

Publication Report



Scottish Abdominal Aortic Aneurysm (AAA) Screening Programme Statistics

Update to 31 March 2015

Publication date – 1 March 2016

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Introduction

A screening programme for Abdominal Aortic Aneurysms (AAA) for men aged 65 was implemented in Scotland in line with the advice from the [UK National Screening Committee \(NSC\)](#). There was a phased roll-out of the programme from June 2012. NHS Highland and NHS Western Isles were the first NHS Boards to implement the screening programme and by November 2013 all NHS Boards were participating.

An AAA is a swelling of the aorta, the main artery in the body, as it passes through the abdomen. As some people get older, the wall of the aorta in the abdomen can become weak and balloon out to form an aneurysm. The condition is most common in men aged 65 and over and usually there are no symptoms.

Large aneurysms are uncommon but can be very serious. As the wall of the aorta stretches, it becomes weaker, and it can rupture (burst). If the aneurysm ruptures, this leads to life-threatening internal bleeding and, in 8 out of 10 cases, death [1].

The Scottish AAA screening programme aims to reduce deaths associated with the risk of aneurysm rupture in men aged 65 and over by identifying aneurysms early so that they can be monitored or treated. The screening test is a simple ultrasound scan of the abdomen which takes around 10 minutes. Men aged 65 are invited to attend AAA screening and men aged over 65 can self-refer into the screening programme. Most men have a normal result and are discharged from the screening programme. Men with detected small or medium aneurysms are invited for regular surveillance screening to check the size of the aneurysm. Men with large aneurysms are referred to vascular specialist services. Further information on the AAA screening programme in Scotland can be found on the [NHS Inform](#) website.

This is the first publication of Scottish AAA screening programme statistics, and the figures cover the period of the phased roll-out of the screening programme in Scotland. It is therefore important to consider the [implementation dates](#) in each NHS Board when interpreting the statistics. The publication provides information on invitations, uptake rates and screening results for the cohort of men eligible for screening up to 31 March 2014. This consisted of:

- men who were aged 65 on the NHS Board implementation date, and
- men who turned 65 years following the NHS Board implementation date and before 1 April 2014

For the eligible cohort to 31 March 2014, invites and attendances to 30 November 2015 are included. The publication also includes information on self-referrals for initial screens, and data on surveillance screens to 31 March 2015.

The figures are published as developmental as they are new statistics undergoing evaluation and the methodology used to collate the figures will be reviewed. The statistics in this publication will be developed to monitor and evaluate the Scottish AAA screening programme through the reporting of performance indicators. A key part of this is user engagement in the evaluation of these statistics to help inform their development. Readers are invited to send comments on the publication to nss.isdaascreen@nhs.net.

AAA screening programme

The screening test is an ultrasound scan of the abdomen and there are five possible results:

Result	Aortic diameter	Pathway
Normal (negative)	Less than 3.0cm	Discharged from screening programme
Small AAA (positive)	Between 3.0 and 4.4cm	Annual surveillance scans
Medium AAA (positive)	Between 4.5 and 5.4cm	Surveillance scans every 3 months
Large AAA (positive)	5.5cm or over	Referred to vascular specialist services
Non-visualisation	Aorta cannot be fully visualised	If an aorta cannot be fully visualised at the first scan, an invitation for a further scan is sent

Most men have a normal result and are discharged from the screening programme.

Men with a small or medium-sized aneurysm are invited to attend surveillance appointments to check the size of the aneurysm regularly to monitor any growth. Men with small aneurysms are invited for annual surveillance scans. Men with medium aneurysms are invited for surveillance scans every three months. Most aneurysms grow very slowly, and many men with a small or medium aneurysm never need treatment.

Men with a large aneurysm are referred to vascular specialist services for further investigation and to discuss treatment options.

If an aorta cannot be fully visualised at the first scan, an invitation for a further scan is sent. Men with a second non-visualisation scan are discharged from the screening programme into the care of their GP.

NHS Board implementation

The introduction of the AAA screening programme in Scotland was phased from June 2012. NHS Highland and NHS Western Isles had a local AAA screening programme in operation for several years prior to the introduction of the national screening programme, and were the first NHS Boards to implement the national programme. Further details on the introduction of the programme in each NHS Board are provided in the table below.

Prior to the programme commencing in each NHS Board, the first cohorts of men eligible for screening were identified. These cohorts were based on men in the relevant age range registered with a Community Health Index (CHI) number. The implementation date shown in the table is when the Scottish AAA Call Recall System, the computer system used nationally to facilitate the invitation of men for screening and record the results, was first populated with data for men registered with a CHI number. The implementation dates are therefore the relevant dates for defining the cohort of men eligible for screening in each Board. The programme start date in the table refers to the 'go-live' date for invitations and/or clinics in each NHS Board.

It is important to consider the implementation and start dates of the screening programme in each NHS Board when interpreting the statistics.

NHS Board	Implementation date for defining cohort of men eligible for screening	Programme start date for invitations and/or clinics
Ayrshire & Arran	01 Jun 2013	26 Jun 2013
Borders	09 Aug 2012	30 Aug 2012
Dumfries & Galloway	24 Jul 2013	05 Aug 2013
Fife	09 Jan 2013	28 Jan 2013
Forth Valley	18 Sep 2013	21 Oct 2013
Grampian	03 Oct 2012	25 Oct 2012
Greater Glasgow & Clyde	06 Feb 2013	25 Feb 2013
Highland ¹	29 Jun 2012	29 Jun 2012
Lanarkshire	01 Apr 2013	25 Apr 2013
Lothian	09 Aug 2012	30 Aug 2012
Orkney	03 Oct 2012	25 Oct 2012
Shetland	03 Oct 2012	25 Oct 2012
Tayside	09 Jan 2013	28 Jan 2013
Western Isles ¹	29 Jun 2012	29 Jun 2012

1. NHS Highland and NHS Western Isles made the transition from their local programme to the national programme and this is the reason why the implementation date and start date are the same.

Definitions

Cohort of men eligible for screening to 31 March 2014:

- men who were aged 65 on the NHS Board implementation date, and
- men who turned 65 years following the NHS Board implementation date and before 1 April 2014

The cohort of men eligible for screening to 31 March 2014 also includes 505 who were over the age of 65 on the NHS Board implementation date. Most of these men were resident in NHS Highland. These men were included in the cohort eligible for screening as they had been eligible for screening under NHS Highland's local AAA screening programme that had been in operation for several years prior to the introduction of the national screening programme and had not previously been invited and/or screened.

The data relates to men registered with a Community Health Index (CHI) number. Men in the relevant age range with a CHI number who were subsequently identified as not eligible for screening, for example because they had moved out of the country, are not included in these statistics.

For further information on the date of birth range used to define the cohort in each NHS Board based on their implementation date see [Appendix A1](#).

Invited: men in the eligible cohort who were sent an invitation for screening. The figures include invitations sent to 30 November 2015. For the cohort eligible to 31 March 2014, 99% of invitations were before 1 April 2015.

Attended (uptake): men in the eligible cohort who attended screening. The figures include screening attendances to 30 November 2015. For the cohort eligible to 31 March 2014, 98% of attendances were before 1 April 2015.

Key points

Men eligible for screening to 31 March 2014:

- The invite rate was 100% and uptake of screening was high at 85.8%. Uptake rates exceeded 80% in all NHS Boards.
- Uptake of screening was lower in the most deprived areas. Uptake was 77.4% for men in the most deprived areas compared to 90.4% for men in the least deprived areas.
- 61,942 men attended for initial screens and an Abdominal Aortic Aneurysm was detected in 936 of these men (1.5%). A large aneurysm was detected in 64 of these men.

Self-referral and surveillance screens to 31 March 2015:

- 3,292 men attended for initial screening following self-referral into the programme and 89 (2.7%) had an aneurysm detected. A large aneurysm was detected in 13 of these men.
- 812 men in Scotland attended for surveillance screens. For these men there were over 1,900 surveillance screens. A large aneurysm was detected in 85 of these men.

Results and Commentary

Invite and uptake rates for initial screens

For the cohort of men eligible for screening to 31 March 2014, the invite rate for initial screens was 100%. Uptake of screening was high at 85.8%. Uptake rates in all NHS Boards exceeded 80%.

Table 1: Invite and uptake rates for initial screens by NHS Board; men eligible for screening to 31 March 2014¹

NHS Board of residence ²	Implementation date	Number of men eligible	Offered screening ³		Attended screening (uptake)	
			N	%	N	%
Ayrshire & Arran	01 Jun 2013	4,629	4,629	100.0	3,991	86.2
Borders	09 Aug 2012	2,410	2,410	100.0	2,159	89.6
Dumfries & Galloway	24 Jul 2013	1,932	1,932	100.0	1,719	89.0
Fife	09 Jan 2013	5,466	5,466	100.0	4,785	87.5
Forth Valley	18 Sep 2013	2,753	2,753	100.0	2,394	87.0
Grampian ³	03 Oct 2012	8,951	8,949	100.0	7,915	88.4
Greater Glasgow & Clyde	06 Feb 2013	13,705	13,705	100.0	11,224	81.9
Highland ⁴	29 Jun 2012	6,068	6,068	100.0	5,297	87.3
Lanarkshire ³	01 Apr 2013	6,620	6,617	100.0	5,478	82.8
Lothian	09 Aug 2012	12,138	12,138	100.0	10,303	84.9
Orkney	03 Oct 2012	403	403	100.0	350	86.8
Shetland	03 Oct 2012	414	414	100.0	376	90.8
Tayside	09 Jan 2013	6,115	6,115	100.0	5,398	88.3
Western Isles ⁴	29 Jun 2012	633	633	100.0	553	87.4
Scotland^{3,4}		72,237	72,232	100.0	61,942	85.8

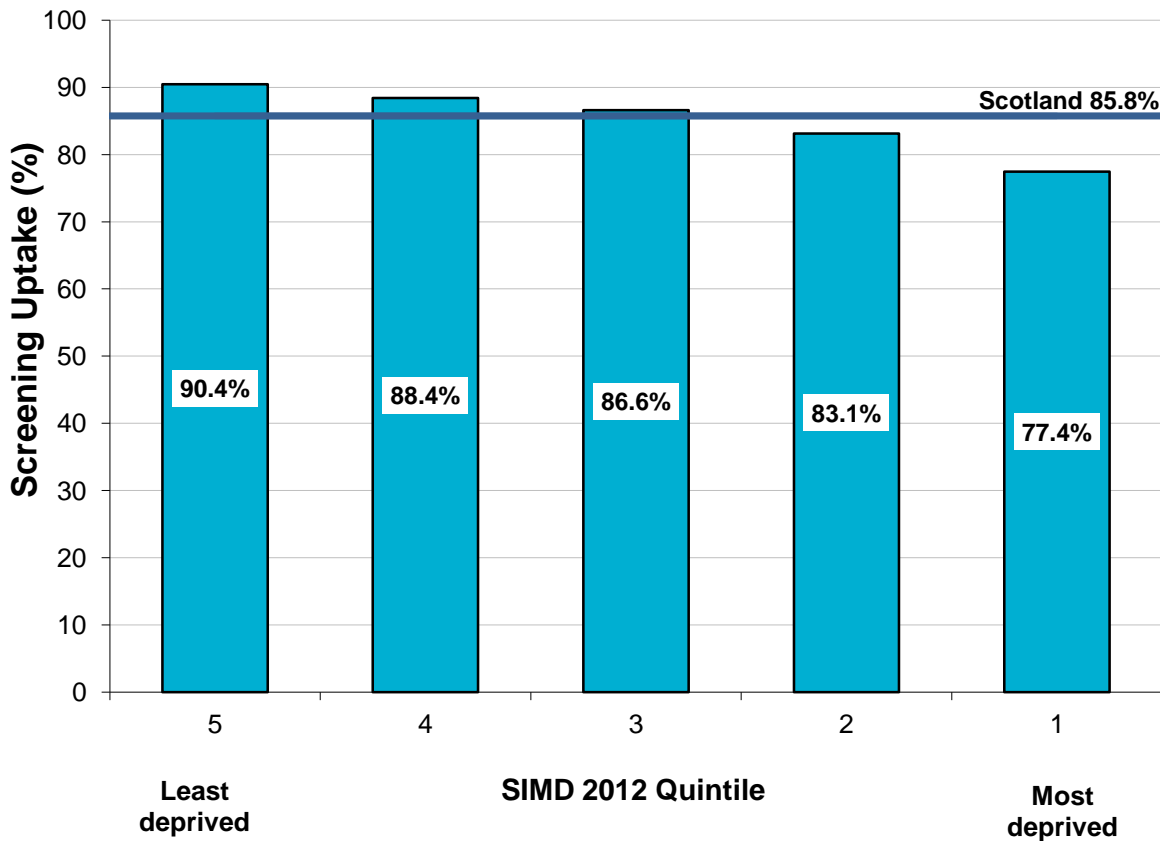
Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.
3. Although the data reported indicates that five men in the eligible cohort were not sent an invite, checks conducted by the relevant NHS Boards have confirmed that these men were invited. The reason for these invites not appearing on the data extract from the system will be investigated.
4. NHS Highland and NHS Western Isles had a local AAA screening programme that had been in operation for several years prior to the introduction of the national screening programme in Scotland. There were approximately a further 1,000 men in the age range for the cohort to 31 March 2014 who had already been screened before the national programme commenced. Most of these men were resident in NHS Highland. As these men had already been screened, they were not included in the cohort of men to be invited for an initial screen when the national programme started and are not included in the figures presented in the table.

Uptake rates by deprivation

Uptake of screening decreases with increasing deprivation. For men eligible for initial screens to 31 March 2014, uptake was 77.4% for men in the most deprived areas compared to 90.4% for men in the least deprived areas.

Figure 1: Uptake of initial screens in Scotland by Scottish Index of Multiple Deprivation quintile^{1,2}; men eligible for screening to 31 March 2014



Source: Scottish AAA Call Recall System at 1 December 2015

1. Scottish Index of Multiple Deprivation (SIMD) 2012 Scotland level population-weighted quintile.
2. The SIMD 2012 quintile is based on the latest postcode of residence at the time of the data extract (1 December 2015). For a small proportion of men this will not be their home postcode at the time of invitation for initial screening.

Initial screen results

Of the 61,942 men from the eligible cohort who attended for initial screens:

- 60,783 (98.1%) had a negative result
- 936 (1.5%) had a positive result
- 169 (0.3%) had a non-visualisation result
- 54 (0.1%) had an 'other' result, for example they attended a clinic, and were asked to re-attend for an initial screen, but did not attend/respond to further invitations.

Of the 936 men with a positive result:

- 757 had a small aneurysm
- 115 had a medium aneurysm
- 64 had a large aneurysm

Table 2: Initial screen results by NHS Board; men eligible for screening to 31 March 2014^{1,2}

NHS Board of residence ³	Implementation date	Attended screening (number of men) ⁴	Positive		Negative		Non-visualisation	
			N	%	N	%	N	%
Ayrshire & Arran	01 Jun 2013	3,991	75	1.9	3,904	97.8	10	0.3
Borders	09 Aug 2012	2,159	32	1.5	2,116	98.0	9	0.4
Dumfries & Galloway	24 Jul 2013	1,719	18	1.0	1,688	98.2	8	0.5
Fife	09 Jan 2013	4,785	79	1.7	4,701	98.2	3	0.1
Forth Valley	18 Sep 2013	2,394	32	1.3	2,350	98.2	8	0.3
Grampian	03 Oct 2012	7,915	138	1.7	7,756	98.0	9	0.1
Greater Glasgow & Clyde	06 Feb 2013	11,224	164	1.5	11,007	98.1	45	0.4
Highland	29 Jun 2012	5,297	68	1.3	5,189	98.0	31	0.6
Lanarkshire	01 Apr 2013	5,478	97	1.8	5,360	97.8	16	0.3
Lothian	09 Aug 2012	10,303	135	1.3	10,142	98.4	23	0.2
Orkney	03 Oct 2012	350	6	1.7	344	98.3	-	-
Shetland	03 Oct 2012	376	6	1.6	370	98.4	-	-
Tayside	09 Jan 2013	5,398	77	1.4	5,312	98.4	7	0.1
Western Isles	29 Jun 2012	553	9	1.6	544	98.4	-	-
Scotland		61,942	936	1.5	60,783	98.1	169	0.3

Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. A small proportion of men attended more than one appointment for an initial screen because the aorta could not be visualised at the first appointment. The screening results in the table relate to the final (or latest) initial screen result for each participant.
3. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.
4. The attended screening total includes 54 men who attended for screening and who did not have a definitive result. For example, this includes men who attended a clinic, were asked to re-attend for an initial screen, but did not attend/respond to further invitations.

Table 3: Number of men with initial screen positive results by aneurysm size and NHS Board; men eligible for screening to 31 March 2014¹

NHS Board of residence ²	Implementation date	Number of men with initial screen positive results	Number of men with positive results by aneurysm size grouping		
			Small (3.0 to 4.4cm)	Medium (4.5 to 5.4cm)	Large (≥5.5cm)
Ayrshire & Arran	01 Jun 2013	75	58	14	3
Borders	09 Aug 2012	32	25	4	3
Dumfries & Galloway	24 Jul 2013	18	12	5	1
Fife	09 Jan 2013	79	63	10	6
Forth Valley	18 Sep 2013	32	29	2	1
Grampian	03 Oct 2012	138	124	8	6
Greater Glasgow & Clyde	06 Feb 2013	164	137	17	10
Highland	29 Jun 2012	68	52	10	6
Lanarkshire	01 Apr 2013	97	74	12	11
Lothian	09 Aug 2012	135	104	20	11
Orkney	03 Oct 2012	6	4	-	2
Shetland	03 Oct 2012	6	4	2	-
Tayside	09 Jan 2013	77	64	10	3
Western Isles	29 Jun 2012	9	7	1	1
Scotland		936	757	115	64

Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.

Self-referrals

In the period to 31 March 2015, 3,292 men attended for initial screening following self-referral into the programme. In total 89 (2.7%) had a positive result. As the incidence of AAAs increases with age, the percentage of initial screens with a positive result is higher for self-referrals than for men in the routine cohort aged 65.

Of the 89 self-referrals with a positive result:

- 58 had a small aneurysm
- 18 had a medium aneurysm
- 13 had a large aneurysm

Table 4: Number of men attending initial screens by result and NHS Board; self-referrals attending to 31 March 2015^{1,2}

NHS Board of residence ³	Programme start date	Number of men screened	Positive		Negative		Non-visualisation	
			N	%	N	%	N	%
Ayrshire & Arran	26 Jun 2013	248	9	3.6	237	95.6	2	0.8
Borders	30 Aug 2012	190	7	3.7	183	96.3	-	-
Dumfries & Galloway	05 Aug 2013	94	1	1.1	93	98.9	-	-
Fife	28 Jan 2013	250	5	2.0	245	98.0	-	-
Forth Valley	21 Oct 2013	572	14	2.4	558	97.6	-	-
Grampian	25 Oct 2012	474	14	3.0	460	97.0	-	-
Greater Glasgow & Clyde	25 Feb 2013	339	4	1.2	335	98.8	-	-
Highland	29 Jun 2012	252	6	2.4	245	97.2	1	0.4
Lanarkshire	25 Apr 2013	118	3	2.5	115	97.5	-	-
Lothian	30 Aug 2012	399	12	3.0	387	97.0	-	-
Orkney	25 Oct 2012	66	5	7.6	61	92.4	-	-
Shetland	25 Oct 2012	11	-	-	11	100.0	-	-
Tayside	28 Jan 2013	250	7	2.8	243	97.2	-	-
Western Isles	29 Jun 2012	29	2	6.9	27	93.1	-	-
Scotland		3,292	89	2.7	3,200	97.2	3	0.1

Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. A small proportion of men attended more than appointment for an initial screen because the aorta could not be visualised at the first appointment. The screening results in the table relate to the final (or latest) initial screen result for each participant.
3. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.

Table 5: Number of men with initial screen positive results by aneurysm size and NHS Board; self-referrals attending to 31 March 2015¹

NHS Board of residence ²	Programme start date	Number of men with positive results	Number of men with positive results by aneurysm size grouping		
			Small (3.0 to 4.4cm)	Medium (4.5 to 5.4cm)	Large (≥5.5cm)
Ayrshire & Arran	26 Jun 2013	9	5	2	2
Borders	30 Aug 2012	7	3	2	2
Dumfries & Galloway	05 Aug 2013	1	1	-	-
Fife	28 Jan 2013	5	3	2	-
Forth Valley	21 Oct 2013	14	10	1	3
Grampian	25 Oct 2012	14	10	2	2
Greater Glasgow & Clyde	25 Feb 2013	4	4	-	-
Highland	29 Jun 2012	6	4	1	1
Lanarkshire	25 Apr 2013	3	1	2	-
Lothian	30 Aug 2012	12	9	3	-
Orkney	25 Oct 2012	5	4	-	1
Shetland	25 Oct 2012	-	-	-	-
Tayside	28 Jan 2013	7	3	2	2
Western Isles	29 Jun 2012	2	1	1	-
Scotland		89	58	18	13

Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.

Surveillance screens

In the period to 31 March 2015, 812 men in Scotland attended for surveillance screens. For these men, there were a total of 1,931 surveillance screens and large aneurysms were detected in 85 men.

NHS Highland and NHS Western Isles had a local AAA screening programme in operation for several years prior to the introduction of the national screening programme. Men on surveillance in the local programme were transferred to the national programme. For this reason, NHS Highland has the highest number of men on surveillance and NHS Western Isles has a higher number compared to the other Island Boards. The transfer of men on surveillance from the local programme also means the age profile of men on surveillance in NHS Highland and NHS Western Isles is considerably older than in other NHS Boards. As the incidence of AAAs increases with age, this will also impact on the number of large aneurysms detected in the surveillance cohort in these Boards.

Table 6: Surveillance screens by aneurysm size and NHS Board; to 31 March 2015¹

NHS Board of residence ²	Programme start date	Number of men attending surveillance to 31 March 2015 ³	Number of surveillance screens to 31 March 2015 ⁴	Number of positive results by aneurysm size grouping		
				Small (3.0 to 4.4cm)	Medium (4.5 to 5.4cm)	Large (≥5.5cm)
Ayrshire & Arran	26 Jun 2013	67	112	43	65	4
Borders	30 Aug 2012	23	43	19	22	2
Dumfries & Galloway	05 Aug 2013	11	17	5	11	1
Fife	28 Jan 2013	52	72	43	26	3
Forth Valley	21 Oct 2013	12	14	7	5	2
Grampian	25 Oct 2012	104	163	102	56	5
Greater Glasgow & Clyde	25 Feb 2013	58	80	38	35	7
Highland ⁵	29 Jun 2012	287	1,043	404	595	44
Lanarkshire	25 Apr 2013	33	52	22	26	4
Lothian	30 Aug 2012	90	163	72	83	8
Orkney	25 Oct 2012	3	4	4	-	-
Shetland	25 Oct 2012	6	10	3	7	-
Tayside	28 Jan 2013	43	70	30	38	2
Western Isles ⁵	29 Jun 2012	23	88	21	64	3
Scotland		812	1,931	813	1,033	85

Source: Scottish AAA Call Recall System at 1 December 2015

1. See the [definitions](#) and [glossary](#) sections for further information.
2. NHS Board of residence as recorded on Scottish AAA Call Recall System. On 1 April 2014, NHS Board boundaries in Scotland were reconfigured to align them with those of local authorities. This led to a phased process, during the latter part of 2014 and early 2015, where eligible men in affected areas were recorded on the AAA Call Recall System as residing in their new NHS Board. This change mainly affected NHS Greater Glasgow & Clyde and NHS Lanarkshire. The data reported covers invitations sent before and after this reconfiguration. Some men may be screened at a location outside their NHS Board of residence.
3. The number of men attending surveillance includes four men with surveillance screens recorded in more than one NHS Board as a result of changes in place of residence. In this column these men are counted once under the latest NHS Board of residence.
4. Number of surveillance screens includes screens with confirmed results only and aneurysms ≥ 3.0 cm. There were a further 10 surveillance screens with a measurement < 3.0 cm (negative result).
5. NHS Highland and NHS Western Isles had a local AAA screening programme in operation for several years prior to the introduction of the national screening programme. Men on surveillance in the local programme were transferred to the national programme. For this reason, NHS Highland has the highest number of men on surveillance and NHS Western Isles has a higher number compared to the other Island Boards. The transfer of men on surveillance from the local programme also means the age profile of men on surveillance in NHS Highland and NHS Western Isles is considerably older than in other NHS Boards. As the incidence of AAAs increases with age, this will also impact on the number of large aneurysms detected in the surveillance cohort in these Boards.

Glossary

AAA	Abdominal Aortic Aneurysm
Initial screen	The first screening(s) to detect an aneurysm
Self-referral	Man over the age of 65 who has not been screened previously, who contacts their local AAA screening centre directly to request screening.
SIMD	Scottish Index of Multiple Deprivation
Surveillance screen	Screens for men who have a detected small or medium aneurysm, to check the size of the aneurysm to monitor any growth.

Bibliography

[1] Reimerink, J. J. et al. (2013). Systematic review and meta-analysis of population-based mortality from ruptured abdominal aortic aneurysm. *British Journal of Surgery*. 100(11):1405-13

List of Tables

Table No.	Name	Time period	File & size
	All tables are included in the AAA screening workbook . These tables are also listed separately below.	See below	Excel [51kb]
Table 1	Invite and uptake rates for initial screens by NHS Board	Men eligible for screening to 31 March 2014	
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Further Information

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Appendix

A1 – Background Information

Data Sources

Data for this publication are derived from the Scottish AAA Call Recall System. This system facilitates the invitation of men for screening and records the results. It is used by all NHS Boards in Scotland.

ISD receive data extracts from the system for the purpose of producing and publishing statistics on the AAA screening programme in Scotland.

Data Quality and Accuracy

The data extract from the Scottish AAA Call Recall System is subject to validation and quality assurance procedures in ISD, with the assistance of NHS Boards and the system suppliers in investigating data quality queries. A few small data quality issues with the data extract have been identified, such as invite data missing for a very small number of men in error. These will be investigated further. These data quality issues are not expected to have materially affected the reported results and findings.

Methodology

This is the first publication of these statistics and they cover the period of the phased roll-out of the screening programme in Scotland. As these published statistics are developed to reflect the reporting requirements of the screening programme, including the reporting of performance indicators, the methodology will be reviewed.

Definition of cohort of men eligible for screening to 31 March 2014 by NHS Board¹

NHS Board	Implementation date for defining cohort of men eligible for screening	Date of birth range for defining cohort of men eligible for screening to 31 March 2014
Ayrshire & Arran	01 Jun 2013	01 Jun 1947 – 31 Mar 1949
Borders	09 Aug 2012	09 Aug 1946 – 31 Mar 1949
Dumfries & Galloway	24 Jul 2013	24 Jul 1947 – 31 Mar 1949
Fife	09 Jan 2013	09 Jan 1947 – 31 Mar 1949
Forth Valley	18 Sep 2013	18 Sep 1947 – 31 Mar 1949
Grampian	03 Oct 2012	03 Oct 1946 – 31 Mar 1949
Greater Glasgow & Clyde	06 Feb 2013	06 Feb 1947 – 31 Mar 1949
Highland	29 Jun 2012	29 Jun 1946 – 31 Mar 1949
Lanarkshire	01 Apr 2013	01 Apr 1947 – 31 Mar 1949
Lothian	09 Aug 2012	09 Aug 1946 – 31 Mar 1949
Orkney	03 Oct 2012	03 Oct 1946 – 31 Mar 1949
Shetland	03 Oct 2012	03 Oct 1946 – 31 Mar 1949
Tayside	09 Jan 2013	09 Jan 1947 – 31 Mar 1949
Western Isles	29 Jun 2012	29 Jun 1946 – 31 Mar 1949

1. The cohort of men eligible for screening to 31 March 2014 also includes 505 men who were over the age of 65 on the NHS Board implementation date. Most of these men were resident in NHS Highland. These men were included in the cohort eligible for screening as they had been eligible for screening under NHS Highland's local AAA screening programme that had been in operation for several years prior to the introduction of the national screening programme, and had not previously been invited and/or screened.

A2 – Publication Metadata (including revisions details)

Metadata Indicator	Description
Publication title	Scottish Abdominal Aortic Aneurysm (AAA) Screening Programme Statistics
Description	Update to 31 March 2015
Theme	Health and Social Care
Topic	Public Health
Format	Excel workbooks, PDF
Data source(s)	Scottish AAA Call Recall System
Date that data are acquired	1 December 2015
Release date	1 March 2016
Frequency	Annual
Timeframe of data and timeliness	Invite and uptake rates and results for men eligible for initial screening to 31 March 2014. The statistics include data on invites and attendances for this cohort to 30 November 2015. The publication also includes information on self-referrals for initial screens, and data on surveillance screens to 31 March 2015.
Continuity of data	This is the first publication and is covering the period of phased roll-out of the screening programme in Scotland so Board implementation dates should be considered when interpreting the statistics.
Revisions statement	Figures contained within each publication may be subject to change in future publications. See the ISD Revisions Policy . The statistics for specific cohorts reflect the invite, uptake and results by a given date. This is the first publication of these statistics, and is covering the period of the phased roll-out of the screening programme in Scotland. As these published statistics are developed to reflect the reporting requirements of the screening programme, including the reporting of performance indicators, the methodology will be reviewed.
Revisions relevant to this publication	Not applicable. This is the first publication of these statistics.
Concepts and definitions	Further information on the AAA screening programme in Scotland can be found on NHS Inform website: www.nhsinform.co.uk/screening/aaa/
Relevance and key uses of the statistics	The statistics in this publication will be developed to monitor and evaluate the Scottish AAA screening programme through the reporting of performance indicators.
Accuracy	The data extract from the Scottish AAA Call Recall System is subject to validation and quality assurance procedures in ISD, with the assistance of NHS Boards and the system suppliers in investigating data quality queries. A few small

	data quality issues with the data extract have been identified, such as invite data missing for a very small number of men in error. These will be investigated further. These data quality issues are not expected to have materially affected the reported results and findings.
Completeness	The data relates to men registered with a Community Health Index (CHI) number. The data is not a sample.
Comparability	This is the first publication of these statistics, and is covering the period of the phased roll-out of the screening programme in Scotland. The statistics will be developed to reflect the reporting requirements for the programme, and this includes the reporting of performance indicators. AAA screening statistics are also fairly new in the rest of the UK. Once firmly established, the comparability of the data will be assessed and data will be compared where appropriate.
Accessibility	It is the policy of ISD Scotland to make its web sites and products accessible according to published guidelines .
Coherence and clarity	Data are available as a PDF and tables on the AAA Screening area of the ISD website.
Value type and unit of measurement	Numbers and percentages.
Disclosure	The ISD protocol on Statistical Disclosure Protocol is followed.
Official Statistics designation	Non-official statistics
UK Statistics Authority Assessment	These are new developmental statistics which have not been submitted for assessment by the UK Statistics Authority
Last published	Not applicable
Next published	To be confirmed
Date of first publication	1 March 2016
Help email	nss.isdaascreen@nhs.net
Date form completed	19 February 2016

A3 – Early Access details (including Pre-Release Access)

Pre-Release Access

Under terms of the "Pre-Release Access to Official Statistics (Scotland) Order 2008", ISD are obliged to publish information on those receiving Pre-Release Access ("Pre-Release Access" refers to statistics in their final form prior to publication). The standard maximum Pre-Release Access is five working days. Shown below are details of those receiving standard Pre-Release Access.

Standard Pre-Release Access:

- Scottish Government Health Department
- NHS Board Chief Executives
- NHS Board Communication leads

Early Access for Quality Assurance

These statistics will also have been made available to those who needed access to help quality assure the publication:

- AAA Screening NHS Board Call Recall Managers
- AAA Screening NHS Board Clinical Leads
- AAA Screening NHS Board Co-ordinators
- AAA Screening NHS Board Lead Screeners
- National Specialist and Screening Services Directorate (NSD)

A4 – ISD and Official Statistics

About ISD

Scotland has some of the best health service data in the world combining high quality, consistency, national coverage and the ability to link data to allow patient based analysis and follow up.

Information Services Division (ISD) is a business operating unit of NHS National Services Scotland and has been in existence for over 40 years. We are an essential support service to NHSScotland and the Scottish Government and others, responsive to the needs of NHSScotland as the delivery of health and social care evolves.

Purpose: To deliver effective national and specialist intelligence services to improve the health and wellbeing of people in Scotland.

Mission: Better Information, Better Decisions, Better Health

Vision: To be a valued partner in improving health and wellbeing in Scotland by providing a world class intelligence service.

Official Statistics

Information Services Division (ISD) is the principal and authoritative source of statistics on health and care services in Scotland. ISD is designated by legislation as a producer of 'Official Statistics'. Our official statistics publications are produced to a high professional standard and comply with the Code of Practice for Official Statistics. The Code of Practice is produced and monitored by the UK Statistics Authority which is independent of Government. Under the Code of Practice, the format, content and timing of statistics publications are the responsibility of professional staff working within ISD.

ISD's statistical publications are currently classified as one of the following:

- National Statistics (ie assessed by the UK Statistics Authority as complying with the Code of Practice)
- National Statistics (ie legacy, still to be assessed by the UK Statistics Authority)
- Official Statistics (ie still to be assessed by the UK Statistics Authority)
- other (not Official Statistics)

Further information on ISD's statistics, including compliance with the Code of Practice for Official Statistics, and on the UK Statistics Authority, is available on the [ISD website](#).