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of Health

NHS
England

Public health functions to be exercised by NHS England

Service specification No.23

NHS Abdominal Aortic Aneurysm Screening Programme

November 2013

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Public health functions to be exercised by NHS England

Service specification No.23

NHS Abdominal Aortic Aneurysm Screening Programme

Prepared by –
Public Health England

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This is a service specification within Part C of the agreement 'Public health functions to be exercised by NHS England' dated November 2013 (the '2014-15 agreement').

The 2014-15 agreement is made between the Secretary of State for Health and NHS England under section 7A of the National Health Service Act 2006 ('the 2006 Act') as amended by the Health and Social Care Act 2012.

This service specification is to be applied by NHS England in accordance with the 2014-15 agreement. An update to this service specification may take effect as a variation made under section 7A of the 2006 Act. Guidance agreed under paragraph A38 of the 2014-15 agreement may inform the application of the provisions of this service specification.

This service specification is not intended to replicate, duplicate or supersede any other legislative provisions that may apply.

The 2014-15 agreement including all service specifications within Part C is available at www.gov.uk (search for 'commissioning public health').

Section 1: Purpose of Screening Programme

1.1 Purpose of the Specification

To ensure a consistent and equitable approach across England a common national service specification must be used to govern the provision and monitoring of abdominal aortic aneurysm screening services.

The purpose of the service specification for the NHS Abdominal Aortic Aneurysm Screening Programme (NAAASP) is to outline the service and quality indicators produced by NHS England for NHS England's responsible population.

The service specification is not designed to replicate, duplicate or supersede any relevant legislative provisions which may apply, e.g. the Health and Social Care Act 2008 or the work undertaken by the Care Quality Commission. The specification will be reviewed and amended in line with any new guidance as quickly as possible.

This specification should be read in conjunction with:

- Guidance from the NAAASP website ¹ where appropriate and as detailed in the Standard Operating Procedures². Abdominal Aortic Aneurysm - Policies
- Standards and Service Objectives <http://aaa.screening.nhs.uk/standards>
- UK National Screening Committee (UK NSC) guidance, Managing Serious Incidents in the English NHS National Screening Programmes <http://www.screening.nhs.uk/quality-assurance#fileid9902>

1.2 Aim

NAAASP aims to reduce AAA related mortality by providing a systematic population-based screening programme for the male population during their 65th year and, on request, for men over 65.

¹ <http://aaa.screening.nhs.uk/>

² NHS Abdominal Aortic Aneurysm Screening Programme: Essential Elements in Developing a AAA Screening and Surveillance Programme, NHS Screening Programmes

1.3 Objectives

- Identify and invite eligible men to the AAA screening programme
- Provide clear, high quality information that is accessible to all
- Carry out high quality abdominal ultrasound on those men attending for initial or follow-up screening according to national protocol
- Minimise the adverse effects of screening, including anxiety and unnecessary investigations
- Identify AAAs accurately
- Enable men to make an informed choice about the management of their AAA
- Ensure appropriate and effective management of cardiovascular risk factors identified through screening
- Ensure referral to accredited vascular services for high quality diagnostic and treatment services
- Promote audit and research and learn from the results. The screening programme will be subject to an annual Quality Assurance (QA) review and effectiveness of treatment will be monitored via annual reports of a National Vascular Review
- Continue to develop the skills of the workforce involved in screening

1.4 Expected health outcomes

NAAASP aims to reduce deaths from abdominal aortic aneurysms (AAA) through early detection, appropriate monitoring and treatment. Research has demonstrated that offering men ultrasound screening in their 65th year should reduce the rate of premature death from ruptured AAA by up to 50 per cent.

Ruptured AAA deaths account for around 2.1% of all deaths in men aged 65 and over. This compares with 0.8% in women of the same age group. The mortality from rupture is high, with nearly a third dying in the community before reaching hospital. Of those who undergo AAA emergency surgery, the post-operative mortality rate is around 50%, making the case fatality after rupture around 80%. This compares with a post operative mortality rate in high quality vascular services of around 2% following planned surgery.

NAAASP was rolled out in phases across England. Phased implementation began in March 2009 and full coverage across England was achieved at the end of March 2013. Each local programme operates as a collaboration between primary care, hospital trusts and vascular networks. Local programmes are based on a recommended minimum population of 800,000.

1.5 Principles

- All individuals shall be treated with courtesy, respect and an understanding of their needs
- All those participating in NAAASP shall have adequate information on the benefits and risks to allow an informed decision to be made before participating

- Access to screening must be matched to the needs of the target population in terms of availability
- Screening shall be effectively integrated across a pathway including between different providers, screening centres, primary care and secondary care

Section 2: Scope of Screening Programme

2.1 Description of screening programme

NAAASP commenced phased roll-out across England in spring 2009. The aim of the programme is to reduce deaths from abdominal aortic aneurysms (also called 'AAAs' or 'triple As') through early detection, appropriate monitoring and treatment. The programme invites all men for screening during the year that they turn 65. Men over the age of 65 can self-refer direct to the screening programme provided they have not previously been screened or diagnosed with an AAA. Any man experiencing symptoms or worried that he may have an AAA should consult his GP.

An ultrasound scan of the abdomen is used to detect AAAs. The scan is quick and non-invasive and the results are provided straight away. Men who have an aneurysm detected through screening will be offered treatment or monitoring depending on the size of the aneurysm.

In delivering a national programme and to ensure national consistency, the local provider shall fulfil the following, in conjunction with guidance from the national programme and as detailed in the Standard Operating Procedures³ ([Abdominal Aortic Aneurysm - Policies](#)):

- Work to nationally agreed common standards and policies
- Implement and support national IT developments
- Use materials provided by the national programme centre, such as leaflets and protocols
- Respond to national action/lessons such as change of software, equipment supplier, techniques
- Work with NHS England in reporting on and resolving serious incidents
- Provide data and reports against programme standards, key performance indicators (KPIs), and quality indicators as required by the national programme on behalf of the UK NSC

³ NHS Abdominal Aortic Aneurysm Screening Programme: Essential Elements in Developing a AAA Screening and Surveillance Programme, NHS Screening Programmes

- Take part in quality assurance processes and implement changes recommended by QA including urgent suspension of services if required
- Implement and monitor failsafe procedures and continuously ensure quality
- Work with other providers to ensure that handover of results or patients is smooth and robust
- Participate in evaluation of the screening programme

Documents referred to above are available from the NAAASP website ⁴ ([NHS Abdominal Aortic Aneurysm Screening Programme](http://aaa.screening.nhs.uk/))

2.2 Care pathway

NAAASP is based on the policies developed by the UK NSC⁵.

Appropriate information and advice are vital elements of the screening programme:

- All men invited for screening shall be given information at all stages of the screening programme as required, about the risks and benefits of screening and any subsequent surveillance or treatment which may be offered
- All men identified with an aneurysm and requiring surveillance shall be offered health promotion information and advice as appropriate, relating to issues such as smoking, diet and physical activity. The nurse practitioner is involved in assessing and counselling men at specific points in the screening process and giving advice on changes in lifestyle as appropriate
- The screening process itself can involve up to three phases depending on the result at each phase: screening, surveillance and referral
- Screening by ultrasound scanning shall be offered to all men during the year they turn 65. Men found to have a normal aorta (diameter < 3cm) will need no further contact with the screening programme.
- Surveillance by ultrasound scanning shall be offered to all men found to have an AAA with a diameter of between 3cm and 5.4cm. Surveillance scans will monitor whether the aneurysm is increasing in size and may require intervention. The interval between scans will depend on the size of the aneurysm

⁴ <http://aaa.screening.nhs.uk/>

⁵ UK National Screening Committee (2005) Recommendation on Screening for Abdominal Aortic Aneurysm, November Committee Meeting

- Referral to a vascular surgeon to consider treatment options, including surgery, shall be offered to men found to have an aneurysm 5.5cm or larger in diameter. Patients who decline treatment or are unfit for surgery shall be offered observation under the care of the surgeon

Vascular surgical services are organisationally distinct from the screening programme. Responsibility for patients transfers from the screening programme to the vascular surgical service at the point of referral once the screening programme has received notification that the referral has been received by the vascular service.

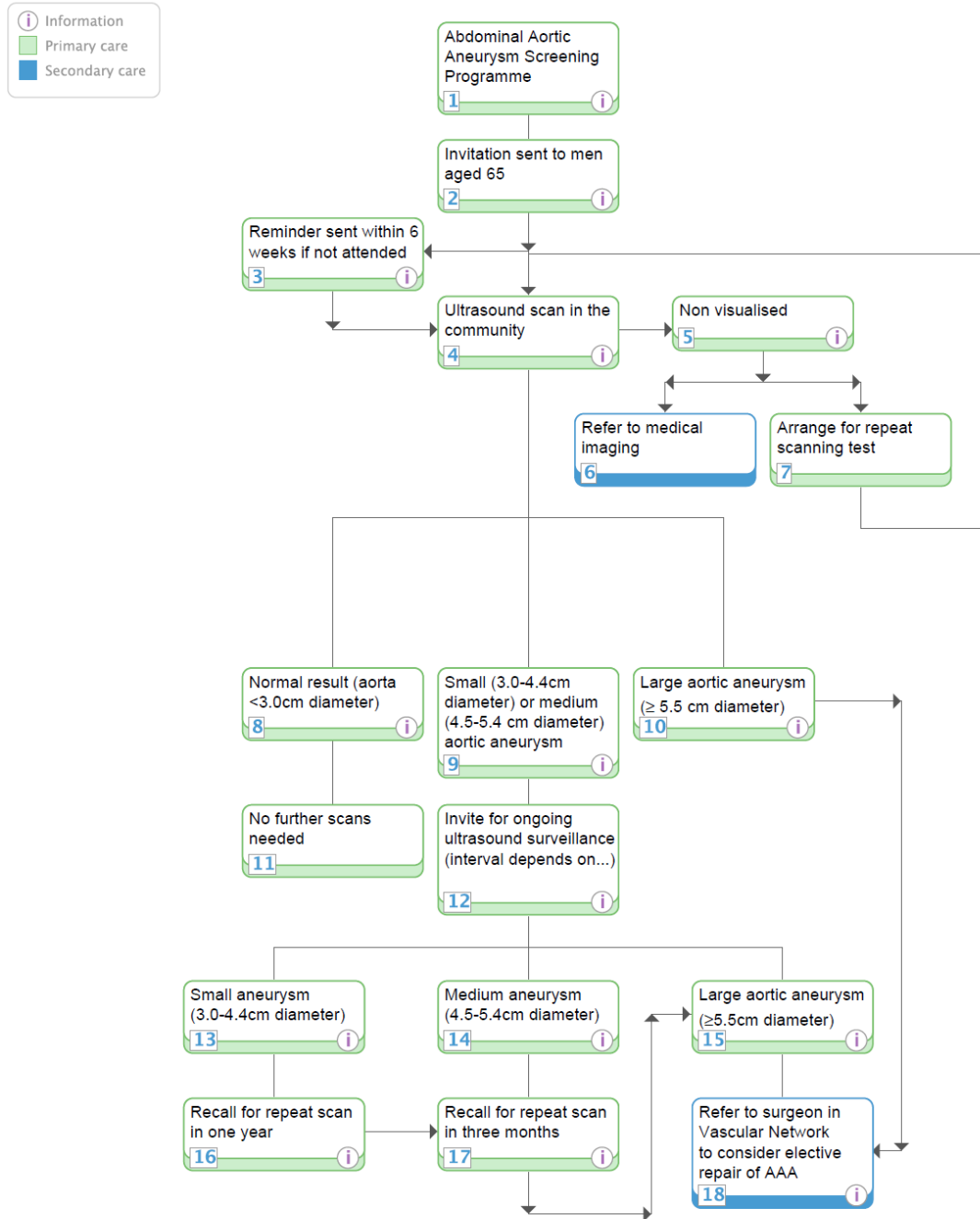
The screening process is divided into the following stages:

- Identification
- Invitation
- Inform
- Test
- Surveillance
- Diagnose
- Treatment/ intervention
- Monitor outcomes

The complete care pathway for AAA screening can be found on the Map of Medicine website

http://healthguides.mapofmedicine.com/choices/map/abdominal_aortic_aneurysm_screening1.html).

http://healthguides.mapofmedicine.com/choices/map/abdominal_aortic_aneurysm_screening1.html
 This care map has been locally developed and approved by The UK National Screening Committee for use in England.



Published: 13-Oct-2010 Valid until: 15-Apr-2012 © Map of Medicine Ltd All rights reserved
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An AAA screening programme relies on a suitable vascular network for treating patients with detected AAAs that covers a population of at least 800,000. The vascular units providing the treatment must be part of a vascular network and comply with the requirements recommended by the Vascular Society of Great Britain and Ireland (VSGBI) for the treatment of AAA and will be required to provide data on the treatment and outcome of every infra-renal AAA operation or intervention to the National Vascular Registry.

2.3 Failsafe Procedures

One of the cornerstones of an efficient and safe screening programme is the failsafe system. For NAAASP, the failsafe system ensures all eligible men are identified and receive appropriate information. If an AAA is detected the subject is given advice about any follow-up or treatment required and appropriate actions are taken.

Screening providers shall ensure failsafe systems are in place to ensure the screening pathway is safe.

All those involved in the screening programme must be aware of the failsafe procedures, know how the systems operate and participate appropriately. These procedures ensure, as far as possible, all reasonable action is taken to offer appropriate management to the subject.

NAAASP guidance recommends that a responsible health professional is identified for all individuals with an AAA. Responsibilities are defined in the following situations:

Area	Responsibility (The Local Director takes overall responsibility for each local screening programme)
Identification of cohort	Coordinator
Sending out invitations	Coordinator
Non-attendance - for initial test or surveillance	Coordinator
Screening clinic	Screening technician
Transfer of screening data from the clinic	Screening technician who undertook the scan
Booking of follow-up appointments	Coordinator
Community clinics/NHS Drop-In Centres	The senior clinician
Hospital clinics	Consultant responsible for the care of the patient

Failsafe systems shall ensure:

- Invitations for a scan are sent to all appropriate individuals and non-responders
- Men are booked to appropriate clinics, with screening sites and staff rotas arranged
- A telephone facility and contact number is available for men to rearrange clinic appointments
- All men failing to respond to first invitation or surveillance appointments will be contacted on at least one further occasion following all attempts to ensure address is correct by use of the NHS Strategic Tracing Service
- Screening equipment is operating and maintained within the required standards

- Appropriate action is taken on finding a normal, an abnormal or non visualised result
- All images and results are archived and stored as per national guidelines using a confidential and secure method⁶
- All data is entered appropriately onto the IT system
- The local programme coordinator has active responsibility for screening men and this is maintained until the patient is referred to a vascular consultant. This consultant then takes over responsibility until a programme of observation or treatment has been completed. The local programme director has overall responsibility for the programme in its entirety
- If indicated, an appointment to attend a vascular unit clinic has been issued
- Follow-up procedures are implemented as required. As far as possible, if an individual moves away from the clinical commissioning group (CCG) area, relevant primary care and specialist services are made available to him
- Ensuring that all men scanned in the medical imaging department following a non visualized screening outcome are seen and given appropriate results. All results must be recorded on the SMaRT system.

The procedures necessary for NAAASP failsafe systems shall involve all professionals concerned with a patient, such as clinical staff, screening team, office team, nurse/health professional adviser and technicians. these procedures must operate in a timely fashion, be precise and seamless. Above all, the following must be clear to all subjects in the programme:

- The result of their last scan (normal, abnormal or non-visualised)
- The appropriate action recommended in their case, when to expect further communication and from whom

2.4 Roles and accountability throughout the pathway

The director/ clinical lead of the screening programme shall have overall clinical responsibility and accountability. He/she shall be responsible for ensuring that:

- Information about the programme is disseminated to primary care teams, for example through the NHS England Area, practice visits or regular GP / practice manager meetings

⁶ NHS Abdominal Aortic Aneurysm Screening Programme: Essential Elements in Developing a AAA Screening and Surveillance Programme, NHS Screening Programmes

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- The central IT system developed for AAA is managed within the screening office to ensure the eligible population in the catchment area is identified, invited and their outcomes recorded accurately
- The call/recall system is well managed
- All men invited for screening are given information, at all stages of the screening programme as required, about the risks and benefits of screening and any subsequent surveillance or treatment which may be offered
- All men with a non visualized outcome will be offered further scanning within the screening programme or medical imaging departments.
- All men identified with an aneurysm and requiring surveillance will be offered health promotion information and advice as appropriate, relating to issues such as smoking, diet and physical activity
- A record of the screening history of each registered individual is maintained and updated in a timely fashion
- All individuals are notified of their test result at the clinic unless they have requested otherwise
- All eligible individuals are recalled at the appropriate interval, according to AAA diameter
- All individuals meeting the criteria for referral are referred promptly and appropriately to a hospital with acceptable outcomes from vascular surgery
- Failsafe procedures are developed locally, based on the national template, and operate in accordance with national policy
- Quarterly activity reports are sent to the NHS England Area Team screening lead
- Performance against national quality assurance standards are judged as satisfactory by the national programme
- An annual report of the local screening programme is produced describing the programme's performance against the QA standards specified in the contract and the objectives for the next 12 months

The coordinator shall be accountable, through the director to the national programme and NHS England, for the efficient running of the failsafe systems.

The coordinator shall be responsible for the operation of the IT solution's failsafe systems which will ensure that:

- The AAA screening programme population records are maintained and updated with results and agreed action codes using the screening management system
- Appropriate recall invitations are sent to men in the surveillance category
- GPs are sent details of patient's results within one week of the date of the screening clinic
- Where possible, and with advice from the local public health department (using the Exeter System) individuals moving to a different address receive appropriate follow-up by notifying the relevant GP or screening programme

- The coordinators receive an alert from the screening management IT system of men over 65 who have registered with a local GP within the preceding year, to ensure that all eligible men have been offered the chance to participate in the programme
- Only men born in the current year cohort will be contacted
- The screening history of individuals moving away from the screening area is forwarded to the relevant screening office according to the location of the new GP. This may require tracing the individual using the NHS Central Register or the Exeter System
- If an individual moves away from the programme area, relevant primary care and specialist services are made available to him. Failsafe systems must include: All men failing to respond to first invitation or surveillance should be contacted on one/two further occasions following all attempts to ensure address is correct
- If a man on surveillance notifies his local programme that he is moving to another local programme area the coordinator of the 'moving out' programme must notify the coordinator of the 'moving in' programme and agree transfer of the screening record within SMaRT as appropriate.

The coordinator must ensure that:

- Records are kept of all attempts to contact the GP/ vascular surgeon about individuals identified by failsafe procedures
- The GP is notified about men who have not attended initial or follow-up screening appointments, as indicated in local programme guidelines
- All appropriate actions to achieve the recommended follow-up investigation are recorded. When these have been unsuccessful and the GP has been notified of the case, the coordinator's responsibilities for failsafe procedures end

2.5 Commissioning arrangements

The commissioning of the AAA screening pathway involves commissioning and contracting at different levels. AAA screening services shall be commissioned by NHS England alongside specialised commissioning of vascular services. Recommendations for setting and monitoring activities at various geographical levels are set out below.

Pathway	Provider	Responsibility for elements of commissioning	Rationale
Identify cohort	Primary care must allow their system to interface with the national IT system.	NHS England as part of the "do once" activities	The national programme centre provides a national IT system that automatically identified the

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			cohort from GP practice systems.
Inform/maximise uptake	The screening provider depends on model adopted: <ul style="list-style-type: none"> • Hospital model • Private provider • Community model 	NHS England at Area Team level	
Screening test	The screening provider depends on model adopted: <ul style="list-style-type: none"> • Hospital model • Private provider • Community model 	NHS England at Area Team level	
Screening test: analysis	The screening provider depends on model adopted: <ul style="list-style-type: none"> • Hospital model • Private provider • Community model 	NHS England at Area Team level	
Screening test: results reporting	The screening provider depends on model adopted: <ul style="list-style-type: none"> • Hospital model • Private provider • Community model 	NHS England at Area Team level	
Diagnose	Vascular service in lead and non-lead acute provider	NHS England	
Intervention/Treatment	Approved centre for vascular surgery – often the lead acute provider	NHS England as part of Specialised Services	

2.6 Links between screening programme and national programme centre expertise

Public Health England (PHE) shall be responsible for delivery of the essential elements of screening programmes best done once at national level.

These include:

- Developing, piloting and roll-out to agreed national service specifications of all extensions to existing screening programmes and new screening programmes
- Setting QA standards
- Setting and reviewing programme standards
- Setting and reviewing national service specifications and advising on section 7A agreements (under the direction of DH requirements)
- Developing education and training strategies
- Providing patient information
- Determining data sets and management of data, for example to ensure KPIs are collected
- Setting clear specifications for equipment, IT and data
- Procurement of equipment and IT where appropriate. Procurement may be undertaken by NHS England but will need advice from PHE screening expertise and related clinical experts
- The collection, collation and quality assurance of data for cancer and non-cancer screening programmes
- Monitoring and analysing implementation of NHS commissioned screening services
- Provision of advice to DH on priorities and outcomes for the NHS England mandate and section 7a agreement, and leading on detailed provisions, in particular the 7a agreement on screening
- Advising NHS England how to increase uptake of screening

PHE shall also be responsible for:

- Providing the QA functions for screening programmes
- Providing public health expertise and advice on screening at all levels of the system, including specialist public health expertise being available as part of NHS England screening commissioning teams
- Ensuring action is taken to optimise access to screening programmes, such as among socio-economically disadvantaged groups

Section 3: Delivery of Screening Programme

3.1 Service model summary

The broad service model involves ultrasound scanning being undertaken within community healthcare facilities such as community clinics, community hospitals, mobile units, primary care facilities and other community locations to meet the needs of the population.

Screeners take views of the abdominal aorta using ultrasonography. Two anterior–posterior (AP) measurements of the maximum aortic diameter are recorded in centimetres measured across the lumen from/to the inside of the ultrasound-detected aortic wall, one with the probe in the longitudinal plane and one with the probe in the transverse plane.

The national protocols for AAA scanning have been developed following the evidence provided by the original randomised controlled trials upon which the programme gained approval to implement nationally.

- The images are assessed at the time of screening to determine whether or not an AAA of 3cm or greater has been detected, and the aortic diameter measurements are recorded. **A minimum of two static** sonographic images, including normal, abnormal or non-visualised results, are recorded and stored to allow recall in cases of Serious Incident and for quality assurance purposes.
- Screening results must be entered directly onto the SMaRT system, if available. If the system is not available at the screening clinic then all screening results should be recorded in writing on a printed work sheet at each clinic. These work sheets are submitted to the local programme Coordinator who checks and files them for audit, quality assurance and fail-safe purposes
- Any result outcome shall be communicated to **all** subjects verbally and in writing to those men in whom an aneurysm is found. If this has not been possible, the results will be sent as soon as possible to the GP and clinicians providing other care.
- If the maximum aortic diameter is less than 3cm, the person will be advised that no aneurysm has been detected and no further follow-up will be arranged
- If the maximum aortic diameter is 3cm or greater, the person must be advised that an aneurysm has been detected, given the appropriate explanatory information leaflet and told the approximate surveillance interval. They will be informed that a further follow-up will be arranged
- If an AAA of ≥ 5.5 cm is identified, the screening office is contacted urgently by telephone from the clinic so that arrangements can start immediately for a referral to a Vascular Surgeon

If the aortic diameter cannot be visualised, the subject will be invited for one further scan at another screening clinic if thought appropriate or by the medical imaging unit at the hospital. If the outcome is still non-visualised at a second screening scan then the subject must be referred to the medical imaging department.

The medical imaging department should notify the screening office of the outcome of the scan and it is the responsibility of the office to send the correct information and action accordingly depending on the presence and size of an aneurysm.

Surveillance subjects shall be followed up in the screening programme unless this is otherwise advised. If the aorta still cannot be visualised after this imaging scan then individual cases must be discussed with the Clinical Director.

3.2 Programme co-ordination

The provider shall be responsible for ensuring that the part of the programme it delivers is coordinated and interfaces seamlessly with other parts of the programme with which they collaborate, in relation to timeliness and data sharing.

The provider shall provide one or more named individuals who will be responsible for the coordination of the delivery of the programme, supported by appropriate administrative support to ensure timely reporting and response to requests for information. Where there is only one named coordinator, the provider must ensure that there are adequate cover arrangements in place to ensure sustainability and consistency of the programme.

The provider and NHS England shall meet at regular intervals (at least annually). The meetings will include representatives from programme coordination, clinical services, vascular services and service management.

Providers must designate a director / clinical lead of the local AAA screening programme

3.3 Clinical and corporate governance

The provider shall:

- Ensure co-operation with and representation on the local screening oversight arrangements/ structures
- Ensure good governance of the screening programme; a screening programme board will meet once every two months to include programme director, co-ordinator, screeener representative, surgeons, radiologists, commissioners and public health.
- The programme shall participate in external quality assurance and ensure ongoing failsafe and incident management programme. Formal

- commissioning and performance management arrangements with service user involvement shall take place every three months.
- Ensure that responsibility for the screening programme lies at executive level (or delegated responsibility)
 - Ensure there is appropriate internal clinical oversight of the programme and have its own management and internal governance of the services provided with the appointment of a clinical lead, a programme manager/coordinator and the establishment of a multidisciplinary steering group or programme board, that meets quarterly, as a minimum,
 - Ensure regular monitoring and audit of the screening programme and, as part of organisation's clinical governance arrangements, ensure the organisation's board is assured of the quality of the screening programme
 - Comply with the UK NSC guidance 'Managing Serious Incidents in the English NHS National Screening Programme' (or updated version)⁷
 - Have appropriate and timely arrangements in place for referral into treatment services that meet programme standards found on the NAAASP website
 - Provide documented evidence of clinical governance and effectiveness arrangements on request
 - Ensure that an annual report of screening services is produced which is signed off by the organisation's board
 - Have a sound governance framework in place covering the following areas:
 - Information governance/records management
 - Equality and diversity
 - User involvement, experience and complaints
 - Failsafe procedures
 - Risks & mitigation plans

3.4 Definition, identification and invitation of cohort/eligibility

Men will be offered a single scan in the year in which they reach 65. In cases where there is doubt over whether the subject should be invited or not, they will be sent an invitation. This includes subjects who are housebound and able to benefit from screening and possible treatment. There will be provision for a service that is accessible to them in accordance with disability discrimination legislation and that may require hospital transport. When a decision is made not to send an invitation for screening it will only be done after careful assessment of the subject and their circumstances.

⁷ UK National Screening Committee Managing Serious Incidents in the English NHS National Screening Programmes: Guidance on behalf of the UK National Screening Committee, (<http://www.screening.nhs.uk/quality-assurance#fileid9902>)

- The target population to be screened is all men registered with a general practitioner within the screening programme area. Selection will be based on year of birth. Men shall be offered screening during the year – 1st April to 31st March – in which they turn 65
- In their start-up year, local programmes shall avoid inviting men for screening when they are still aged 63. However, it is acceptable to invite men as soon as they have turned 64, which is the start of their 65th year
- In accordance with the Department of Health's early impact assessment⁸, a facility must also be made available for men aged over 65 on request. The number who will self-refer is uncertain but experience from existing screening programmes suggests it will be 6-7% but this could increase following any local publicity or awareness raising.
- Long-term residents in secure organisations such as prisons and mental health units are at risk of not receiving an invitation to screening. These groups may also not be registered with a community-based GP practice. Local programmes will work collaboratively with Area Teams to address these and other groups where access to screening may be restricted.
- Men **in their 65th year** known to have a small AAA <5.5cm. Programmes will receive information about these men included in the appropriate cohort demographic for that given year. The first scan within the screening programme shall be classed as their initial scan and previous surveillance scan measurements discounted. Other health care providers such as the GP and the vascular surgeon whose care the man is under will be notified of the screening attendance. It is advised that the man will remain in the screening programme only and not be scanned under two separate services
- Providers must ensure the programme is accessible for all ethnic groups, all sexualities, all abilities and all socio-economic groups
- Men and women of any age with a strong family history can be scanned under existing procedures but not within the screening programme, following referral by their GP to a medical imaging department
- The provider will maximize the offer and uptake of screening in vulnerable/ hard-to-reach populations
- The provider shall try to reach those who are not registered with a GP.
- The SMaRT system will automatically update the system with all those men registering with a GP. Regular attempts shall be made to ascertain contact up-to-date contact details whilst working with Area Teams to ascertain whereabouts of this group of unregistered subjects.

⁸ Department of Health (2008) *Impact Assessment of a National Screening Programme for Abdominal Aortic Aneurysms, Version 5*

3.5 Location(s) of programme delivery

Clinic locations will be quality assured and agreed locally to ensure they are accessible. Scanning typically takes place within community healthcare facilities such as community clinics, community hospitals, mobile units, primary care facilities and other community locations to meet the needs of the population.

Men are seen by a health professional (sonographer or screening technician) on arrival at the clinic so they can receive further information about screening before deciding whether to participate. Men are asked to give their consent to the screening procedure and the use of their personal information.

A screening office shall also be provided to accommodate the screening programme staff. The office is required to have access to the internet and the hospital IT system.

3.6 Days/hours of operation

The days and hours of service operation shall be based on the needs and wants of the target population with the aim of maximising the uptake of the screening offer.

3.7 Entry into the screening programme

See section 3.4 for details.

3.8 Working across interfaces between departments and organisations

The screening programme is dependent on strong working relationships (both formal and informal) between the screening programmes, the information systems, ultrasonography departments, vascular services and primary care and specialist professionals. Accurate and timely communication and handover across these interfaces is essential to reduce the potential for errors and ensure a seamless pathway for service users. It is essential that there remains clear named clinical responsibility at all times and at handover of care the clinical responsibility is clarified. The provider shall ensure that appropriate systems are in place to support an inter-agency approach to the quality of the interface between these services. This must include, but is not limited to:

- Agreeing and documenting roles and responsibilities relating to all elements of the screening pathway across organisations
- Providing strong clinical leadership and clear lines of accountability
- Developing joint audit and monitoring processes
- Agreeing jointly what failsafe mechanisms are required to ensure safe and timely processes across the whole screening pathway
- Contributing to any NHS England Screening Lead's initiatives in screening pathway development in line with UK NSC expectations

- Meeting the national screening programme standards covering managing interfaces which can be found on the NAAASP website

The programme interfaces with professionals responsible for primary care including local GPs, and GPs providing services for prison populations and Armed Forces personnel. They involve the communication of information to ensure:

- The subject register is maintained and up to date
- Primary care is made aware of a subject's failure to attend appointments
- Primary care is made aware of a subject's screening results in order to ensure integration with the overall health care of that subject
- The subject has a local point of contact to discuss the consequences of being excluded from the programme

NAAASP interfaces with AAA treatment/ management services. The interfaces which involve the referral of subjects to further investigation/ treatment are shown in the care pathway including those with a non visualised outcome at screening.

3.9 Information on Test/ Screening Programme

The service will provide men with evidence-based UK NSC approved information on the AAA screening programme and the screening process. Up to date information can be accessed from the NAAASP website.

Communication of the risk of mortality resulting from elective surgery must be in line with guidance from the UK NSC.

3.10 Testing (laboratory service, performance of test by individuals)

A screening technician undertakes an examination of the abdominal aorta using ultrasonography.

3.11 Information Technology (call and recall)

Systematic screening requires call and recall information and the capture and management of ultrasound images. Local screening providers must use the software developed through and provided by the national programme and to ensure that the national minimum dataset is collected. This software solution is known as the Screening Management and Referral Tracking (SMaRT) system.

A minimum dataset for AAA screening has been developed along with a detailed software specification used to scope, agree and procure the following

modules of functionality within the SMaRT system: [Standards and Service Objectives](#)

Identification and collation of screening cohort

The system interface with the NHS Health and Social Care Information Service permits identification of all men in their 65th year, and to collate a screening cohort for each local screening programme. Local screening programmes will be defined by the list of GP practices to which they are responsible for offering screening. The screening year will be from 1st April to 31st March rather than a calendar year.

Management of administration, screening and referral process

This system provides full administration of the screening pathway including call/recall, the management of referrals for those screened positive, and the collation of audit and performance management data for the programme. The data for the programme will be stored in a single national system. Each screening unit will have access to the subjects for whom it is responsible.

Recording of AAA surgery and outcomes

To measure the effectiveness of the screening programme, it will be necessary to collate data about AAA surgery (whether following a positive screen or not) and outcomes. Much of this information is already collected by the VSGBI and this functionality forms an extension to National Vascular Registry, with links into the screening management software. There is a requirement for all vascular services providing a diagnostic and treatment service to the screening programme to provide full outcome data to the local screening programme manager.

The call and recall system has been developed by the national programme and is centrally hosted by IT supplier Northgate Public Services, so no local installation will be required. There is a requirement, however, to ensure appropriate N3 (the NHS secure network) connections are available via a suitably fast and resilient link.

3.12 Results giving, reporting and recording

Screening assessment (based on aortic diameter measurement) of the AAA is required to determine if immediate referral to a vascular surgeon or regular surveillance is required:

Aortic Diameter	Action
<3cm	Advise that no aneurysm has been detected, give the appropriate explanatory letter and no further follow-up will be arranged

3-4.4cm	Follow-up will be arranged for one year
4.5-5.4	Follow-up will be arranged for three months
>5.5cm	A referral to a consultant vascular unit will be made within one working day
Non visualized	An offer of a repeat scan should be made, either within the screening programme or through a referral to the local medical imaging department

Results giving

Results letters will be printed and sent to the patients with aneurysms requiring surveillance, **those who had a non visualised result** and for those requiring referral.

Letters are **not** sent to men with normal aortic measurements.

Results are printed and sent to GPs for all patients, regardless of the result.

3.13 Transfer of and discharge from care obligations

Active inclusion in the screening programme ends when:

- The scan is found to be normal
- The AAA reaches 5.5cm diameter on ultrasound and the subject has been referred to the vascular unit. It is the responsibility of the screening programme to ensure the referral has successfully reached the vascular service and has been acted upon
- The director of the screening unit or the GP decides referral for treatment will be considered based on other factors such as co-morbidities or symptoms etc
- Three consecutive scans show an aortic diameter less than 3cm on ultrasound where the initial scan was 3cm or greater. In this case the man will be discharged from the screening programme and both the man and GP informed by letter
- After 15 scans at one-year intervals the AAA remains below 4.5cm. In this case the man will be discharged from the screening programme and both the man and GP informed by letter

- 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, or dies. If a man under surveillance moves out of the area, the coordinator must alert the screening programme responsible for the GP practice to which the patient is then registered

Patients **over the age of 65** who have had AAA identified through routes outside the screening programme must not be referred to the screening programme for surveillance. These patients must stay within the care of the vascular service. **Men in their 65th year identified outside the programme** known to have a small AAA <5.5cm must be included in the national programme. The demographic information for these men will be received by the programme in their cohort upload and therefore these men will be invited as routine. If they choose to attend their screening appointment the first scan within the screening programme shall be classed as their initial scan and previous surveillance scan measurements discounted. Other health care providers such as the GP and the vascular surgeon whose care the man is under shall be notified of the screening attendance when this is known to the local programme. men in this cohort shall remain in the screening programme only.

3.14 Self Care/ Carer information

This is monitored through the quality assurance process.

Key elements of information will need to include:

- Publicity. The National Programme Director will be responsible for publicity in relation to the programme and central written resources
- Leaflets and information. Nationally developed and approved information is available to all screening programmes. It is the responsibility of the local programme to ensure that information is available to all men and that literature is displayed in appropriate locations. The provider shall ensure local contact details are added to the information leaflets and space on the back cover has been allowed to do this
 - The invitation leaflet is designed to ensure that men are told what screening can and cannot achieve. This, along with the invitation letter, addresses the need to inform subjects about the use made of personal information for audit, as set out in guidelines developed for the programme by the National Information Governance Board (NIGB)
 - Men will be able to make a genuinely informed choice based on an understanding about why they are attending for screening, the risks involved and associated with a positive result and what happens to their records after being screened. The information will be sent to all men with their invitation for AAA screening

- There is a second leaflet for men who enter the surveillance programme
- There is a third leaflet for those men identified with AAAs of 5.5 cm or greater setting out the benefits and risks of AAA surgery. This will include information on conservative management for those men who decline intervention
- Letter templates will be available to all local programmes and provided within the IT solution. Minimal changes to the template will be permitted but changes to the content shall not be made as the original text was developed in agreement with stakeholders and the National Information Governance Board (NIGB)
- Website. A website for patients and professionals is administered by the national programme team and can be found at [NHS Abdominal Aortic Aneurysm Screening Programme Home Page](#). Downloadable pdf and text leaflets are available from the website. Areas of the website are password access only

Posters are available and provided by the national programme
All leaflets and posters will be ordered from the national programme

3.15 Exclusion criteria

The following people are not eligible for the AAA screening programmes:

- Under the age of 64
- Females
- Men over 65 who have been previously diagnosed with an AAA,
- Those who have previously undergone surgery for AAA repair
- On advice from their GP related to other health concerns
- Men who requested that they are permanently removed from the AAA screening programme
- Men who have already had a scan through NAAASP and whose aorta was within normal limits

In rare cases a “best interest” decision may be made to exclude subjects with mental incapacity from the programme. This needs to be completed in line with the principles enshrined in the Mental Capacity

Act www.nhs.uk/carersdirect/moneyandlegal/legal/pages/mentalcapacityact.aspx.

3.16 Staffing

The following are recommended staffing levels based on the evidence of the randomised control trials and the early experience of rolling-out AAA programmes around the country.

Programme clinical staff:

- Director/ Clinical Lead (0.2 wte/ 800,000 population)

- Lead Ultrasound Clinician (0.1 wte/ 800,000 population)
- Nurse Practitioner (0.1 wte/ full capacity programme i.e. 7,000 scans per year)
- Consultants in the Vascular Units – these are not employed by the screening programme. However, there must be a “responsible doctor” for onward patient referral

Programme Screening Staff

- Screening Technician (3 wte/ 800,000).

Programme Management, Administration and Technical Staff

- Coordinator (1 wte/ 800,000),
- Clerical Officer (1 wte/ 800,000),
- Medical Physicist (5 days per year for a full capacity programme – 7,000 per year)

Training and education for staff must be conducted as required by NAAASP⁹.

Training, development and information programmes are available for the following staff groups. All training will be based around a national competency framework.

- Screening Technicians (Sonographers)
- Clinical Skills Trainers (CST): these are senior practitioners who cascade practical training to other staff and provide training, support and advice to the Screening Technicians They also provide QA through the monitoring of the quality of the images and measurements taken by the Screening Technicians
- Coordinators, who cascade non-clinical training to others and clerical staff

The training provided via NAAASP for Screening Technicians will be: CASE (Consortium for the Accreditation of Sonographic Education) accredited; approved by the SoR (Society of Radiographers) and the SVT (Society for Vascular Technology) and enable individuals to receive academic credit.

Information seminars and update events will be required for Local Programme Clinical Directors.

Information updates will also be required for:

- Lead Ultrasound Clinicians
- Nurse Practitioners
- NHS ENGLAND

⁹ NAAASP (2010) NHS Abdominal Aortic Aneurysm Screening Programme: Education and Training Framework, NHS Screening Programmes

It is recommended that all administrative staff, including the Coordinator/Manager undertake local IT training to cover rudimentary use of Microsoft Excel and Access. Training will be provided on the use of the NAAASP IT system by the national team and Northgate Public Services but assumes a level of IT literacy.

3.17 User involvement

All provider(s) must:

- Demonstrate that they regularly seek out the views of service users, families and others in respect of planning, implementing and delivering services
- Demonstrate how those views will influence service delivery for the purposes of raising standards
- Show that all families are given information about how to provide feedback about services they receive, including about the complaints procedure

Collection of the views of service users/families will often be via surveys or questionnaires. Such surveys shall take place on a regular (rather than ad hoc) basis and that the results will be made available to NHS England on request. It may be efficient to include the results in the annual report.

3.18 Premises and equipment

Premises are for local determination based on the needs and wants of the target population with a view to increasing accessibility of the screening programme

Providers are responsible for maintenance and re-procurement of screening equipment to NAAASP requirements, specifications and standards in order to reduce variability across England and to ensure compliant interface with the national IT system.

Screening equipment shall consist of portable ultrasound machines with digital recording devices from which data can easily be downloaded. Approximately one machine per 2,000 men screened per annum will be required.

3.19 Key Performance Indicators

The national programme team will feed back provider performance information on a regular basis to providers of AAA screening and NHS

England. This activity and quality data and guidance for its collection are set out by NAAASP¹⁰ and the UK NSC¹¹.

Public Health Outcomes Framework Indicator (Proposed)

KPI AA1: The proportion of men eligible for abdominal aortic aneurysm screening to whom an initial offer of screening is made.

Key Deliverable: The acceptable level shall be achieved as a minimum by all services

Acceptable \geq 90.0%

Achievable 100%

3.20 Data collection, monitoring and reporting

The previous method of submitting data to the PCT needs to be agreed by the local screening programme board

The provider shall share all data that is sent to the national programme team with NHS England, including quality assurance results. Thresholds for achievable and acceptable performance are based on information from international comparisons (mortality) and comparative data in the UK.

The provider must report the following to the screening coordinator of the Area Team of NHS England on a quarterly basis split by GP practice of the men, screening clinic and each respective locality, in order that NHS England can monitor activity at different clinics and make necessary adjustments to clinic choice/venue or public engagement:

- % of men's records with insufficient contact details to make an offer
- % of men offered screening who are tested
- % of those tested who have an aortic diameter of <3.0cm and are discharged from the screening programme
- % of those tested who have an aortic diameter 3.0-4.4cm and are entered into annual surveillance
- % of those tested who have an aortic diameter 4.5-5.4cm and are entered into three-monthly surveillance
- % of those tested who have an aortic diameter of 5.5cm or greater and are referred to a vascular surgeon

¹⁰ NAAASP NHS Abdominal Aortic Aneurysm Screening Programme: Standards and Service Objectives, NHS Screening Programmes

¹¹ UK National Screening Committee Key Performance Indicators for Screening (<http://www.screening.nhs.uk/kpi>)

Quarterly reported figures shall be reported to allow NHS England to make informed decisions about the programme provision for the population they are responsible for.

The provider shall supply identifiable information regarding men eligible for screening to the NHS England area team in the event that a SI occurs relating to the programme, for the investigation of a complaint, for a specified quality assurance exercise or for any other reason that NHS England would reasonably require this information.

Activity and performance data shall be shared with NHS England to allow benchmarking between areas within the eligible screening programme population.

Section 4: Service Standards, Risks and Quality Assurance

4.1 Key criteria and standards

QA systems support commissioners and providers in clinical governance so that core processes are safe and the programme achieves better outcomes. Several activities are involved, including:

- Accredited training programmes and continuing professional development of staff
- Regular appraisal and refresher training
- Standardised calibration of equipment
- Monitoring of standardised outcome and performance information with feedback of comparative information to local services from national analysis of screening data, AAA surgery and AAA deaths
- Site visits for peer review
- Supporting activities for avoidance and management of Serious Incidents. Systems for the management of Serious Incidents should be integrated at local level

Programme standards are available on the programme website <http://aaa.screening.nhs.uk/qualitystandards>. Providers will meet the acceptable and work towards the achievable programme standards. A number of resources to support providers are available on the programme website¹².

¹² NAAASP NHS Abdominal Aortic Aneurysm Screening Programme: Standards and Service Objectives, NHS Screening Programmes

4.2 Risk assessment of the pathway

Providers must have an internal quality assurance and risk management process that assures the commissioners of its ability to manage the risks of running a screening programme.

Providers must:

- ensure that appropriate failsafe mechanisms are included across the whole screening pathway
- review and risk assess local screening pathways in the light of guidance offered by Quality Assurance processes or the National Screening programme
- work with the Commissioner and Quality Assurance Teams to develop, implement, and maintain appropriate risk reduction measures
- ensure that mechanisms are in place to regularly audit implementation of risk reduction measures and report incidents
- ensure that appropriate links are made with internal governance arrangements, such as risk registers
- ensure routine staff training and development is undertaken
- undertake QA reviews of images and screener performance as per the guidance in the Standard Operating Procedures. The QA of images should be carried out using the QA module of SMaRT. Local quality assurance should be performed by the Lead Radiology Clinician or the nominated Clinical Skills Trainer.

On a quarterly basis high scoring risks will be identified and agreed between the provider and the commissioners and plans put in place to mitigate against them. Risk identification must take into account failsafe mapping (please also see section 2.3 Failsafe).

4.3 Quality assurance

Providers shall participate fully in national Quality Assurance processes and respond in a timely manner to recommendations made. This shall include the submission to QA teams and commissioners of:

- data and reports from external quality assurance schemes
- minimum data sets as required – these may be required to be submitted to national external bodies e.g. National Vascular Database etc.
- self-assessment questionnaires / tools and associated evidence
- audits or data relating to nationally agreed internal quality assurance processes

Providers shall participate fully in the QA visit process where required and cooperate in undertaking ad-hoc audits and reviews as requested.

Providers shall respond to QA recommendations by the submission of action plans to address identified areas for improvement and any non-conformities / deviations from recommended performance thresholds.

Where QA believe there is a significant risk of harm to the population, they will recommend to commissioners to suspend a service.

National Vascular Registry (NVR)

Submission of data to the NVR is compulsory for all surgeons wishing to participate in NAAASP. The programme will also be supported by local vascular networks, which are groups of surgeons and other clinicians who deliver interventions for screen-detected AAA. Vascular assessment and treatment services must comply with guidance from the VSGBI (<http://www.vascularsociety.org.uk/library/quality-improvement.html>) and from the UK NSC.

4.4 Serious incidents

Providers shall comply with the current and future national guidance for the management of incidents in screening programmes and NHS England guidance for the management of incidents.

Managing Incidents in National NHS Screening Programmes
Interim Guidance

Developed in collaboration between the UK National Screening Committee, the NHS Screening Programmes, the NHS Cancer Screening Programmes (all part of Public Health England) and NHS England

September 2013

<http://www.screening.nhs.uk/incidents>

“NHS Commissioning Board. (2013) Serious Incident Framework – an update to the 2010 National Framework for Reporting and Learning from Serious Incidents Requiring Investigation. NHS Commissioning Board: London”.

4.5 Procedures and protocols

The provider must be able to demonstrate that they have audited procedures, policies and protocols in place to ensure best practice is consistently applied for all elements of the screening programme.

4.6 Continual service improvement

Where national recommendations and acceptable/achievable standards are not currently fully implemented the provider shall indicate in service plans what changes and improvements will be made over the course of the contract period.

The provider shall develop a CSIP (continual service improvement plan) in line with the KPIs and the results of internal and external quality assurance checks. The CSIP will respond to any performance issues highlighted by the commissioners, having regard to any concerns raised via any service user feedback. The CSIP must contain action plans with defined timescales and responsibilities, and will be agreed with the commissioners.

4.7 Teaching and training

The provider must ensure that:

- Education, training and staff development are an integral part of the service and complies with the requirements of the screening programme
- It keeps up to date with clinical advances
- Contributes to education and training of other relevant professionals where appropriate

It should also aspire to participate in properly conducted quality research where possible (with appropriate ethical approval).