NHS Commissioning Board

Public health functions to be exercised by the NHS Commissioning Board

Service specification No.23

NHS Abdominal Aortic Aneurysm Screening Programme

November 2012

DH Department of Health

DH INFORMATION READER BOX

Policy	Clinical	Estates
HR / Workforce	Commissioner Development	IM & T
Management	Provider Development	Finance
Planning / Performance	Improvement and Efficiency	Social Care / Partnership Working

Document Purpose	Policy
Gateway Reference	18375
Title	Public health functions to be exercised by the NHS Commissioning Board, Service specification No.23, NHS Abdominal Aortic Aneurysm Screening Programme
Author	Department of Health
Publication Date	**15 November 2012**
Target Audience	PCT Cluster CEs, NHS Trust CEs, SHA Cluster CEs, Care Trust CEs, Foundation Trust CEs , Directors of PH
Circulation List	Directors of Adult SSs
Description	This specification is part of an agreement made under section 7A of the National Health Service Act 2006. It sets out requirements for and evidence underpinning a service to be commissioned by the NHS Commissioning Board for the financial year 2013-14. It may be updated in accordance with the agreement.
Cross Ref	N/A
Superseded Docs	N/A
Action Required	N/A
Timing	**N/A**
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For Recipient's Use	

First published November 2012

Published to DH website, in electronic PDF format only.

www.dh.gov.uk/publications

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Service specification No.23

This is a service specification within Part C of the agreement "Public health functions to be exercised by the NHS Commissioning Board" dated November 2012 (the "2013-14 agreement").

The 2013-14 agreement is made between the Secretary of State for Health and the National Health Service Commissioning Board ("NHS CB") 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 the NHS CB in accordance with the 2013-14 agreement. An update to this service specification may take effect on an agreed date as a variation made in accordance with the 2013-14 agreement.

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

The 2013-14 agreement including all service specifications within Part C is available at www.dh.gov.uk/publications

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 (AAA) Screening Programme is to outline the service and quality indicators expected by the NHS Commissioning Board (NHS CB) for the NHS CB'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 National Programme Centre website [1] where appropriate and as detailed in the Standard Operating Procedures[2]. Abdominal Aortic Aneurysm - Policies
- Standards and Service Objectives http://aaa.screening.nhs.uk/standards
- UK NSC guidance, Managing Serious Incidents in the English NHS National Screening Programmes http://www.screening.nhs.uk/quality-assurance#fileid9902

1.2 Aim

The AAA screening programme 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.

1.3 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,

[1] http://aaa.screening.nhs.uk/
[2] NAAASP NHS Abdominal Aortic Aneurysm Screening Programme: Essential Elements in Developing a AAA Screening and Surveillance Programme, NHS Screening Programmes

- 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 skill of the workforce involved in screening.

1.4 Expected health outcomes

The NHS AAA Screening Programme aims to reduce deaths from abdominal aortic aneurysms (AAA) through early detection. Research has demonstrated that offering men ultrasound screening in their 65th year could reduce the rate of premature death from ruptured AAA by up to 50 per cent.

Ruptured AAA deaths account for 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 82%. This compares with a post operative mortality rate in high quality vascular services of 3-8% following planned surgery.

The NHS AAA Screening Programme was rolled out in phases across England. Each local programme operates as a collaboration between primary care, hospital trusts and Vascular Networks. Local programmes are based on a minimum population of 800,000 or as close as possible. Advice should be sought from the national programme centre if plans are for smaller populations. Phased implementation began in March 2009 and full coverage across England was achieved at the end of March 2013.

1.5 Principles

- All individuals will be treated with courtesy, respect and an understanding of their needs,
- All those participating in the AAA Screening Programme will have adequate information on the benefits and risks to allow an informed decision to be made before participating,
- Access to screening is matched to the needs of the target population in terms of availability

- Screening will be effectively integrated across a pathway including between the different providers, screening centres, primary care and secondary care.

Section 2: Scope of Screening Programme

2.1 Description of screening programme

The NHS AAA Screening Programme 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. The programme will invite all men for screening during the year that they turn 65. Men over the age of 65 can also self refer direct to the screening programme providing they have not previously been 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 is expected to fulfill the following, in conjunction with guidance from the National Programme Centre where appropriate and as detailed in the Standard Operating Procedures[3]. Abdominal Aortic Aneurysm - Policies

- Work to nationally agreed common standards and policies
- Be required to implement and support national IT developments
- Use materials provided by the national Programme Centre, eg, leaflets, and protocols for their use
- Be required to respond to national action/lessons such as change of software, equipment supplier, techniques
- Work with the NHS CB 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 Programme Centre on behalf of the UK NSC
- 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 bordering providers to ensure that handover of results or patients is smooth and robust
- Participate in evaluation of the screening programme

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

Documents referred to above are available from the National Programme Centre website [4].NHS Abdominal Aortic Aneurysm Screening Programme

2.2 Care pathway

The NHS AAA Screening Programme is based on the policies developed by the UK NSC[5].

Appropriate information and advice are vital elements of the screening programme:
• All men invited for screening will 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 will 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 go through up to three phases depending of the result at each phase: screening, surveillance and referral:
• Screening by ultra-sound scanning will be offered to all men in their 65th year. Men found to have a normal aorta (diameter < 3cm) on the screening scan will need no further contact with the screening programme.
• Surveillance by ultra-sound scanning will be offered to all men found to have an AAA with a diameter of 3cm - 5.4cm on the screening scan. 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.
• Referral to a vascular surgeon to consider treatment options, including surgery, will be offered to men found to have an aneurysm 5.5cm or larger in diameter. Patients who decline treatment or are unfit for surgery will 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 notification that the referral has been received by the Vascular Service.

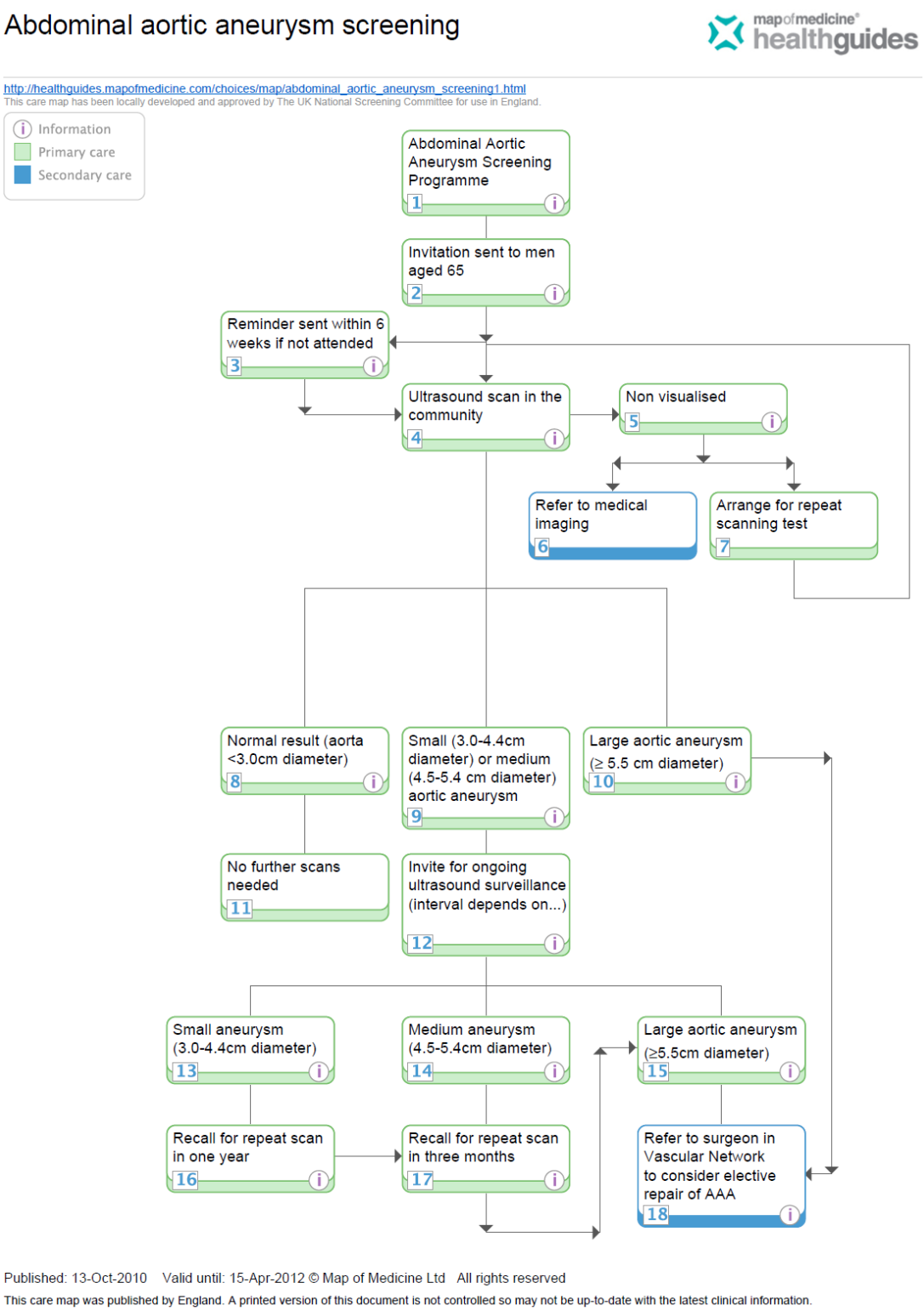
The screening process is divided into the following stages:

- Identification,
- Invitation,
- Inform,
- Test,
- Surveillance,
- Diagnose,
- Treatment/ intervention,

[4] http://aaa.screening.nhs.uk/
[5] UK National Screening Committee (2005) Recommendation on Screening for Abdominal Aortic Aneurysm, November Committee Meeting

- 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).



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 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 Database.

2.3 Failsafe Procedures

One of the cornerstones of an efficient and safe screening programme is the failsafe system. For the AAA Screening Programme 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.

It is important that all involved in the screening programme are 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.

AAA Screening Programme 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 will 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 will be contacted on one/two further occasions following all attempts to ensure address is correct by use of NHS Strategic Tracing Service
- Screening equipment is operating and maintained within the required standards
- Appropriate action is taken on finding a normal and an abnormal result

- All images and results are archived and stored as per national guidelines using a confidential and secure method [6]
- All data is entered appropriately onto the IT system
- The 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 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 CCG area, relevant primary care and specialist services are made available to him

The procedures necessary for the AAA Screening Programme failsafe systems will involve all professionals concerned with a patient – e.g. clinical staff, screening team, office team, nurse/ health professional adviser, diagnosticians and technicians. It is important these procedures operate in a timely fashion, are precise and seamless. Above all the following will 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 has overall clinical responsibility and accountability. He/she will be responsible for ensuring that:

- Information about the programme is disseminated to primary care teams, eg through the NHS CB Area, practice visits or regular GP / practice manager meetings.
- The central IT system developed for AAA is managed within the screening office to enable the eligible population in the catchment area to be 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 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.

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

- 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 CB Area screening lead.
- Performance against national quality assurance standards are judged as satisfactory by the NAAASP.
- An annual report of the local screening programme is produced describing the programmes performance against the QA standards specified in the contract and the objectives for the next twelve months.

The Coordinator is accountable, through the Director to the National AAA Programme and the NHS CB, for the efficient running of the AAA Screening Programme failsafe systems.

The Coordinator is responsible for the operation of the IT solutions 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 follow-up recommended category GPs are sent details of patient's results within 1 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 single preceding 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

The Coordinator will ensure that:

- Records are kept of all attempts to contact the GP/ Vascular surgeons 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. NAAASP screening services will be commissioned by the NHS Cb 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 Commissioning Board as part of the "do once" activities	The National Programme Centre for AAA provides a national IT system that automatically identified the cohort from GP Practice systems.
Inform/Maximise uptake	The screening provider depends on model adopted: • Hospital model • Private provider • Community model	NHS CB at the NHS CB Local Area Level	
Screening test	The screening provider depends on model adopted: • Hospital model • Private provider • Community model	NHS CB at the NHS CB Local Area Level	
Screening test: analysis	The screening provider depends on model adopted: • Hospital model • Private provider	NHS CB at the NHS CB Local Area Level	

	• Community model		
Screening test: results reporting	The screening provider depends on model adopted: • Hospital model • Private provider • Community model	NHS CB at the NHS CB Local Area Level	
Diagnose	Vascular service in lead and non-lead acute provider	NHS CB	
Intervention/Treatment	Approved centre for vascular surgery – often the lead acute provider	NHS CB as part of Specialised Services	

2.6 Links between screening programme and national programme centre expertise

PHE will 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 undertaken by NHS CB but will need advice from PHE screening expertise and related clinical experts);
- Collect, collate and quality assure data for cancer and non-cancer screening programmes;
- Monitor and analyse implementation of NHS commissioned screening services;
- Provide advice to DH on priorities and outcomes for the NHS CB mandate and section 7a agreement, and to lead on detailed provisions, in particular the 7a agreement on screening;
- Advise the NHS CB how to increase uptake of screening.

PHE will also be responsible for

- providing the QA functions for screening programmes;
- providing PH expertise and advice on screening at all levels of the system, including specialist PH expertise being available as part of NHS CB screening commissioning teams.;
- ensuring action is taken to optimise access to screening programmes, e.g. 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 the community healthcare facilities such as community clinics, community hospitals, mobile units and primary care facilities.

Screeners record two anterio-posterior (AP) measurements in centimetres of the maximum abdominal aortic diameter. Results are communicated immediately to all men verbally. Written results are also sent to GPs and men identified with an aneurysm

An AAA is defined as a maximum aortic diameter of 3.0cm or greater in the maximum anterio-posterior measurement. An aortic diameter of less than 3.0cm is deemed to be within normal limits.

3.2 Programme co-ordination

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

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

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

Providers will designate a Director / Clinical Lead of the local AAA screening programme

3.3 Clinical and corporate governance

The Provider will:

- ensure co-operation with and representation on the local screening oversight arrangements/ structures,

- ensure that responsibility for the screening programme lies at Executive-level, (or delegated responsibility)
- ensure that 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 and the establishment of a multidisciplinary steering group (that meets quarterly) as a minimum,
- ensure that there is regular monitoring and audit of the screening programme, and that, as part of organisation's Clinical Governance arrangements, 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 National Centre 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

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.

- 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 will be offered screening during the year – 1st April to 31st March – in which they turn 65
- In their start-up year, local programmes will avoid inviting men for screening when they are still aged 63. However, it is acceptable to

[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)

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 assessment[8], a facility should 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 2-3%.
- Men resident in local prison establishments during their 65th year and at the agreement of the prison healthcare NHS CB and Prison Service should also be offered screening
- 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 will 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
- They will try also to reach those are not registered with a GP

In the first year, a total population of 800,000 will generate a requirement for approximately 4,000 scans in men aged 65 plus. By year 10, the screening team will be working at full capacity, with about 7,000 scans each year largely due to the number of surveillance subjects based on the 800,000 population.

3.5 Location(s) of programme delivery

Clinic locations will be decided locally to ensure they are accessible. Scanning typically takes place within community healthcare facilities such as community clinics, community hospitals, mobile units and primary care facilities.

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.

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

A Screening Office will 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 will 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 will ensure that appropriate systems are in place to support an interagency approach to the quality of the interface between these services. This will 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 on what failsafe mechanisms are required to ensure safe and timely processes across the whole screening pathway
- Contributing to any NHS Commissioning Board (NHS England) Screening Lead's initiatives in screening pathway development in line with National Screening Committee expectations
- Meeting the national screening programme standards covering managing interfaces which can be found on the National Programme Centre 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 in order to ensure that:

- the subject register is maintained 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 and
- The subject has a local point of contact to discuss the consequences of being excluded from the Programme.

The Programme interfaces with the AAA treatment/ management services. The interfaces which involve the referral of subjects to the further investigation/ treatment are shown in the Care Pathway.

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 National Programme Centre website.

Communication of the risk of mortality resulting from elective surgery must be conducted 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 will be expected to use the software developed through and provided by the National Programme Centre 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 purpose of this module is to identify 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 module provides the core functionality for the screening programme, including the administration of 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 Vascular Society of Great Britain and Ireland and this functionality forms an extension to the existing NVD, with links into the screening management software.

The call and recall system has been developed by the National Programme Centre 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 3 months
>5.5cm	A referral to a consultant vascular unit will be made within one working day

If the aorta could not be visualised at the screening clinic a further scan will be arranged at a later screening clinic or local hospital imaging department.

Results giving

Results letters will be printed and sent to the patients with aneurysms requiring surveillance 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 (co-morbidities, symptoms etc.),
- After three consecutive scans showing 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 will alert the screening programme responsible for the GP practice to which the patient is then registered. If screening has not been implemented in that area then a referral will be made by the GP to the appropriate vascular service.

Patients 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.

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. It is recommended that 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 new programmes and all local programmes will use these as provided within the IT solution. Minimal changes to the template will be permitted but changes to the content should 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 Centre.
All leaflets and posters will be ordered from the National Programme Centre.

3.15 Exclusion criteria

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

- Under the age of 65,
- Females,
- Have been previously diagnosed with an AAA,
- Have previously undergone surgery for AAA repair,
- On advice from their GP related to other health concerns,
- Have requested that they are permanently removed from the AAA Screening Programme,

- Have already had a scan through the AAA Screening Programme and the 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 RCTs 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
- Senior Screening Technician (0.1 wte/ 800,000),
- 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),
- IT Lead.

Training and education for Screening Programme staff must be conducted as required by the NAAASP. The latest requirements are included in ‘Education and Training Framework’ (NAAASP)[9].
Training, development and information programmes are available for the following staff groups. All training will be based around a national competency framework.
- Screening Technicians (Sonongraphers)
- Clinical Skills Trainers (CST) :- these are senior practitioners who cascade practical training to other staff and offer support and advice to the Screening Technicians during the initial months of the programme;

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

thereafter monitoring 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 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 CB

It is recommended that all administration personnel, including the Coordinator and/or Programme Manager undertake some early 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 Information Systems but assumes a level of IT literacy.

3.17 User involvement

All provider(s) will:

- 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. It is expected that such surveys will take place on a regular (rather than ad hoc) basis and that the results will be made available to the NHS CB on request. It may be efficient to include 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 maximising uptake of the screening.

Providers are responsible for maintenance and re-procurement of screening equipment however this will be done to NAAASP requirements and standards.

Screening equipment will consist of portable ultrasound machines with digital recording devices from where 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 feedback provider performance information on a regular basis to providers of AAA screening and the NHS CB. This is activity and quality data and guidance for its collection is set out by the NHS AAA Screening Programme[10] and the UK NSC[11].

3.20 Data collection, monitoring and reporting

The provider will share all data that is sent to the national AAASP with the NHS CB including quality assurance results. Thresholds for achievable and acceptable performance are set based on information from international comparisons (mortality) and comparative data in the UK.
The provider will report the following to the NHS CB on a quarterly basis split by GP practice of the men, screening clinic and each respective locality, in order that the NHS CB 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 a three monthly surveillance.
- % of those tested who have an aortic diameter of 5.5cm or greater and are referred to a Vascular Surgeon.

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

To allow the NHS CB to carry out detailed analysis of the programme provision, the provider will supply an anonymised data set of all eligible men at the request of the NHS CB. This dataset would not include the name of the men but would included date of birth, postcode of residence, GP, screening clinic, delivery of brief lifestyle interventions and referral to lifestyle management services as well as all other nationally agreed quality assurance data.

The provider will supply identifiable information regarding men eligible for screening to the NHS CB in the event that a SI occurs relating to the programme, for the investigation of a complaint, for a specified quality

[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)

assurance exercise or for any other reason that the NHS CB would reasonably require this information.

Activity and performance data will be shared with all NHS CB 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

The NAAASP has produced a number of standards in collaboration with the UK NSC. These standards will be adhered to by all AAA screening programmes[12].

4.2 Risk assessment of the pathway

Providers are expected to have an internal quality assurance process that assures NHS CB of their ability to manage the risks of running a screening programme.

Providers are expected to use the Failures Modes and Effects Analysis (FMEA) method, which is recommended by the NHS National Patient Safety Agency's risk assessment programme, to identify all possible risks along the screening pathway and to ensure that there are control arrangements in place to minimise the occurrence of the possible risks.

Risks should be defined in the standard NHS format (*likelihood and severity multiplied to give a RAG score*)

Providers are expected to maintain a register of risks and work with the NHS CB and QA staff to identify key areas of risk in the screening pathway to ensure that these points are reviewed in contracting and peer review processes. On a quarterly basis high scoring risks will be identified and agreed between the provider and the NHS CB, and plans put in place to mitigate against them.

4.3 Quality assurance

The NHS CB will suspend a service on recommendation from QA.
The Provider will:

- meet national programme standards, or have plans in place to meet them where this is not the case
- participate fully in national Quality Assurance processes and respond in a timely manner to recommendations made
- make available data from external quality assurance programmes to programme centres, national team and the NHS CB

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

- collect and submit minimum data sets as required to assure the NHS CB and the Quality Assurance Team in Public Health England of the safety and quality of the services provided
- complete and submit the annual self-assessment tool with or without (as requested) an annual report of services to the Quality Assurance team and respond to identified areas for improvement

National Vascular Database (NVD)

Submission of data to the NVD is compulsory for all surgeons wishing to participate in the AAA screening programme. 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 Vascular Society of Great Britain and Ireland (http://www.vascularsociety.org.uk/library/quality-improvement.html) and from the UK National Screening Committee.

4.4 Serious incidents

A serious incident (SI) for screening programmes is defined as an actual or possible failure at any stage in the pathway of the screening service which exposes the programme to unknown levels of risk that screening or assessment has been inadequate, and hence there are possible serious consequences for the clinical management of patients. The level of risk to an individual may be low or high, but because of the large numbers involved the corporate risk may be very high. Complex screening pathways often involve multidisciplinary teams working across several NHS organisations in both primary and secondary care, and inappropriate actions within one area, or communication failures between providers, can result in serious incidents.

Potential serious incidents or serious near misses in screening programmes should be investigated with the same level of priority as for actual serious incidents.

The provider will:

- have a serious incident policy in place and ensure that all staff are aware if it and of their responsibilities within it
- inform the NHS CB within 24 hours in the event of a serious adverse event and provide all reasonable assistance to the NHS CB in investigating and dealing with the incident. Where appropriate, such incidents should also be reported to the National Programme Centre to assist in the development of a national picture of risk identification and management
- comply with appropriate statutory regulations (e.g. Data Protection Act, COSHH Regulations etc) to ensure a safe working environment

- comply with the UK NSC guidance, '*Managing Serious Incidents in the English NHS National Screening Programmes'* available on the UK NSC website[13]
- review their procedures and processes against the standards for the screening programme to reduce the likelihood of incidents occurring
- have a robust system in place whereby families, other professionals and the public can raise concerns about the quality of care and where there is adequate arrangements for the investigations of such concerns.

There are many parts to the AAA Screening Programme which are likely to involve various organisations. This complex system is therefore open to errors. Often SIs will span organisations involved in the care pathway; therefore the Incident Management Team will not be established in only one provider organisation.

4.5 Procedures and protocols

The provider will be able to demonstrate that written procedures and protocols are in place to ensure best practice is consistently applied for all elements of the screening programme (these must be consistent with National Programme Centre requirements). This will include policy based on best practice for the care of men who have declined to take part in the screening programme.

Where the provider undertakes screening on more than one site, they will ensure consistency of procedures and protocols across all sites, including policies for onward referral to, for example, counselling or appropriate clinical services.

The Provider shall ensure that all staff are aware of and comply with the Provider's safety, confidentiality and safeguarding policies.

4.6 Continual service improvement

Where national recommendations and core and/or developmental standards are not currently fully implemented the provider will be expected to 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 and any performance issues highlighted by the NHS CB, having regard to any concerns raised via any service user feedback.

- [13] 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 CSIP will contain action plans with defined timescales and responsibilities, and will be agreed with the NHS CB.