitable screening programmes for people in Northern Ireland
- Supporting continuous quality improvement through programme monitoring and evaluation, and adverse incident investigation and management

The Agency takes lead responsibility for external quality assurance (QA) of the programme. This involves the establishment of a robust QA structure and function, to ensure it meets the responsibilities outlined above.

To help fulfil its core quality assurance function, the PHA has ensured:

- A formalised process is in place for the timely appointment/re-appointment of a clinical lead and an imaging lead
- The establishment of an AAA Screening Co-ordinating Group. This is chaired by the Public Health lead for AAA screening, including PHA staff, patient representatives and all relevant members of the Belfast Health and Social Care Trust NI AAA Screening Programme team
- Regular monitoring of QA data is undertaken
- Appropriate fail-safe mechanisms are in place to ensure screening is offered to all eligible men and that those men requiring surveillance and referral are followed up in a timely and appropriate way
- There is an agreed programme of equipment monitoring
- A programme of formal, external quality assurance visits will be

established in collaboration with the English NHS AAA Screening Programme

Appendix 4 details the PHA's governance and accountability reporting arrangements.

The Belfast Health and Social Care Trust

The Belfast Health and Social Care Trust is responsible for the operational management and delivery of the NI Abdominal Aortic Aneurysm Screening Programme.

The Trust ensures all eligible men are invited to attend for screening in their 65th year. It ensures they are provided with appropriate information, support and advice, particularly those men who have an AAA detected through the programme.

Staff who have responsibility for the operation of the programme are employed by the Trust and carry out all of the scans, including rescans and surveillance scans.

The surveillance programme for men identified with a small or medium AAA is provided by the Trust as part of the NI AAA Screening Programme. Those men who are identified with a large AAA are referred to the vascular surgery team at the Royal Victoria Hospital within the Belfast Trust to discuss potential treatment options.

The Trust also has responsibility for:

- Setting operational policy for the programme
- Liaising with GPs regarding secondary care, particularly when a man is detected as having an aneurysm
- Local (internal) quality assurance of the entire screening process
- Ensuring appropriate failsafe systems are in place
- Providing reports on the performance of the programme and data for quality assurance purposes
- Engaging with stakeholders regarding development of the programme
- Organising and taking part in promotional activities for the programme

Appendix 5 details the Belfast Trust's governance and accountability reporting arrangements.

Audit and Research

Both organisations take joint responsibility for developing and facilitating audit and research activities related to the programme. In 2016-17, a number of research projects were undertaken including the following project outlined below.

AAA Screening in NI increases prescribing of preventative cardiovascular medication for men diagnosed with a small or medium AAA (G Armstrong, A Maguire, D Bradley, A Mairs, D O'Reilly, F Kee)

Dr Armstrong's co-authored study considered the impact of AAA Screening, and the intervention of primary care, on the use of medications to reduce cardiovascular risk.

Background

The study was premised on evidence that men diagnosed with abdominal aortic aneurysms are at significant risk of cardiovascular events such as stroke and ischaemic heart disease. Research in England and Wales also suggested that this risk is not addressed sufficiently. The AAA Screening Programme in Northern Ireland has diagnosed hundreds of men with small-medium aneurysms. The aim of this project was to determine if men within the surveillance arm of the NI AAA Screening Programme were being prescribed medications to reduce their risk of cardiovascular events.

Methods

Datasets were linked from the NI AAA Screening Programme (NIAAASP) and the Enhanced Prescribing Database. All men were included who were invited for AAA screening between 2012 and 2014 (n=24,278). Prescription of medications to reduce cardiovascular risk before and after screening was compared, including: anti-platelets, statins and anti-hypertensives. Statistical analysis was performed to determine the likelihood of prescription of these medications for the men.

Results

Diagnosis with a small or medium aneurysm increased statin prescribing by 26% and anti-platelet prescribing by 50%. This relationship was even stronger in men who were not on any medications prior to screening. There was no significant change in prescription of cardiovascular medications for men who did not attend screening or for men with no aneurysm.

Conclusion

Attending the NIAAASP increases the likelihood that men diagnosed with small to medium AAAs are commenced on cardiovascular risk-reducing medication. AAA screening may therefore provide an opportunity to address cardiovascular risk factors for a high-risk group.

Dr Gillian Armstrong presented this work at the **NHS England AAA Screening Programme's Audit and Research Day in February 2017 in Leicester.**

Section 11:

Future Developments

The NI AAA Screening Programme (NIAAASP) remains committed to continued development of the programme, building on achievements to date and continuing to improve the AAA screening experience for service users.

Whilst continuing to deliver on the core objectives of the programme as outlined in Section 3 of this report, during 2017-18 the programme will:

- Endeavour to secure a date for an External Quality Assurance (EQA) visit from Public Health England and English NHS AAA Screening Programme colleagues. This is in line with the rollout of the NIAAASP's EQA function and structure.
- Produce an AAA screening video detailing what happens when men attend for an initial scan, including information on how to access screening for minority groups (for example physically and learning disabled men).
- Identify and address inequalities in the AAA Screening Programme through awareness-raising sessions amongst relevant voluntary groups and participation in the development of a UK Health Inequalities Toolkit.
- Work in partnership with appropriate prison healthcare providers to facilitate screening clinics for eligible men.
- Consider any further opportunities to raise general awareness of the programme and encourage further self-referrals, e.g. through promotional opportunities and continued engagement with Men's Sheds, etc.
- Continue engagement with GPs and other primary care teams to raise awareness of the programme and continue to promote the self-referral pathway, e.g. by attending flu clinics.
- As appropriate, identify additional appropriate venues to enable AAA screening to be provided within local areas.
- Undertake the required procurement process to source funding for and purchase six new portable ultrasound machines for the programme.
- Undertake a review of the letters used by the programme and update as appropriate.

Appendices

- 1 NI AAA Screening Programme Staff
- 2 Map of Screening Locations
- 3 The Screening Pathway
- 4 Governance and Accountability Structure: Public Health Agency
- 5 Governance and Accountability Structure: Belfast Health and Social Care Trust

Appendix 1 – NI AAA Screening Programme Staff

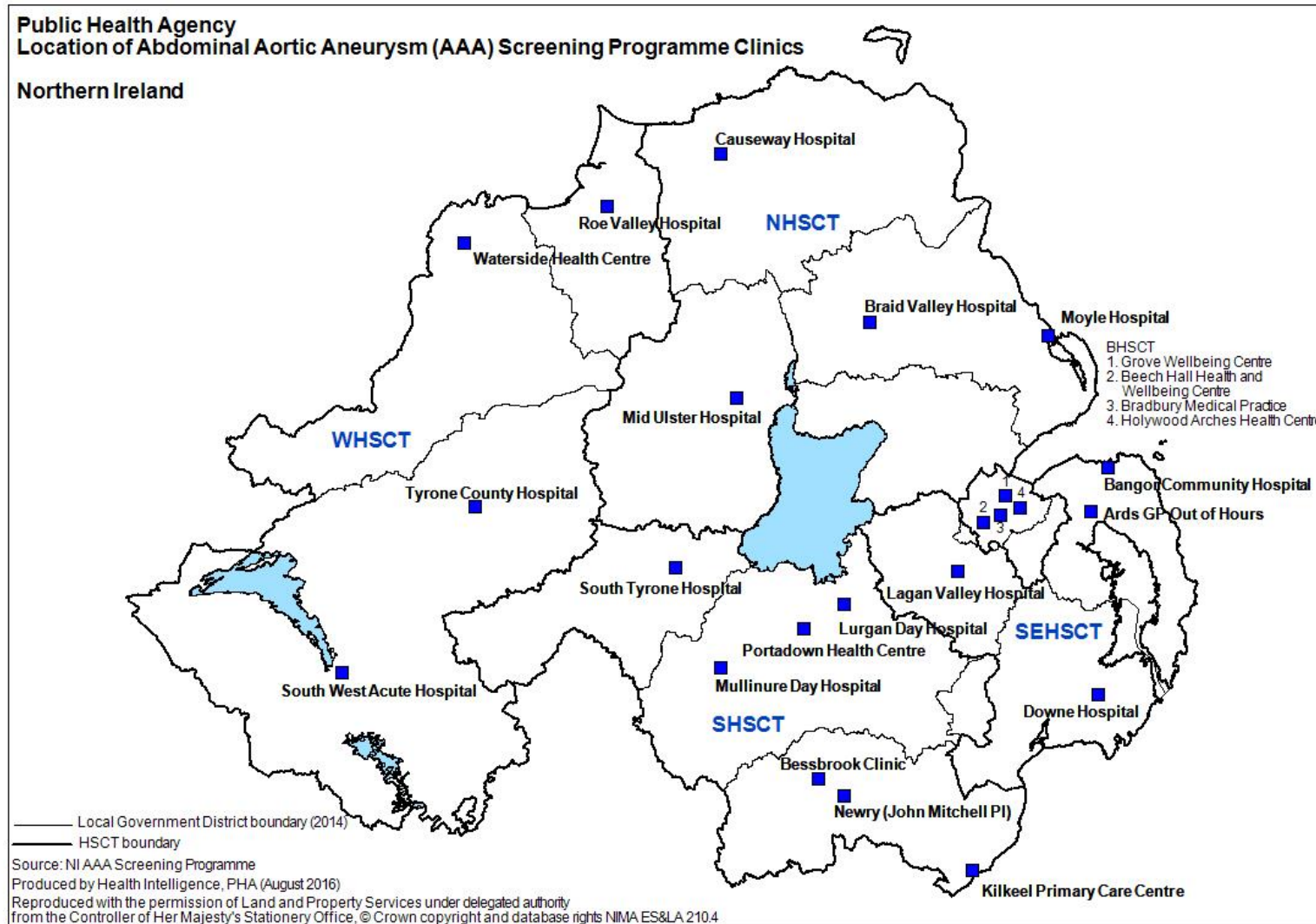
Belfast Health and Social Care Trust

Paul Blair	Clinical Lead
Janet Callaghan	Clinical Co-ordinator
Lisa Campbell	Administrative Assistant
Ciara Conway	Screening Technician
Sarah Davidson (until June 2016)	Administrative Assistant
Trez Dennison	Vascular Nurse Specialist
Elaine Donnelly	Screening Technician
Sarah-Louise Dornan (from May 2016)	Deputy Programme Manager
Peter Ellis	Imaging Lead
Paul Fusco (from October 2016)	Administrative Assistant
Deborah Galloway	Screening Technician
Paul Goodyear (from August 2016)	Screening Technician
Paula Heaney	Screening Technician
Deirdre Kearns	Lead Screening Sonographer
Pauline McMahan	Screening Technician
Karen McClenaghan	Specialist Surgery Services Manager
Kathy McGuigan	Vascular Nurse Specialist
Gillian Newell	Screening Technician
Diane Stewart	Programme Manager
Gill Swain	Vascular Nurse Specialist

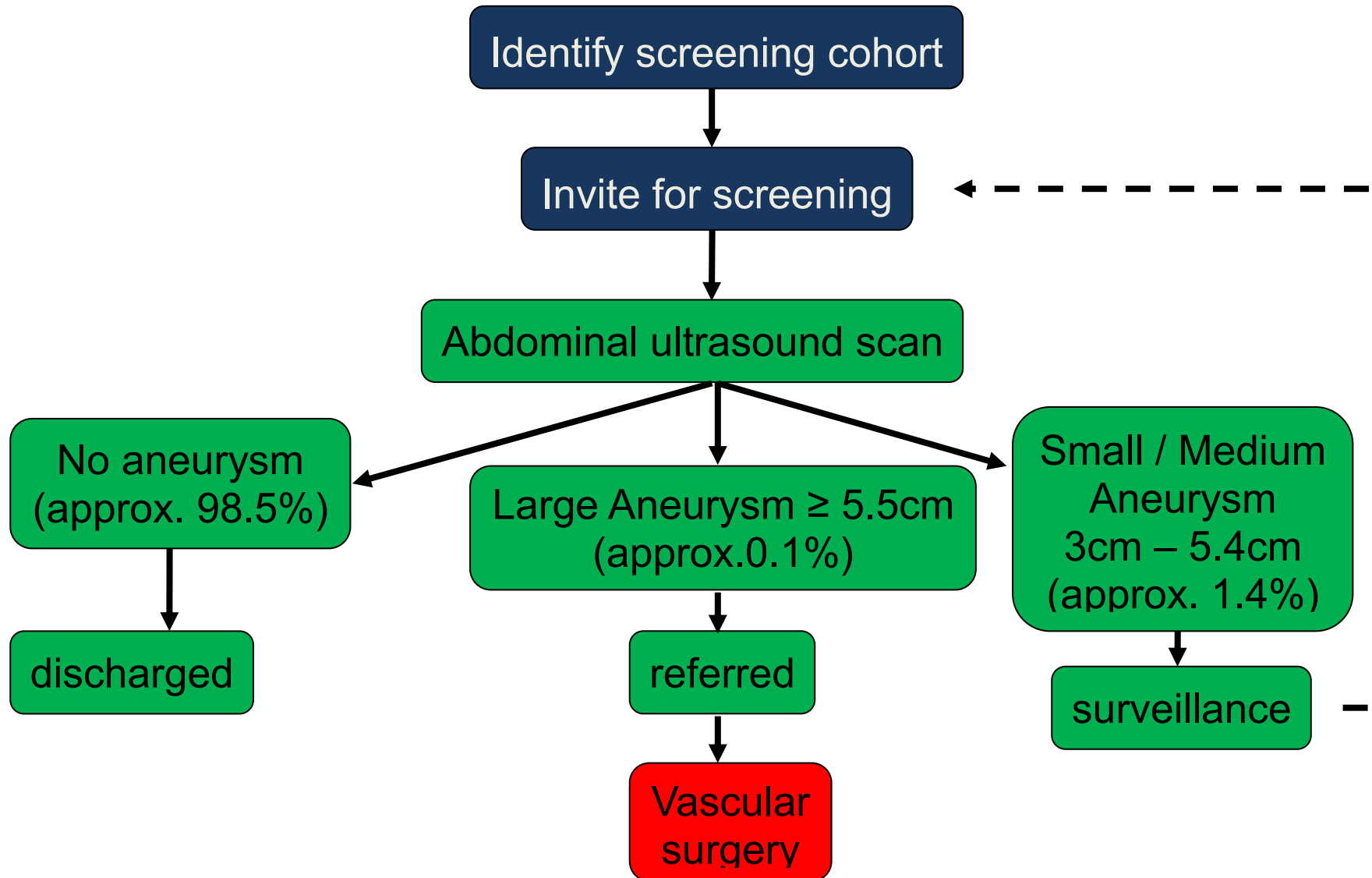
The Public Health Agency

Adrian Mairs (until September 2016)	Public Health Lead
Stephen Bergin (from October 2016)	Public Health Lead
Jacqueline McDevitt	QA and Commissioning Support Mgr
Sonya Myladoor (from November 2016)	Administrative Support

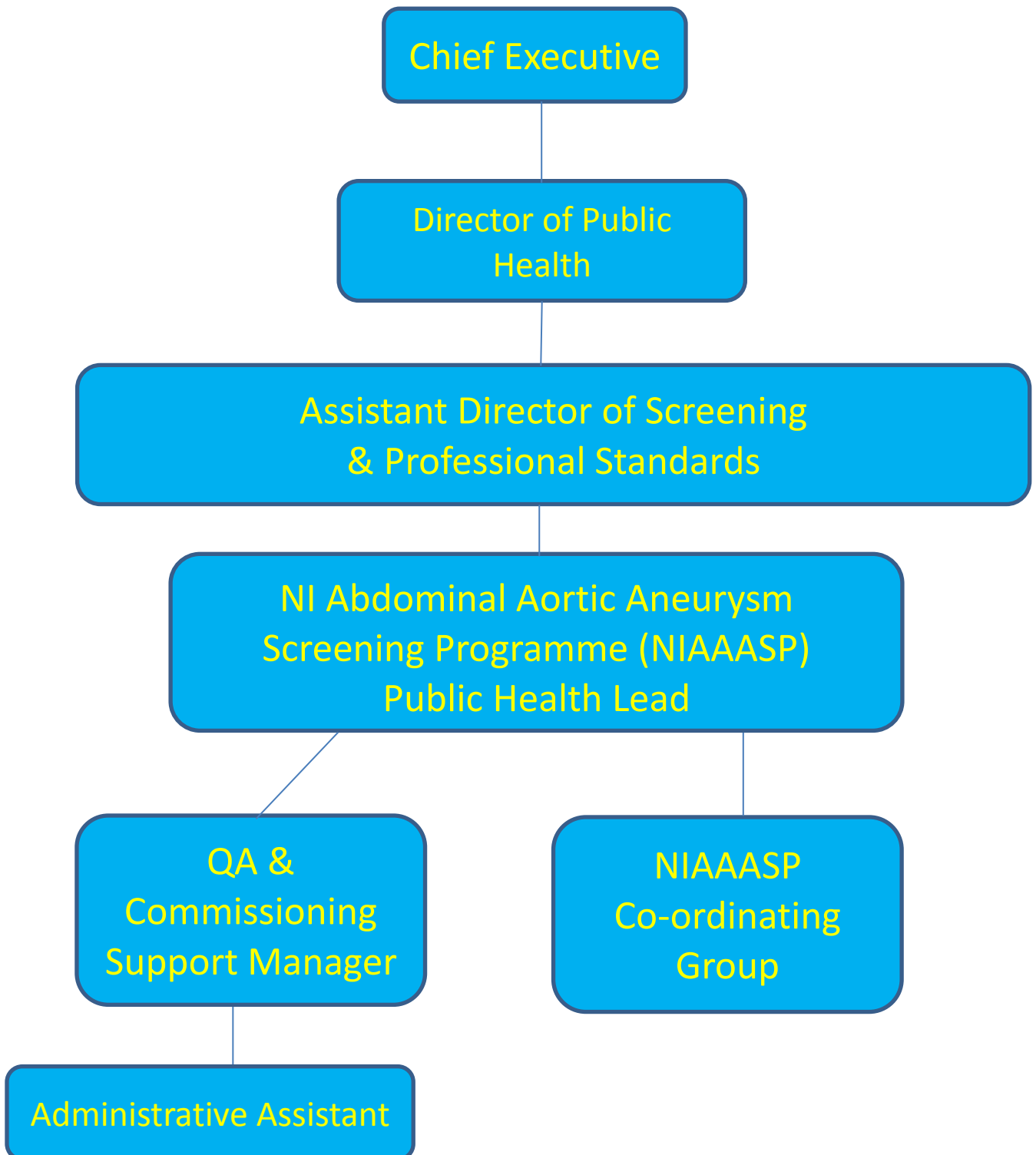
Appendix 2 – Map of Screening Locations



Appendix 3 – The Screening Pathway

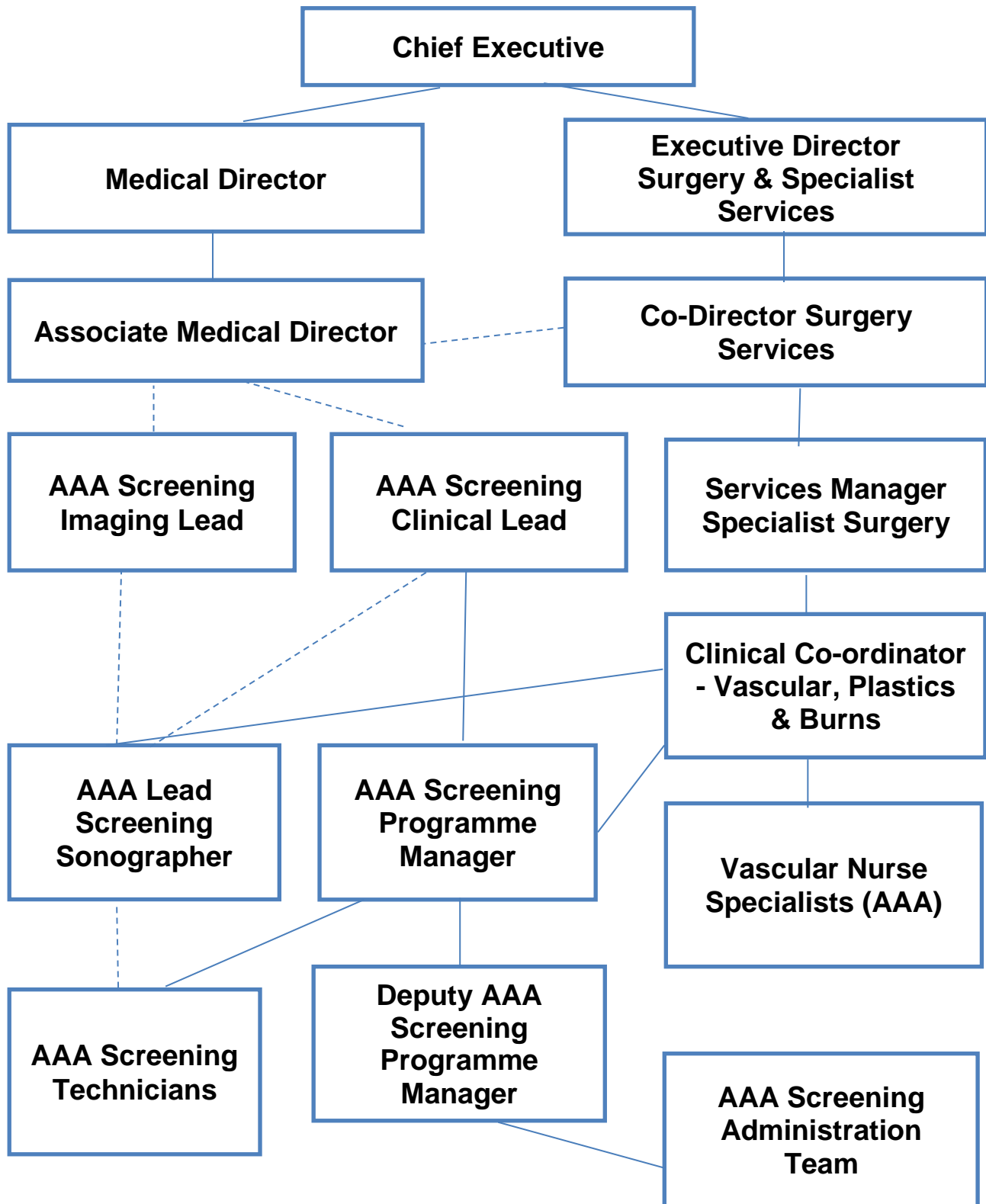


Appendix 4 – Governance and Accountability Structure: Public Health Agency



Appendix 5 – Governance and Accountability Structure: Belfast Health and Social Care Trust

Organisational chart as at March 2017



If you are interested in finding out more about being screened please contact the Screening Programme Office on 02890 631828.