NHS Abdominal Aortic Aneurysm Screening Programme

Essential Elements in Developing an Abdominal Aortic Aneurysm (AAA) Screening and Surveillance Programme

July 2011, Version 3.0

These Standard Operating Procedures are designed to inform and assist Screening Leads, Strategic Health Authorities and other key stakeholders in establishing and implementing a new AAA screening programme within the NHS AAA Screening Programme in England.
Addenda

The following sections have been published or updated since the initial release of SOP/Workbook Version 2.2 and affect the advice and guidance in this workbook. Please ensure you review the entire document for changes as well as those additions identified below. All documents will be available from the National Programme website at http://aaa.screening.nhs.uk

Inclusions
- Screening equipment settings
- Education and training of workforce
- Image storage and retrieval
- Your personal information (sometimes called personal data)
- Informed Dissent
- Managing Serious Incidents in National Screening Programmes
- Local Programme Quality Assurance
- Key Studies
- Screening in Prisons
- How we use your personal information
This workbook contains four interdependent overarching sections, all of which will need consideration by those involved in setting up and running a local programme as part of the national NHS Abdominal Aortic Aneurysm Screening Programme:

Section 1 details the necessary elements of a screening programme
Section 2 details the screening pathway
Section 3 details the requirements of an appropriate vascular network
Section 4 explains the quality assurance processes and requirements for programmes

These sections should be considered together: for example, the way a programme is administered will be partly determined by an understanding of the quality assurance standards.

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Introduction to the Programme Management Workbook

This is the fourth edition of the NHS AAA Screening Programme (NAAASP) Standard Operating Procedures (SOPs) and Workbook. It will be updated frequently and the latest version of the workbook will be available from the NAAASP website, http://aaa.screening.nhs.uk. Feedback is welcomed on the SOPs and Workbook and associated documents and development will continue with stakeholders and implemented local AAA screening programmes. It is important to note that the SOPs were based on the original programme plan that provided the evidence and the basis of the acceptance of the programme by the UK National Screening Committee. Deviations from the SOPs are seen as deviations from nationally set and agreed protocols. The NAAASP Quality Standards and the development of the IT solution are based on the SOPs.

Please notify the National Programme Centre if you have concerns about any areas of the SOPs. All leaflets and additional documents referred to in the SOPs and Workbook can also be found on the NAAASP website.

In order for screened individuals to receive a high quality, reliable, supportive and effective service, local screening programmes need to have a number of key elements in place. Local programmes must undertake core activities and fulfil a number of responsibilities to ensure high quality screening is available to their local population.

Local screening programmes are responsible for:
- Coordinating and managing their programme
- Setting operational policy
- Identifying and inviting eligible people
Providing information, support and advice for participants
Undertaking and reading screening tests
Recording results, scheduling follow-up surveillance scans and running failsafe systems
Referring for diagnostic investigations
Recording and monitoring the outcomes of interventions
Reporting on performance against quality assurance standards

Background

Ruptured abdominal aortic aneurysm deaths account for an estimated 2.1% of all deaths in men aged 65 and over. This compares with approximately 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.

Most abdominal aortic aneurysms are asymptomatic until they are on the point of rupturing. Some patients have their condition detected during imaging processes for an unrelated cause, but most present as rupture. Prevalence of the condition in men aged 65-80 is 7.6% compared with 1.3% in women and prevalence increases with age.

Treatment is available for these patients if their medical condition permits. In most hospitals the treatment is urgent surgery which requires the attention of a vascular surgeon, as well as skilled attention from medical and nursing staff in the operating theatre, intensive care and on the surgical ward. A minority of hospitals have a programme of urgent endovascular stenting for suitable patients.

The NHS 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.

An AAA is defined as a maximum aortic diameter of 3cm or greater in the maximum anterior-posterior measurement. An aortic diameter of less than 3cm is deemed to be within normal limits.

The objectives of NAAASP are to:

- Identify eligible men and invite them for screening
- 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 AAA 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 high quality diagnostic and treatment services
- Promote audit and research and learn from the results

The Principles of Screening for Abdominal Aortic Aneurysms

Screening for AAA refers to measuring the maximum aortic diameter on apparently well men to detect those with an unrecognised AAA and then referral on to assessment and treatment for those who need it.

Department of Health policy and strategy documents lay out strategies for improving specific areas of care in order to transform the health and social care system so that it produces faster, fairer services that deliver better health and tackle health inequalities. Community AAA screening
directly supports these policies by reducing AAA-related mortality through community-based screening. This will be achieved through earlier detection of AAA by ensuring the provision of:

- An effective AAA screening programme for men at age 65
- A facility for screening on request for men over 65 who have not previously been screened
- Rapid referral to a Vascular Unit for those meeting the criteria for considering treatment
- A surveillance programme for men with detected AAA who have not reached the criteria for referral
- Referral to vascular assessment and treatment services that comply with guidance from the Vascular Society of Great Britain and Ireland (VSGBI) ([http://www.vascularsociety.org.uk/library/quality-improvement.html](http://www.vascularsociety.org.uk/library/quality-improvement.html)) and from the UK National Screening Committee

The main guiding principles for the NHS AAA Screening Programme are:

- All individuals should be treated with courtesy, respect and an understanding of their needs
- All those participating in the NHS AAA Screening Programme should have adequate information on the benefits and risks to allow an informed decision to be made before participating
- The target population should have equitable access to screening
- Screening should be effectively integrated across a pathway including between the different providers, screening centres, primary care and secondary care
Section 1: The Screening Programme

1.1 Population and Programme Size

Before a local screening programme (minimum 800,000 total population per screening programme) can be set up, there must be a suitable Vascular Intervention Centre or network for treating patients with detected AAA that covers a population of at least 800,000. The Vascular Units providing treatment must 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. It is anticipated that once implementation is complete there will be about 42 local screening programmes in England. A small amount of pump-priming finance will be available to set up local screening programmes to cover the first 18 months after which it is expected that local commissioners will pick up funding.

The minimum population size for each local screening programme will allow for the predicted increase in the number of scans that will occur over the first 10 years. This increase is due to the anticipated rise in the number of men aged 65 over successive years and the progressive increase in the number of surveillance patients year by year. In the first year, a total population of 800,000 will generate a requirement for approximately 4,000 scans in men aged 65 plus self-referrals (the expected number of self-referrals is undetermined but not expected to be significant). 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.

The relatively small number of scans in the first year has some benefits:

- It allows for training and induction of screening staff. Fewer subjects per clinic can be booked while experience is gained by screening staff and procedures are put in place for referral and treatment. The number of staff employed is a local issue, but for the health and safety of staff and screening subjects it is advised that two staff are employed at each session. It is also important to consider the number of staff recruited and the number of scans they regularly perform to ensure competency. Most programmes employ part-time staff which gives greater flexibility of working hours and allows cover for annual leave and sickness.

- It allows clinic space for screening self-referred men over 65. The number who will self-refer is uncertain but experience from existing screening programmes and trial data suggests it will be around 2-3% of the total number screened. With national roll-out of the programme there may be an initial increase in self-referrals which would have an impact on training and the induction of new staff. This will need to be monitored and factored into local planning. The demand for self-referrals will decrease over the first five years as progressive coverage of a wider age group is achieved year on year.

Both the number of scans and the number of elective operations required will build progressively over ongoing years and services should be aware that the requirement for additional clinics and scanning staff will increase over time.

The maximum population size for a local screening programme is likely to be approximately 2.5 million. At this size, the local screening programme may decide to set up two or more local screening units, depending on the requirement locally and the geographical challenges.

Men will be offered a single scan in the year in which they reach 65. In cases where there is doubt whether the subject should be invited or not, they should be sent an invitation. This includes subjects who are housebound and able to benefit from screening and possible treatment. There should 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 should only be done after careful assessment of the subject and their circumstances.
Inclusions:
- The target population to be screened is all men registered with a general practitioner within the local participating Primary Care Trusts (PCTs) within the screening programme area. Selection will be based on year of birth. Men should be offered screening during the year – 1st April to 31st March – in which they turn 65.
- In their start-up year, local programmes should 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.
- A facility is also available for men aged over 65 on request – see exclusions for further details.
- Men resident in local prison establishments during their 65th year and at the agreement of the PCT and Prison Service – see Annex H for suggested protocol.
- 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 should 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 should be notified of the screening attendance. It is advised that the man should remain in the screening programme only and not be scanned under two separate services.

Exclusions:
Individuals are normally excluded from the programme if:
- They have previously been diagnosed with an AAA and fall outside the category as defined above.
- They have previously undergone surgery for AAA repair.
- On advice from their general practitioner related to other health concerns.
- They have requested that they are permanently removed from the NHS AAA Screening Programme.
- They have already had a scan through the NHS AAA Screening Programme and the aorta was within normal limits.
- They have made an informed choice that they do not wish to be invited for screening.

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. [http://www.nhs.uk/CarersDirect/moneyandlegal/legal/Pages/MentalCapacityAct.aspx](http://www.nhs.uk/CarersDirect/moneyandlegal/legal/Pages/MentalCapacityAct.aspx)

Ineligible:
- Under age of 64
- Females

Selection by other risk factors
Men and women with a strong family history of any age can be scanned under existing procedures following referral by their GP to a medical imaging department. If an aneurysm is diagnosed, the patient should be referred to a Vascular Specialist for assessment, treatment or continued surveillance.

1.2 Screening Programme Models
The model for the service typically involves ultrasound scanning being undertaken within community healthcare facilities such as community clinics, community hospitals, mobile units and primary care facilities. Clinic locations are a local issue and some clinics may be held in other suitable locations. Early planning should be considered as the cost of some screening locations may be prohibitive.
1.3 **Programme Management**

A small core team of clinical staff will need to be identified. During the initial setting up of the local screening programme more time may be required of the key clinical staff. However, suggested staffing levels should be maintained following implementation into the day-to-day delivery of the programme.

Recommended staffing is outlined below.

1.3.1 **Programme Clinical Staff**

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

A Vascular Surgeon, responsible to the National Programme Centre, will have responsibility for the overall running of the local programme and for clinical support for their Programme Coordinator, particularly in matters involving patient care. They will also be responsible for making clinical decisions related to screening subjects up to the point where a referral has been made.

The primary purpose of this role is to act as the strategic lead for the local AAA screening programme. The Director will oversee the screening programme and take clinical responsibility. The role of the Director is to ensure the successful implementation of the programme and that a high quality service is maintained following implementation.

The key components of the role are:

- To act as the strategic lead for the local programme with responsibility and authority for leading the service, implementing service developments and negotiating necessary funding and resources

- To advise on clinical matters concerning the programme at the request of the screening staff

- To oversee the project management of the implementation of the local screening programme in accordance with national policies, procedures, protocols and timescales. A number of implementation tasks will be carried out by other members of the local team but the Director will need to oversee these tasks and take overall responsibility

- To take overall responsibility and accountability for the management, quality assurance and clinical governance of all aspects of the local screening programme. To receive, read, disseminate and act upon regular and other reports supplied by the National Programme Centre

- To monitor that diagnostic and treatment services meet the capacity and quality requirements of the NHS AAA Screening Programme and to make reports to the National Programme Centre

- To be accountable for the timely and complete data entry of all outcomes including post operative rupture

- To take professional responsibility for the programme where appropriate. The Director will remain the responsible clinician for men entered into the screening programme up to the point where a referral is made

- To provide management of and clinical guidance to the senior screening programme staff (Senior Sonographer and Coordinator)
Lead Ultrasound Clinician (0.1 wte/800,000 population)
A Radiologist/Consultant Sonographer/Vascular Scientist will have special responsibility for quality assurance (QA) of staff and the screening process and responsibility for the screening equipment, staff accreditation and monitoring of clinical performance (including review of scans from screening clinics). This task is often delegated to the Clinical Skills Trainer but this is a local decision. Any QA concerns should be brought to the attention of the Director. They will advise on which ultrasound equipment should be purchased (subject to the specifications of the NAAASP guidelines) and when it needs to be updated or replaced.

Consultants in the Vascular Units
Note: Vascular Surgeons are not employed by the screening programme and are unlikely to participate in the screening programme as such.

In Vascular Units, the Consultant responsible for the care of the patient will be classed as the “responsible” doctor once the referral is received. They should:

- On referral from the local AAA screening programme, ensure that further confirmatory diagnostic image testing is performed and keep records of the findings of this testing
- Assess patients with a view to surgery, taking into account guidelines from the Vascular Society of Great Britain and Ireland (VSGBI)
- Notify the Coordinator of the local screening programme of the outcome of the initial and further outpatient visits and, if indicated, the treatment
- Submit data for audit purposes on an ongoing basis to the online VSGBI National Vascular Database (NVD) of all AAA surgery. Failure to do so will mean that the Vascular Consultant is ineligible to participate in taking referrals from the NHS AAA Screening Programme

1.3.2 Programme Screening Staff

Job descriptions are available on the extranet pages of the NAAASP website. Access to the extranet pages is available on request to the National Programme Centre.

Ultrasound Screening Staff
The screening team should normally consist of pairs of Screening Technicians who will go out to selected screening sites as requested.

The screening team will be overseen by a Clinical Skills Trainer who is a Senior Sonographer/Vascular Scientist. The team will usually consist of staff working in pairs to ensure effective throughput of patients in the clinic. They will be required to undergo regular assessment and to renew their accreditation at intervals as per the NAAASP Education and Training Framework. Clinics will be held at various locations within the screening district and staff are expected to travel to the different locations and move portable screening equipment and supplies.

Clinical Skills Trainer (Senior Sonographer/Vascular Scientist – 0.1 wte per 800,000)
A Senior Sonographer/Vascular Scientist is responsible to the Director/Clinician Lead. This will be an Advanced Practitioner who holds a CASE (Consortium for the Accreditation of Sonographic Education) accredited qualification or full Society of Vascular Technology (SVT) accreditation. They will also have completed the NAAASP mandatory training for CSTs. As the first line supervisor of the Screening Technicians, the CST is responsible for staff training and regular review of staff for quality assurance in addition to undertaking routine equipment quality assurance assessments and ensuring regular maintenance of the ultrasound equipment. CSTs also run occasional AAA screening clinics to maintain their skills.
They should have extensive experience of training in the workplace. The work within these clinics will include:

- Ensuring that men attending clinics are booked in smoothly and efficiently and are aware of the benefits and risks of the NHS AAA Screening Programme and give informed consent to the procedures
- Accurately recording aortic sonographic measurements
- Collecting other patient information
- Reporting scan results and their implications to patients both verbally and in writing
- Preparing copies of the results for GPs
- Transferring clinic data to the screening office
- Updating the screening management IT system

As with other clinical staff, more time may be required during initial set-up.

All staff fulfilling the CST role are expected to attend the nationally accredited NAAASP training prior to the commencement of screening.

**Screening Technicians (3 wte per 800,000)**

Screening Technicians ensure that men attending clinics are booked in smoothly and efficiently and are aware of the benefits and risks of the NHS AAA Screening Programme and give informed consent to the procedures. They will accurately record sonographic measurements of the aortic diameter, collect other patient information and report scan results and their implications to patients both verbally and in writing. They will also prepare copies of the results for GPs, transfer clinic data to the screening office and update the screening management IT system.

Screening Technicians may come from a non-NHS background, although some may have experience in a related field. There will be a requirement for all those undertaking the scanning to have attended the nationally approved and accredited NAAASP training course and fulfilled all the competency requirements of the training. It is recommended that all newly appointed Screening Technicians have an initial probationary period built into their contract to allow time for training and assessment of competency.

The Screening Technicians will be responsible for the smooth running of the clinics they are attending.

The CST is the first line supervisor of the Screening Technicians and in turn would be supported by the Lead Ultrasound Clinician.

**Nurse Practitioner (0.1 wte per full capacity programme – 7,000 scans per year)**

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. Further referral on to other specialists should be made following discussion with the Director of the local screening programme.

### 1.3.3 Programme Management, Administration and Technical Staff

**Coordinator (1 wte per 800,000 population)**

The Coordinator is responsible to the Director/Clinical Lead, who delegates the task of the day-to-day running of the screening programme to the Coordinator but remains the responsible clinician for patients entered into the screening programme.

The primary purpose of the Coordinator’s role is to direct the day-to-day operational management of the local programme. They oversee the work of the Clerical Officer and screening team and their duties include:
• To act as the professional lead for the day to day management, evaluation and quality assurance of the screening process including the provision of information, the screening procedures and any onward referral
• To act as a single point of contact for the entire local programme across multiple professional groups and possible multiple screening facilities within that programme (which might include hospitals, clinics and other screening locations)
• Liaison with appropriate staff to ensure that policies and procedures are adhered to across all agencies and professional groups involved in the screening programme
• Ensuring that all parties in the local screening programme, as well as other appropriate local staff, are kept fully informed
• Liaising with PCTs to identify GP practices within the local AAA screening programme area
• Locating suitable screening sites
• Organising staff rotas
• Ensuring all invitations to eligible subjects are sent including new subjects, men with AAA in the surveillance programme and self-referrals
• Reconciliation processes at the end of each year to ensure all men in that cohort have been offered a screening appointment
• Ensuring referrals are sent for appropriate subjects to Vascular Surgeons
• Arranging medical imaging scanning following a non-visualised screening outcome
• Monitoring fail-safe systems
• Monitoring and reporting any serious adverse events and taking steps to ensure the safety of staff and patients
• Storage and retrieval of images
• Arranging appropriate local QA of images as per national guidance
• Ensuring that NAAASP screening protocols and procedures are adhered to and NAAASP screening targets are met.
• Leading the screening team on non-clinical matters.
• Line-managing appropriate members of the screening team, ensuring regular reviews of screener performance are undertaken and appropriate personal development plans written and implemented
• Responsibility for the recruitment, retention and organisation of the training of the screening team in accordance with national policies and procedures
• Managing all aspects of the screening equipment, ensuring protocols are followed, service and calibration is completed at the required intervals, and equipment is safely and securely stored.

Clerical Officer (1 wte per 800,000 population)
The Clerical Officer is responsible for the administration and is the first point of contact between the screening population and the screening office. The work involves administering and processing subject invitations and appointments, recording information and updating data systems relating to results and patient outcomes and ordering supplies. The Clerical Officer plays a supporting role to the local AAA screening programme and ensures that members of the public are informed of the benefits of the programme.

Medical Physicist (5 days per year for a full capacity programme – 7,000 scans per year)
The purpose of this role is to undertake acceptance of new ultrasound machines and to provide independent, regular quality assessments using sophisticated test objects. This specialist will undertake annual assessments on all the ultrasound machines and probes, assisted by the Senior Practitioner. They will prepare reports for the Director of the local programme.

IT Lead
The IT Lead supports the Coordinator in the timely installation of IT equipment and software, in accordance with the IT checklist issued by the Software Supplier. The IT Lead acts as a single site contact point for IT for the software supplier during implementation. The IT Lead is responsible for ensuring the appropriate software for the programme is accessible and they will be available at a
high level to troubleshoot when required. They will also facilitate the set-up and process for archiving screening data and back-up. This role is likely to be part of the overall responsibility of a Trust’s IT department. A named individual should, however, be made available during the initial installation of the IT system.

1.3.4 Governance

The provision of the NHS AAA Screening Programme involves a number of organisations:

- Strategic Health Authorities
- Primary Care Trusts
- Primary care providers
- Local Screening Programme
- Diagnostic and Treatment Services

1.3.5 Responsibilities in the Programme

National Roles

The UK National Screening Committee (UK NSC) advises Ministers and Chief Medical Officers in the four UK countries, and the NHS, on all aspects of screening policy and programmes. Each UK country is responsible for its own decisions on implementation. The UK NSC has three principal functions:

- Assessing proposed new screening programmes against a set of internationally recognised criteria covering the condition, the test, the treatment options and the effectiveness and acceptability of the screening programme
- Ensuring that screening programmes are developed and managed to explicit quality standards and with continuous improvement in performance, including advising and overseeing the introduction of new technologies
- Supporting and taking an overview of the implementation of new screening programmes and developments in the NHS – including establishment of pilots

The UK NSC National Programme Director leads the work of the UK NSC, and the national programme teams, supported by the secretariat provided by the Department of Health (DH) Screening Policy Team and a small Director’s Unit.

The expert National Programme Centres, which exist for National Screening Programmes in England, are led by a Programme Director with a widely based Advisory Group, work closely with the NHS, and undertake a number of functions best ‘done once’ nationally. These teams are nationally commissioned through the UK NSC Programme Director on behalf of the DH and the 10 SHAs.

These centres ensure national consistency and provide technical expertise for the NHS through the following activities:

- Set and reset national quality standards for screening programmes, measures and specifications
- Harness national expertise including the “lay” perspective – including robust systems for user involvement at all levels
- Develop, and sometimes deliver, training packages and put in place accreditation of training
- Ensure the skills in the workforce are developed and training opportunities provided
- Specify Information Management and Technology (IM&T) requirements and a minimum dataset for monitoring and epidemiological analysis
• Produce specifications for equipment and carry out national framework procurement, such as that for IM&T systems, to save NHS costs
• Advise services on roll-out and local implementation
• Develop and maintain standardised information materials for individuals, professionals and the public that can be used locally
• Develop, implement and maintain programmes to ensure uptake is equitable across all population groups
• Develop and maintain QA and management systems, including commissioning of some QA mechanisms
• Specify the requirements for a fail-safe system
• Monitor national progress on implementation and quality improvement
• Provide epidemiological analysis at national level and produce an annual report on the programme
• Support avoidance and management of critical incidents
• Shape interface with other national NHS bodies as needed – e.g. Healthcare Commission, Clinical Negligence Scheme for Trusts

The Strategic Health Authority (SHA):
The SHA’s role relates to the performance management of PCTs to ensure they are fulfilling their commissioning and quality assurance roles. The key roles of the SHA in relation to screening are:
• To ensure robust commissioning arrangements are in place
• To ensure quality assurance systems are in place and that accountabilities for action are clear
• Where programmes are provided across organisational boundaries, the SHA is responsible for ensuring that the relevant organisations work together effectively
• To hold the commissioners to account for effective performance of screening programmes to national standards
• To maintain an overview of risk and ensure appropriate action to manage risk
• To provide a lead through the workforce development function on training and development on screening issues in the workforce

The Regional Directors of Public Health (RDsPH) lead a combined public health function for each SHA and Government Office of the Region (GOR). RDsPH:
• Ensure that effective commissioning arrangements are in place, particularly at the implementation stage of new screening programmes
• Ensure that Serious Incidents are managed appropriately
• Ensure that there are effective arrangements for bringing together all stakeholders involved in commissioning and delivering screening programmes, so that a coordinated and integrated screening service is a reality for patients
• Review the annual report from their Specialised Commissioning Group on commissioning of screening programmes to ensure commissioning arrangements are robust and delivering the expected outcomes

RDsPH have a professional responsibility for ensuring the effectiveness and safety of population screening programmes in their area. For the NHS AAA Screening Programme they ensure, in partnership with the UK NSC Director of Programmes and the National Programme Director (whose expertise can be called on for assistance and advice), that QA systems for screening programmes in the SHA area are in place, are robust and that action is taken on recommendations to improve quality and safety.

For new programmes, there will be a development phase of QA systems. In practice, much of the work in overseeing screening at regional level may be undertaken by the SHA Screening Lead, a post that supports the RDPH in their screening responsibilities.
Primary Care Trusts (PCT):  
PCTs are responsible for ensuring that their population is covered by screening programmes of good quality which meet national standards and for monitoring equity of access to programmes. PCTs, and in particular Directors of Public Health (DsPH), have a critical responsibility to protect and improve the health of the population, and to address inequalities in health and access to health care. Where some aspects of commissioning arrangements are carried out by sub Specialist Commissioning Groups (SCGs) and become more ‘distant’ from PCTs, there could be a risk of disengagement of the PCT public health team and others in addressing local problems and issues. Safe and effective screening remains a core responsibility of a PCT.

Commissioning for populations larger than individual PCTs must be flexible and sensitive to local issues. PCT public health teams, with others, play a major part in ensuring effective screening programmes for their populations, as well as contributing to wider collaborative commissioning arrangements.

The PCT’s responsibilities include:
- To actively steer the screening programme development and maintenance agenda based on robust and regular needs assessments that establish a full understanding of current and future local screening needs and requirements, in the context of national quality and safety standards
- To work collaboratively with key clinicians, public health staff and managers as well as community partners, ensuring all parties are clear about their roles whilst encouraging innovation and continuous improvement in service design and delivery. Local knowledge and interaction with those providing different parts of the screening pathway can often broker change and ensure resolution of local operational issues
- To proactively seek and build continuous and meaningful engagement with the public and patients to promote screening take-up
- To shape services – particularly promoting integration of screening, diagnosis and treatment services – whilst ensuring equity in uptake and reductions in health inequalities
- To ensure that investment in AAA screening services meets local needs, service requirements, national quality and safety standards, and values of the NHS. Also to ensure all financial investments promote sustainable development and value for money whilst protecting service users
- To promote continuous improvements in screening services through clinical and provider innovation

General Practice:  
The intention of the screening programme is to keep the primary care workload to a minimum. However, GPs should be aware of the programme so they can take advantage of opportunities to raise awareness amongst men on their list. Once screening has begun, some people receiving invitations may want to discuss the screening process with their GPs. GPs will also be notified by the screening programme of the screen outcome for men on their list, including the referral of men with large aneurysms.

NHS Trusts:  
The Chief Executive has overall responsibility for the quality of the AAA screening programme tasks undertaken in their Trust. Those Trusts contracted to provide screening services have responsibility to ensure that:
- Performance against national quality assurance standards is judged as satisfactory by the National Programme Centre
- Fail-safe procedures operate in accordance with national policy

Those Trusts contracted to provide diagnostic and treatment services have responsibility to ensure that:
- Appropriate diagnostic investigation and treatment is offered to individuals referred from the screening programme
• Appropriate follow-up procedures are undertaken
• Fail-safe procedures operate in accordance with the agreed policy

NHS Indemnity Arrangements

NHS Indemnity is a Government policy that applies in all clinical settings and is not a statutory obligation.

The NHS has a duty of care to all patients: if any suffer harm due to the Trust or Clinician failing in their duty of care, then the NHS Risk Pooling Scheme will cover financial damages which may be payable once negligence is admitted or proven in a court of law. In all cases the Trust has the capacity to provide financial cover for damages or compensation arising from negligent harm.


Director/Clinical Lead of Local Screening Programme:
The Director/Clinical Lead has a responsibility to ensure:
• The call/recall system is robust and well managed
• A record of the screening history of each registered individual is maintained and updated in a timely fashion
• Fail-safe procedures operate in accordance with national policy
• Regular quality assurance reports are sent to the PCT lead
• All individuals are notified of their test result at the clinic unless they have requested otherwise
• All eligible individuals are recalled at the routine interval according to AAA diameter
• All individuals meeting the criteria for referral are referred promptly and appropriately
• An annual report of the local screening programme is produced describing the programme's performance and achievements, and the objectives for the next 12 months

1.4 Accommodation Requirements

Clinic Rooms
Rooms with appropriate facilities should be identified within the community. At each clinic the requirement is for two rooms if possible furnished with a height adjustable examination couch, a desk, telephone and sufficient electrical power points. Ideally there should also be N3 network access in at least one of the rooms along with a dedicated PC. A waiting area is also required for each clinic. The clinic locations may include PCT centres or GP surgeries where practicable, or alternatives such as NHS Drop-in Centres, health centres, community hospitals, mobile units etc. Separate designated screening rooms within main hospital grounds can be used. However, in order to maintain a high acceptance rate, it is recommended that main hospital outpatient or imaging departments are avoided except for ‘mop-up’ clinics for previous fail to attend or surveillance subjects. Early identification of screening locations is essential.

Consideration should be given to available lighting and patient privacy in any room offered as a clinic room. Ultrasound requires control over the level of lighting during scanning.

Screening Office
Offices should be secure and large enough to accommodate a minimum of two desks plus lockable storage units, telephone and access to hospital IT systems (including N3 connection and access to patient information systems).
1.5 **Information**

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 local AAA 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 patient invitation information leaflets and space on the back cover has been allowed to do this. Address information should be printed on Avery J8160 labels.
  - 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 should 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 AAA of 5.5 cm or greater setting out the benefits and risks of AAA surgery.
  - Letter templates will be available to new programmes and all local programmes should 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.

- **Website.** A website for patients and professionals is administered by the National Programme Centre and can be found at [http://aaa.screening.nhs.uk/](http://aaa.screening.nhs.uk/). Downloadable PDF and text leaflets are available from the website, including translated and easy read versions of patient information leaflets. Extranet pages of the website are password access only. Access can be requested by contacting the National programme Centre.

- **Posters** are available and provided by the National Programme Centre for display in GP surgeries, other primary care facilities and other suitable public locations identified locally. Information sheets for GPs and other healthcare professionals are also available and provided by the National Programme Centre.

All leaflets, posters and information sheets should be ordered from the National Programme Centre. An order form can be found at [http://aaa.screening.nhs.uk/leaflet reorder](http://aaa.screening.nhs.uk/leaflet reorder).

1.6 **Screening Equipment**

The screening equipment will consist of portable ultrasound machines with digital recording devices from where data can easily be downloaded.

Small, robust, portable ultrasound machines, producing good quality black and white images, are required for Screening Technicians to carry to the screening clinics. The number of machines required will vary according to local conditions and the geography of the area. **It is anticipated that one machine per 2,000 men screened per annum will be required.** These machines should be able to store and transfer data digitally, and incorporate a facility for recording whole clinics in real time within a storable facility (e.g. disk, server, central hub) for QA purposes.
A technical equipment specification has been developed and an approved list of equipment meeting this specification has been agreed. It is a requirement that all local programmes select equipment from this list. Initial equipment will be purchased centrally and the National Programme Centre will work with local programmes individually to ensure equipment is ordered. Please note: It is important that reference is made to documents relating to ultrasound and the prevention of work-related musculoskeletal injuries. Documents which reference these guidelines are available via the Society and College of Radiographers’ website at www.sor.org.

Liability and insurance for equipment loss and damage should be discussed with the local PCTs/Trusts.

**Equipment default set-up**

**Recommended settings for the GE Logic e for the NHS AAA Screening Programme**
- Tissue Harmonics – ON
- Cross-beam (compound imaging) – ON
- Dynamic range – recommend 70-80 dB (say 75dB)
- Edge enhancement – recommend setting no. 2
- Grey map – recommend C or D
- The power output is not great even on 100% so this should be left on

**Recommended settings for the Sonosite M Turbo for the NHS AAA Screening Programme**
- Tissue Harmonics – ON
- “MB” – multi-beam = compound imaging - ON
- Dynamic range – there are 7 settings, from +3 to -3. The recommended setting is -2

**Safety, compliance and quality assurance on ultrasound machines**
- Compliance with local policies and directives is necessary. All equipment will need to be safety tested and accepted locally following delivery
- Ensure that all the components belonging to one piece of equipment are clearly labelled. Local programmes should colour code each piece of equipment to allow the matching of equipment to each man scanned and easier identification of equipment should problems occur
- Electrical safety testing is required annually
- Regular maintenance and quality assurance testing to specified levels by qualified personnel is required. The following procedures should be implemented:
  - In-depth baseline tests on new equipment
  - Annual routine tests using specialist equipment
  - Simple user tests on a regular basis (intervals to be advised)

**Equipment review and replacement**

It is desirable that a formally agreed review and replacement programme should be in place with providers because of rapid changes in technology and clinical expectations and needs. The Board of the Faculty of Clinical Radiology, Royal College of Radiologists, recommends review of ultrasound equipment at four to six-year intervals. The National Programme Centre will support and advise local programmes with this process as consistency of equipment use across and within the NHS AAA Screening Programme is essential.

**Transport of equipment**

Equipment must be transported safely between sites by staff and care must be taken when doing so.
- During transit, the ultrasound machine should be secured where possible in the car, preferably in the car boot

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• It should not be left in the car overnight for security reasons and because extreme temperature changes can damage electronic equipment
• Any staff who use their car for work-related travel should have an insurance policy covering them for business as well as social use of their car. Whenever an NHS travel expenses claim is completed and signed it includes a declaration confirming that the insurance policy in respect of the car provides cover whilst the car is used on official business for full third party insurance, including cover against risk or injury to or death of passengers (including those passengers included in the travel claim) and damage to property. The replacement cost of the equipment is approximately £25,000 for each ultrasound machine so this should be specifically raised with the insurance company to make sure it is covered within the term ‘business use’. This is unlikely to add significantly to the cost of the insurance premium

Equipment storage
• Unless clinics are being held in a lockable room solely used for AAA screening, equipment should be placed in a safe and secure area
• If it is impractical to leave equipment set up, it should be packed away appropriately after use in the carrying bag provided, ensuring that the probe is protected to prevent damage
• If no secure storage area is available, the equipment should be returned to the screening office at the end of the clinic so it is available for collection for subsequent use

Consumables and other items
At each screening clinic, items relating to the ultrasound machines and general administration will be required. Spare consumables should be monitored at the end of each clinic visit and replacements requested from the administration office as required. Sufficient stocks should be left available for at least one further clinic to allow for supplies to be despatched and received.

All equipment problems (even intermittent ones) should be recorded and logged and the screening office notified so that appropriate actions can be taken if necessary. The development of an equipment fault log sheet is recommended.

Supplies for use with the portable ultrasound system:

N.B. Care should be taken when packing away the probes as these can be easily damaged and cannot generally be replaced through the maintenance contract

Cable connectors and co axial lead
2 x Extension Lead - 4 socket
Medicated cleansing wipes
2 x small u/s gel bottle

Large blue paper roll
Soft tissues for cleaning probe
1 x Large U/S Gel Refill
Fault report book
Rubbish bags

For general clinic use (packed in a kit bag for ease of transit and storage):

Transit bags and Transit bag security closures
Clinic pro formas
Summary protocol/ flow chart and checklists
Time sheets and travel claim forms
Scissors
Stapler x 2
Pencils & pencil sharpener
Resuscitation face mask
List of staff contacts
Accident reporting book
Memo pad

Spare information leaflets
Blank IT data pro formas
Blu Tack & Sellotape
Erasers
Highlighter Pen
Staples
Pens
Resuscitation instruction sheet
Sample of selected information leaflets
Signs for clinic and waiting area
Post-it notes

Cleaning

Local cross-infection policies must be taken into consideration along with manufacturer’s instructions.
• Ultrasound Machine and Examination couch
Wipe with multi-surface wipes for MRSA control

• Transducer
This should be wiped with tissue after each examination and gently wiped with a non-alcoholic
wipe (e.g. Tigene Advance or a soap/saline solution). This assists with reducing nosocomial and
bacterial infections. The use of alcohol is not recommended as it has destructive properties on the
transducer membrane.

Packing up instructions
Clinic staff should work together to pack up at the end of each clinic. Equipment should generally
be packed away for security purposes. The transducer should be disconnected from the ultrasound
machine and packed in a padded pocket. The cables should be loosely coiled and packed.
All correctly colour coded equipment should be packed away together.

1.7 Workforce education and training

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

- Senior Practitioners/CSTs, who will be expected to cascade practical training to other staff
  and will offer support and advice. There will be a requirement for these professionals to
  clinically support the Screening Technicians during the initial months of the programme and
  there will be a related impact on workforce
- Screening Technicians
- Coordinators, who will be expected to cascade training to screening and clerical staff

Information seminar and update events will be required for Directors.

Information updates will also be required for:

- Lead Ultrasound Clinician
- Medical Physicist
- Nurse Practitioner
- Commissioners

The National Programme Centre recommends 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, such as the European Computer Driving Licence
(ECDL) training. Training will be provided on the use of the IT system by the National Programme
Centre and the provider of the national IT solution, Northgate Public Services.

The University of Salford is the contracted training provider for NAAASP. The training for
Screening Technicians will involve a combination of face to face classroom based training, e-
learning and on site clinical skills training at the local programme. It is estimated that the training,
up to the point of becoming accredited as an AAA Screening Technician, will take between three
and six months.

For further details see http://aaa.screening.nhs.uk/training

1.8 Confidentiality and Security

Basic principles of Information Governance

- Patient information is confidential and should be entrusted to those with a justified need to
  know
• Integrity of information must be monitored and maintained to ensure that it is of sufficient quality for use within the purposes it was collected
• Awareness and understanding of all staff, with regard to their responsibilities, should be routinely assessed and appropriate education and awareness provided
• Risk assessment in conjunction with overall priority planning of organisational activity should be undertaken to determine appropriate, effective and affordable information governance controls are in place

**Basic principles of storage and transfer of person-identifiable data**

- All person-identifiable information must be encrypted when stored or transferred electronically
- Storage or transfer of bulk person-identifiable information should not be done without the express permission of the Caldicott Guardian who will maintain a register
- All electronic bulk person-identifiable information must be encrypted to an acceptable level (256-bit Advanced Encryption Standard [AES-256] algorithm plus a strong password – 12 or more characters in length)
- Files containing person-identifiable information can be encrypted individually or, in the case of laptops, the hard drives can be encrypted

**Mobile computer media and devices**
The above principles apply to all forms of mobile/portable computer media and devices including laptops, notebook computers, PDA’s, solid-state memory cards, memory sticks, pen drives, USB drives, DVDs, CD-ROMs etc.

**Emailing and other electronic transfers of person-identifiable information**

- The above principles apply to all forms of electronic transfer of person-identifiable information including email, FTP, internet submissions etc
- Files containing the person-identifiable information must be encrypted during full transit from sender to receiver and must be properly protected as stated above when stored on the sender’s and receiver’s computer devices
- NHS numbers should not be used in emails between programmes or between programmes and the Northgate Public Services IT service desk unless using nhs.net email addresses to send and receive. The confidential ID number generated for each subject within the IT system should be utilised in such cases

**Incident reporting**
Staff should report all information security breaches or near misses via the Incident Reporting Process (the same process for reporting clinical incidents).

**1.9 Information Technology**

Systematic screening requires call and recall information and the capture and management of ultrasound images. Screening programmes 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:

**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 VSGBI 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.

In addition the following are also required:
- A minimum of two administrative computers, including printers, to access the system with appropriate support
- Telephone system with appropriate voicemail
- A computer attached to each screening location if possible. This could be a dedicated installed desktop if this facility is available (some PCT buildings or GP surgeries contain PCs which should be accessible with the appropriate local approval) or laptops which the screening team is responsible for. N.B. there is no additional central funding for this.

1.9.1 Use of Data and Consent
The IT system that supports the NHS AAA Screening Programme is different from most hospital systems in that records are stored in a national system and most of these records relate to subjects who have not sought NHS care. This system has huge advantages in monitoring the programme and better understanding the progression and clinical management of AAA. However, men who have been offered screening might not expect that their personal information is being stored or used outside the local screening programme, so we are legally obliged to seek informed consent before entering personal information into the national database.

Every subject who attends for screening must be given an opportunity to read the form of words provided on the ‘consent card’ (Annex I), so they can understand and consent to screening and to the storage and use of personal information. There is no need to obtain a signature but in all cases it is the screener’s responsibility to ensure that the subject’s consent preferences are accurately recorded. It may be unlawful to record personal information on a national database without obtaining appropriate consent.

Consent need only be obtained once for each man, but the rules on consent may change, so in practice it may be easier to present the consent card at each screening encounter so that consent can be reconfirmed.

Translated versions of the consent card are available on the extranet pages of the NAAASP website http://aaa.screening.nhs.uk. Access to the extranet pages can be requested from the National Programme Centre.

Declined or withdrawn consent
It is important that any man who declines consent for their personal information to be used in this way understands the consequences of their decision. Often explaining why information is needed
and affirming that it will only be used within the NHS as part of the care, evaluation and improvement process will reassure the subject that this use of their personal information is appropriate. However, it is important that only legitimate informed consent is recorded within the system.

Subjects may decline consent for any or all of the activities listed on the card. However, a subject declining consent must not be screened other than when he declines consent for use of personal information for research purposes. Screening is a diagnostic procedure that requires the consent of the subject and there is an associated duty of care to record information to evidence what was done and what was found.

Subjects may withdraw consent for any of the listed activities at any time. The rules around consent withdrawal where previous personal information has been stored on the database have not been finalised and at the present time withdrawal of consent operates prospectively (so a subject cannot request that historic information be removed).

The National Programme Centre has sought guidance and approval for the use of data from the National Information Governance Board (NIGB). The following paragraphs MUST be included in all subject letters as stipulated by the NIGB.

**Your personal information (sometimes called personal data):**

As you are registered with a GP you are entitled to AAA screening as part of the NHS programme in England.

Your personal information (name, contact details and date of birth) will only be used by the NHS AAA Screening Programme to provide a safe screening service. It will not be passed on to third parties other than healthcare professionals directly involved in screening or any subsequent investigations and treatment. As a national NHS screening programme, we are required to record statistics and may also contribute to research linked to abdominal aortic aneurysms or screening programmes. In the event that your data is used for these purposes, we will not identify any of your personal details other than where there is a clear legal basis.

*If you choose not to take up this offer of screening, we will keep a record to demonstrate that we have contacted you, and we may let your GP know that you have not been screened. We also share personal information with the Vascular Society of Great Britain and Ireland so that we can monitor mortality from AAA disease and improve the effectiveness of the screening programme.*

*If you have any concerns or queries about how your information is used or stored, please contact the screening centre on [insert local programme telephone number]*

### 1.9.2 Image Storage and Retrieval

The National Programme Centre is developing tools to assist in the storage, integration and retrieval of images. Local programmes are currently advised to arrange suitable storage facilities for their images to enable easy retrieval during quality assurance or for any look-back exercise required. Local programmes are provided with a minimum of one encrypted disk that should be used as a back-up storage facility for all images. This disk, through arrangement with Northgate Public Services, can be used to transport a copy of all the images to a secure server as a safety measure.
Section 2: Screening Pathway

The Screening Process
The NHS AAA Screening Programme is based on the written policies developed by the UK National Screening Committee (UK NSC) AAA Screening Working Group taking account of guidance from a variety of bodies and agreed by the UK NSC.

The screening procedure is divided into the following stages:
- Identification
- Invitation
- Inform
- Test
- Surveillance
- Diagnose
- Treatment/Intervention
- Monitor outcomes

2.1 Identification

Each programme will have access to their entire cohort list to allow for clinic planning. This will come via the IT solution. The unique identifier for each man will be the NHS number.

Screening Timetable
A rota will need to be drawn up to schedule clinics, taking into account:
- Staff availability
- Clinic room availability (date and times)
- Logistics of transferring equipment between different locations
- Experience of staff
- Number of surveillance subjects to incorporate into the clinic

Staff rotas
The rotas should be circulated at least four weeks in advance of clinics, taking into account availability, staffing requests and special requirements. Two staff should be booked for each three-hour session.

Staff will be advised what equipment or supplies they need to take to each clinic and given request forms to return to the base so further consumables can be ordered and dispatched as required.

Clinic booking
The National Programme Centre suggests the following booking pattern for clinics when the local screening team is well established. Local programmes will need to build up the number of men included in each clinic to take account of the training needs of their team.

It is suggested that screening clinics are scheduled to last three to four hours and appointment slots are usually allocated at 10 or 15-minute intervals with a short break mid-session. Ten-minute slots should be allocated for surveillance patients. Generally 15-18 men would be seen over three hours, but the number should be reduced if:
- There are newly qualified screening technicians who are gaining experience
- More than five surveillance subjects are to be included
- It is a new screening location

2.2 Invitation

Eligible men are invited by letter to one of the dedicated screening clinics held in a variety of locations within their community. The invitation will come from the local screening office and not the GP. It may be advisable to book and invite all 65-year-old men from one practice over the same time period for ease of booking.
If a local screening programme receives its cohort ‘early’ – i.e. before the year (1st April to 31st March) that the men turn 65, it should avoid inviting men for screening when they are still aged 63. However, it is acceptable to invite men for screening as soon as they have turned 64 even if the date of screening falls before the start of their cohort year.

If a man is invited for screening when he is still aged 63, his local programme should use the following wording if the man subsequently asks why he has been invited:

The NHS AAA Screening Programme usually invites men for screening during the year they turn 65. This is because most AAA occur in men aged 65 and over. However, during the initial roll-out of local AAA programmes, some men may be invited for screening shortly before their 64th birthday. Inviting men for screening ‘a few months early’ is not clinically significant. However, it does help to ensure that the programme is implemented successfully in all areas of England. We can assure you that it is highly unlikely that any 63-year-old man whose abdominal aorta measures less than 3cm will develop an aneurysm in later years that could rupture.

All call and recall appointments MUST be organised at, and generated from, the central administrative office within the screening programme. The local screening programme will generate and send invitations from the screening office three weeks before the clinic date, using the cohort list of subjects within the IT system.

An invitation pack should include:
- An appointment detailing a specific date, time and location. This letter should also ask men with special needs (e.g. mobility, hearing, visual) to contact the screening office in order to arrange an appointment at a separate dedicated clinic if applicable
- The NAAASP invitation leaflet
- A direction sheet with map
- An address/phone number/email address to contact the screening centre

If subjects cancel an appointment, the vacant appointment slot can be filled by sending an invitation to another subject up to two weeks before the appointment, or through subjects rearranging their appointments by telephone.

It is important that invited men can give informed consent to be screened. For non-English speakers, translations of the NAAASP patient information leaflets and consent forms are available to download and print out from the extranet at http://aaa.screening.nhs.uk/translations_for_local_programmes. There is also a translated information sheet that can be printed out and attached to the invitation letter which consists of a short paragraph in each language asking non-English speakers to contact their local programme if they require translated material or for an interpreter to be present at their appointment. Local programmes should arrange any required interpreter services through their local Trust or PCT.

2.3 Inform

The man will be seen by the Screening Technician on arrival at the screening clinic. This will allow further information about screening to be given before the decision to participate is taken.

Care should be taken to ensure the identity of the person being screened is securely established by:
- Asking to see the letter of appointment where possible, and double checking the NHS number against the subject record
- Asking the individual to state their full name, address and date of birth and checking that the details match the subject record
The man should be fully informed about the process and possible outcomes. This information should also include an explanation regarding the use of his data. His full consent should be obtained prior to screening commencing.

2.4 Test

Screeners take views of the abdominal aorta using ultrasonography. Two anterior–posterior (AP) measurements of the maximum aortic diameter should be recorded in millimetres, 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. Inner wall to inner wall is the measurement that has been agreed upon and supported by radiological/ultrasound specialist advisers. All men entering the programme should follow the national process and pathway outlined. However, it is acknowledged that in some areas there will be existing surveillance patients who have previously had their aortic diameter results based on a different measuring criteria. These men, on their next follow-up scan, should be provided with a clear explanation regarding the changes in measuring criteria based on the implementation of a new national screening programme, the result of which may see the diameter of the aorta reduced compared to their previous scan. Clear information following their scan should also be given which will need to explain any change to their surveillance pathway. It is important that these men understand this does not necessarily mean their aortic aneurysm has reduced in size.

- 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, should be recorded and stored to allow recall in cases of Serious Incident and for quality assurance purposes.

- All screening results should also 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 should 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 should be sent as soon as possible to the GP and clinicians providing other care. The concept of ‘no news is good news’ will not be acceptable

- 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 will 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 either at a future screening clinic at a specified time interval, or at a hospital outpatient clinic with a Vascular Specialist

- 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 – e.g. due to transient bowel gas – 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.
Guidance should be offered recommending minimum food and drink intake in the four-hour period before the proposed scan. 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 should 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. CT/MRI scanning as routine is not considered to be cost effective and has associated risks. This should not be carried out unless considered important by the Clinical Director, taking into account the wishes and circumstances of the man involved. The Clinical Director should come to an agreement locally with commissioners and providers as to who would fund this additional imaging should it be deemed appropriate.

All programmes should ensure that their Screening Technicians have been appropriately trained and assessed as competent to give verbal feedback at the time of the scan.

- Screening staff should not carry out any additional abdominal scanning during a screening appointment. However, a local process, including notification of the findings to the programme Director and referral to the Ultrasound Department, should be developed to deal with any incidental findings from a scan
- Any anomalous findings, for example clear dilation/saccular bulges when the aorta is below 3cm, should be discussed with the Clinical Director or the Imaging Lead
- Screening results should be entered directly onto the SMaRT system if available

After the clinic (at the office)
- Result letters are printed and sent to subjects with aneurysms requiring surveillance and for those requiring a referral. Letters are not sent to men with normal aortic measurements
- Results are printed and sent to GPs for all subjects regardless of the result
- Data from the clinic is reviewed to ensure that information has been fully and correctly recorded
- If the aorta cannot be visualised at the screening clinic a further scan should be arranged at a later screening clinic or local hospital medical imaging department
- The Coordinator makes appropriate referrals to a Vascular Surgeon for patients who have an AAA of ≥5.5 cm and informs the GP within one working day of the clinic
- Further invitations (at least one) should be sent to those not attending their first appointment without notification to the programme. Local policy should take into account the pursuit of non responders such as checking contact details with the GP practice. It is essential that GPs are contacted via telephone with letter/email follow-up regarding the non-attendance of a surveillance patient and the actions taken, including any reason for the non-attendance recorded in case of future rupture of the aneurysm
- If a surveillance subject has moved out of the local programme area to a location not covered by NAAASP then the local programme Coordinator should check the NHS Spine system to find and contact the patient's new GP. The National Programme Centre recommends that all local programme Coordinators should have access to the NHS Spine system
- Examples of standard result letters are available from http://aaa.screening.nhs.uk/ and should be used with minimal local amendment to the template only and not to the content.
Letter set-up should be part of the IT installation and programmes will be informed of this near the time of their implementation

2.5 Surveillance

If the AAA measures:

a) 3.0-4.4 cm, a follow-up will be arranged in one year
b) 4.5–5.4 cm, a follow-up will be arranged in three months

Forward planning

- Through a search facility, the IT system will produce a summary of the number of expected recalls by month for a one-year period (based on a fiscal year rather than calendar year). The numbers will include forecasts of subjects with AAA of 3.0-5.4cm who are under either three-monthly or yearly surveillance. It will not include patients who have an AAA ≥5.5 cm who will be referred to a Vascular Surgeon.
- Details should be checked and any changes made to the IT system. Checks should be made that:
  - Subjects are not deceased
  - Their address has not changed
  - The GP has not indicated that the man is unsuitable for surveillance
- The appointment letters should be generated, allocating men to an appropriate clinic venue which should then remain constant for that man. It is unreasonable to expect surveillance subjects to attend clinics at different venues on successive occasions as this increases their anxiety.
- Men attending their first screening appointment and those under surveillance should be included in a single clinic so staff regularly have the opportunity to scan AAA subjects. This ensures that they maintain their skills and adds interest to the clinics.
- The number of men booked at each clinic will vary according to the number of subjects under surveillance who are included and the experience of the staff. Generally, once a screening programme is fully operational, patients are allocated a single slot at 5-10 minute intervals over a 3-3.5 hour session.
- If the man requests a delay or change in the appointment, or if a further appointment is declined or deemed inappropriate, the IT system should be updated accordingly. The updated clinic list is then available to staff on the day of the clinic.

At the clinic

- Results should be communicated to all men verbally and in writing at the clinic. Results should indicate if a further scan is planned and if so the approximate surveillance interval. If an AAA ≥5.5 cm is identified, the screening office is contacted urgently by telephone from the clinic so arrangements can be started without delay for a referral to a Vascular Surgeon.
- Results should be entered directly on to the SMaRT system if available.
- Screening results and paperwork are returned to the office, including a printout of the clinic work sheet with screening measurements in writing against each subject.
- Equipment is packed away and securely stored or taken for use at another site.

After the clinic (at the office)

- Result letters are printed and sent to subjects with aortas measuring ≥3.0 cm.
- Results are printed and sent to GPs.
- Data from the clinic is reviewed by the programme Coordinator to ensure information has been fully and correctly recorded.
- If the aorta could not be visualised at the screening clinic a further scan should be arranged either at a subsequent screening session or at a local hospital medical imaging department.
- The Coordinator makes appropriate referrals to a Vascular Surgeon for patients who have an AAA of ≥5.5 cm and informs the GP within one working day of the clinic.
- Further invitations (at least one) should be sent to those not attending their first appointment without notification to the programme. Local policy should take into account
the pursuit of non responders such as checking contact details with the GP practice. It is essential that GPs are contacted via telephone with letter/email follow-up regarding the non-attendance of a surveillance patient and the actions taken; including any reason for the non-attendance recorded in case of future rupture of the aneurysm
• Standard result letters should be used with minimal local amendments to the template only and not to the content

Informed Dissent

• Men with small abdominal aortic aneurysms who indicate that they do not wish to be re-screened should be encouraged to remain in the surveillance recall system and decline their next individual regular invitation rather than withdraw permanently. However, any man who indicates that he is certain of his decision should have this decision respected
• Men must be provided with sufficient information to enable an informed decision to be made about withdrawing from the screening programme. This must be in a format which is accessible and men must be informed that withdrawing from the programme will prevent them from receiving any future invitations or reminders about screening. However, it must be made clear that they may return to the programme at any time at their own request
• Additionally, men must be capable of making and communicating an informed decision. Under the Mental Capacity Act 2005, individuals must be presumed to have capacity to make their own decisions unless it is proved otherwise. Ceasing decisions for people who lack mental capacity may be made by a legally-accountable decision-maker only where the individual cannot make his own decision even with support and assistance, and must always be in the individual’s best interests. This is likely to be appropriate only where the man would never be suitable for further investigations or treatment should his aneurysm increase in size. Decision-makers are required to document the decision-making process and retain an auditable record of this
• Wherever possible a specifically-written instruction should be signed by the subject or his representative to confirm his informed dissent from surveillance recall. Each screening office must have fully defined and documented protocols for ceasing, and these must be available to all staff who deal with queries from screening subjects and the general public
• Individuals who have confirmed their wish to be removed from the screening programme should receive no further correspondence relating to any screening episode. Unless the man has specifically requested otherwise, the screening office must write to him to confirm that recall has ceased and to give instructions on how to rejoin the programme if required

2.6 Nurse Practitioner / Health Promotion Clinics

This option has been presented to the Department of Health Vascular Programme Board and has been accepted as a working approach.

Men will be offered an appointment to see a Nurse Practitioner/Vascular Nurse at or before their first surveillance scan (at three months or 12 months) and an opportunity to see the Nurse when they move from annual surveillance to three-monthly surveillance. How these appointments are arranged will be a local decision and may be at the same clinic as the follow-up scan – leaving the Screening Technician to carry out the scanning – or at a dedicated separate clinic.

Subject
Following a positive screen with the aorta measuring 3cm to 5.4cm the subject will be given an appropriate surveillance information leaflet.

The screening office will then send an accompanying letter confirming the outcome of the screening test and will inform the man that before his next scan he will be contacted by a Nurse Practitioner/Vascular Nurse who will invite him to an appointment to answer any questions he may have and to provide him with some advice should he want it. This appointment may be before or at the same time as his next scan.
Following a positive screen with the aorta measuring 3cm to 5.4cm the GP will be sent a letter giving the following information:

- Result of scan including the size of the aneurysm
- An outline of the interval for the next scan
- Information that the Nurse Practitioner/Vascular Nurse will contact the patient to invite him to an appointment for support, reassurance and lifestyle advice

Appointment details
The appointment will be a one-off unless:

- Contact from the man is made to the programme Coordinator expressing undue anxiety
- The subject is moving from 12-month surveillance to three-month surveillance

The appointment letter should state that the appointment is being offered should he wish to accept it and that, if attending, the patient should bring any prescribed medication with him.

During the appointment the Nurse Practitioner/Vascular Nurse should:

- Measure and record height
- Measure and record weight
- Calculate and record BMI (body mass index) using NICE (National Institute for Health and Clinical Excellence) guidelines
- Determine current smoking status
  - Never smoked
  - Ever smoked
  - Currently smoking
- Measure and record blood pressure (more than once)
- Ask whether the man is currently taking statins. If so, what?
- Ask whether the man is currently taking aspirin
- Determine and record any patient concerns
- Provide smoking cessation advice as per PCT guidance
- Recommend any interventions such as seeing GP
- Provide lifestyle advice as per NICE guidelines and record
- Provide reassurance regarding size and presence of AAA
- Ensure all measurements and recommendations are recorded and transferred to the screening office for input into the screening management system
- Send letter to GP outlining outcome of appointment
- Send letter to subject outlining recommendations

2.7 Diagnose

If the AAA measures 5.5cm or greater:

- The subject should be informed at the clinic, both verbally and in writing, of the need to be referred to a Vascular Consultant in a hospital outpatient department, and the reasons explained for this referral given. He should also be given the appropriate leaflet. If a man declines a referral then confirmation of this should be sent to him and the GP indicating that he is free to change his mind at any time. It is important that this is done in case of later rupture
- The screening clinic should contact the Coordinator to inform them of the need for a referral
- The referral should then be made by the Coordinator of the local programme, within one working day of the clinic, to the appropriate Vascular Unit (see below)
- A copy of the letter should be sent to the subject and the GP along with a summary of previous screening results
- The referral letter/fax should be sent directly to the Secretary of the appropriate Vascular Surgeon or Vascular Centre. Local process should dictate the quickest and most effective way of making this referral
• The local programme Coordinator should verify this referral has been received via email or telephone

At the same time, an email or fax should be sent to the GP practice with a follow-up phone call to ensure the practice is aware of the referral. As the referral is based on the ultrasound measurement alone, the GP may want to provide additional information to the Surgeon. The subject and/or GP may choose to alter the referral location (within three working days of contact with the practice). The GP should be asked to send any additional information, special requests or exclusions to the Coordinator who will record this information and pass it on to the appropriate Clinician. Any change to the referral should also be logged on to the SMaRT system.

All referrals should be seen in the vascular outpatients department within two weeks of the referral being made by the Coordinator. If the AAA has a diameter on ultrasound of over 7cm, an urgent referral should be made with every attempt to see the patient at the next available outpatient clinic.

The choice of Vascular Surgeon from those eligible (fulfilling the NVD audit requirements and nominated as part of the screening programme) will be made according to the GP practice location of the patient or, if not registered with a GP, the home address.

The GP and patient should be made aware in writing that:
• Strong links between screening services and Vascular Networks help to ensure that surgery is of a consistently high standard
• It may not be possible to verify high quality surgical outcomes from Vascular Surgeons not participating in the screening programme
• The screening programme will not learn the outcome of a referral to a Vascular Surgeon not participating in the programme. This will make it more difficult to ensure that appropriate follow-up takes place

On referral to the Vascular Unit:
• Confirmatory diagnostic image testing should be carried out. If the repeat imaging test shows the AAA to be less than 5.5cm in diameter, or the patient is unfit for surgery, continued follow-up should be arranged under the care of the Vascular Surgeon (not the screening programme). Once a patient has been under the care of the Vascular Surgeon for surveillance they must not be referred back to the screening programme for them to monitor

• The patient should be fully informed of the proposed investigations, possible treatment and potential risks of the condition and the treatment

• A clinical examination, clinical history and other appropriate investigations should be undertaken

• The patient’s fitness for surgery should be assessed

• Urgent referrals for assessment or treatment should be made to other specialties if required

• If surgery or stenting is indicated, the operation should be completed within eight weeks of the date of referral from the screening programme to minimise the risk of AAA rupture

• Advice on change of lifestyle should be given if required

• Patients should be fully informed of the outcome of the investigations and given further outpatient appointments, a proposed date for surgery or further surveillance (arranged by the Vascular Unit through the hospital imaging department)
• The screening office should be advised by letter of the outcome and results of each consultation

Referral checking mechanism
Checks should be made by the screening office to ensure an outpatient appointment has been arranged within four weeks of the referral to a Vascular Surgeon

At least once a week, the Coordinator should review the progress of AAA patients referred to a Vascular Consultant and update the IT system to include date of initial outpatient appointment, date and type of AAA surgery and date of death if within 30 days of surgery.

A robust mechanism for checking the above should be agreed with all involved and could be via hospital notes or via telephone updates with the Vascular Surgery secretaries. Regardless of the mechanism agreed it should be documented and will rely on good communication links between everyone involved.

2.8 Treatment/Intervention

The Vascular Unit undertaking surgical treatment should take into account the guidelines of the VSGBI. The Vascular Unit is responsible for setting up mechanisms with the local screening programme to inform the screening office of the decisions concerning surgery and the outcome of surgery.

Details of all AAA surgery performed by the Vascular Unit should be entered on to the National Vascular Database and made available to the screening office though the interface across the national IT system.

The screening office should review all AAA operations once a month and link them to patients recruited to the screening programme and identify those with screen-detected AAA, surgery following a normal scan, or non-attendance despite an invitation for screening. The Coordinator should discuss cases with the local screening Director of screening subjects who have AAA surgery who have not been referred through the screening programme. Any previous scan results should be reviewed by the Lead Ultrasound Clinician for quality assurance purposes.

2.9 End Point of the NHS AAA Screening Programme

Active inclusion in the screening programme ends when:
• The scan is found to be within normal limits (aorta less than 3cm diameter on AP measurement in both longitudinal and transverse view, at initial scan)

• The AAA reaches 5.5cm diameter on ultrasound on either of the AP measurements 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 been acted upon. **NB: A diagnosis is not made at the completion of a screening test. The ‘diagnosis’ of an AAA will be made by the Vascular Surgeon**

• The Director of the local screening programme or the GP decides referral for treatment should be considered based on other factors (e.g. symptoms, co-morbidities)

• 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 should 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 should 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 (if one exists), a different PCT or dies. If a man under surveillance moves out of the area, the Coordinator should 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 should 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 except for Inclusions listed under section 1.1. These patients must stay within the care of the Vascular Service.

2.10  Self-referral Process

The following process has been developed for use when men aged over 65 who have not been screened previously contact the programme asking for a screening appointment. These men are known as self-referrals. The National Programme Centre advises local programmes not to accept self-referrals from men outside the agreed screening programme boundaries. If a local programme is contacted by a self-referral from outside its programme boundary then a recommendation should be given for him to contact his GP should he have any worries or concerns. This should only be an issue over the first few years of roll-out until the programme covers the whole of England and men can self-refer into their local programme.

An NHS number will be required for all men who enter the screening programme and it is likely some men will not know their individual number. A process must be established which enables the screening programme to access this important piece of information.

1. The subject contacts the screening programme wishing to self-refer for an AAA scan.

2. If the subject has knowledge of and access to his NHS number and is registered with a GP then his details can be entered on to the screening IT system and an appointment sent directly to him.

3. If the subject does not know his NHS number then the information pro forma should be sent to his home address by the screening programme. This pro forma asks him to send back specific information to the programme including:
   • Name
   • Address
   • Postcode
   • Date of birth
   • NHS number
   • GP name and address (if known)

4. The subject returns the pro forma to the screening programme.

5. An acknowledgement of receipt is returned to the subject, his details entered on to the screening IT system and an appointment made for a suitable clinic.

NHS number access
In order for the man to find his NHS number he will need to be aware of the access guidance as set out by NHS Connecting for Health. See Annex G for information and pro forma template.
2.11 Screening Flow Charts

The NHS AAA Screening Programme has developed care pathways which are available through the Map of Medicine or on the NAAASP website at: http://aaa.screening.nhs.uk/carepathways
Section 3: **Vascular Networks**

The success of the screening programme in terms of outcomes for men is critically dependent on achieving the lowest possible morbidity and mortality from surgical interventions for those found to have an AAA warranting surgery or stenting. Approved intervention centres, clinical networks, standard operating procedures, participation in national audit and good patient information about risks and benefits will all play a part in achieving this.

The Vascular Society of Great Britain and Ireland (VSGBI) works closely with the National Programme Centre, the UK NSC and Department of Health on the development of Vascular Networks and quality improvement processes.

The criteria required for Vascular Networks linked to local AAA screening programmes and delivering interventions for screen-detected AAA are outlined in full on the NAAASP website at [http://aaa.screening.nhs.uk/vascular_networks](http://aaa.screening.nhs.uk/vascular_networks).
Section 4: Service Objectives, Standards, Risk Management and Quality Assurance

All screening programme services will be required to monitor performance against the national standards for the NHS AAA Screening Programme. All Surgeons treating patients identified through NAAASP will be expected to submit data to the National Vascular Database.

The UK NSC AAA Screening Working Group initiated the development of core national standards for NAAASP. The NAAASP standards are a core set of objectives, criteria, minimum standards and targets that have been developed to measure the processes or outcomes of AAA screening. In addition to the core national standards, more detailed QA standards have been developed for each element of the screening programme.

Both QA between units and quality control within a unit are important. Involvement of Radiologists, Sonographers, Screening Technicians and Medical Physicists will be required.

4.1 Service Objectives and Core National Standards

The NAAASP Quality Standards and Service Objectives can be found at http://aaa.screening.nhs.uk/quality

Performance management thresholds

Two thresholds have been defined in relation to each of the service objectives and quality assurance standards: an achievable threshold, that all programmes should aim to meet, and an acceptable threshold, that all programmes must meet.

The achievable threshold represents safe and robust performance; screening programmes should budget for and aspire towards performance at this level. Local constraints may sometimes result in programmes failing to meet this threshold. Service improvement plans should focus on the delivery of a balanced service with as many standards as possible meeting the achievable threshold.

The acceptable threshold is the lowest level of performance considered safe. All programmes are expected to exceed the acceptable threshold and to agree service improvement plans that develop performance towards an achievable level. Programmes not meeting the acceptable threshold are expected to implement recovery plans to ensure rapid and sustained improvement.

Some standards have an unsafe threshold. Below this threshold a programme is operating at significant risk. A Serious Incident will usually be declared against programmes approaching or crossing the unsafe threshold and consideration will be given to suspending screening until an appropriate remedial plan is in place.

4.2 Programme Risk Management and Fail-safe Procedures

The rationale for fail-safe system

One of the cornerstones of an efficient screening programme is the fail-safe system. For the NHS AAA Screening Programme the fail-safe 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 fail-safe 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. The NAAASP fail-safe document and map can be found at http://aaa.screening.nhs.uk/qualityassurance

Fail-safe systems should 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 should be contacted on one/two further occasions following all attempts to ensure address is correct by use of NHS Demographics services (http://nww.connectingforhealth.nhs.uk/demographics) such as the Personal Demographics Service (PDS)
• 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 per national guidelines using a confidential and secure method
• All data is entered appropriately on to 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 PCT area, relevant primary care and specialist services are made available to him

The procedures necessary for the NHS AAA Screening Programme fail-safe systems should 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 should 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
• If and when to expect further communication and from whom

4.3 Individual responsibilities in fail-safe procedures

The Director/Clinical Lead of the screening programme has overall clinical responsibility and accountability. However, it is likely that the day-to-day management of fail-safe procedures will be delegated to the programme Coordinator.

The Coordinator is responsible for the operation of the IT solutions fail-safe systems which should ensure that:
• The AAA screening programme population records are maintained and updated with results and agreed action codes using the SMaRT system
• Appropriate recall invitations are sent to men in the follow-up recommended category
• GPs are sent details of patients’ 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
• Throughout the year the SMaRT system will receive the demographics of all men registering in covered GP practices who turn 65 within that screening year.
• 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 PDS system

The Coordinator should ensure that:
• Records are kept of all attempts to contact the GP/Vascular Surgeons about individuals identified by fail-safe procedures
• The GP is notified about men who have not attended initial or follow-up screening appointments
• 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 fail-safe procedures end

The Coordinator is accountable, through the programme Director to the National Programme Centre and the SHA, for the efficient running of the NAAASP fail-safe systems.

The Coordinator should ensure that:

• Records are kept of all attempts to contact individuals for further investigation
• When an individual with a detected AAA actively refuses further investigation, the reasons for this are notified to the GP/Vascular Nurse Specialist
• Appropriate investigations are undertaken to determine why repeated attempts to contact an individual due for a repeat scan have failed
• All appropriate actions to achieve the recommended follow-up investigation are recorded. When these have failed, the Coordinator’s responsibilities for fail-safe procedures end

4.4 Serious Incidents

The UK NSC has developed guidance on how Serious Incidents should be managed in national screening programmes. This guidance can be downloaded from the UK NSC portal website at http://www.screening.nhs.uk/quality-assurance

4.5 Quality Assurance (QA)

The UK NSC has stated that QA is an essential component of any national screening programme. Those performing screening are in a reverse ethical position from usual healthcare because an approach is made to an apparently healthy person, with the implication of benefit.

The aim of QA is to:

• Reduce the probability of error
• Ensure that errors are dealt with competently and sensitively
• Help professionals and organisations improve year on year
• Set and reset standards (national responsibility)

QA processes aim to ensure that the whole screening pathway is functional and safe. They include ensuring that:

• The correct population is identified and invited
• An appropriate invitation is used and men have an informed choice
• IT systems are in place to ensure effective tracking of individuals’ progress along the pathway and that their results reach them in a timely way
• Action is taken to follow up unscreened men
• Men with a positive screen result receive appropriate follow-up including a diagnostic test and information. Those with a positive diagnosis receive appropriate and timely treatment

There are national, regional and local components to achieve all of the following:

• Error prevention and effective management of risks and untoward incidents
• Year on year performance assessment and, where appropriate, improvement
• Maintenance of clear responsibility for different aspects of screening and the flow of information between those involved in running different components of the screening programme
• Production of an annual report on the screening programme at a local and national level. Pro forma reporting forms and standard search items will be part of the national database showing a minimum dataset. Additional information can be reported to local SHAs and PCTs subject to prior discussion and agreement with the UK NSC and the local programme Director.

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 (see NAAASP Quality Assurance Framework for Training)
• 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 Trust/PCT/SHA level

The commissioner should set out a clear specification for QA in the contract. The provider of the local AAA screening programme should have a QA plan with identified targets for improvement. There should be internal and external QA activities. The NAAASP are currently developing their quality assurance processes with the UK NSC.

4.5.1 Local Programme Quality Assurance

A quality assurance framework has been developed as part of the education and training development. Details of the quality assurance requirements for Screening Technicians can be found at http://aaa.screening.nhs.uk/training_documents

A QA module has been developed as part of the SMaRT system and can be used to generate subject details in line with the QA process. Local quality assurance should be performed by the Lead Radiology Clinician or the nominated Clinical Skills Trainer.

As part of the QA process, if the screener fails to meet any of the standards in three or more assessments then remedial action should be taken such as:

• Close mentoring and supervision
• Retraining
• Continuing review of images from random clinic selection
• Review of past images and possible recall of men. Local programmes should notify the National Programme Centre if a recall is required and should work with them to plan the process

Ultrasound equipment

• Initial testing
  o Range of standard commercial phantom test objects used, with tests undertaken by an independent Registered Clinical Scientist (Medical Physicis).

• Periodic testing
  o As per acceptance tests, using the same test objects and undertaken by the similarly qualified staff and results reported to the screening office. Carried out on an annual basis

• Regular testing
  o QA checks done at routine maintenance service by equipment manufacturer, carried out at service intervals detailed by the manufacturer
o Routine monthly tests using a standard test object carried out locally by the Senior Sonographer and results reported to the screening office

Other
• Service provision
  o Questionnaires sent periodically to a sample of randomly selected service users (doctors, Practice Managers/staff, patients, Vascular Surgeons) to ask whether any problems arose as a result of the screening programme
  o Enquire about any procedural changes that could improve the delivery of the screening programme

Referral to Vascular unit
• Monitor time from referral to outpatient consultation (see fail-safe for limits)

Vascular Unit assessment
• Monitor time from referral to surgery

Surgical procedure
• Vascular Society of Great Britain and Ireland to monitor outcomes

AAA mortality
• Monitor deaths from ruptured AAA through information supplied by Office for National Statistics (ONS) and linked to gender, age group and screening category

4.5.2 Reporting

As NAAASP uses a national call and recall screening management system it has responsibility for providing programmes with regular activity reports as well as key performance indicators (KPIs) and service objective reports. The activity reports are to inform the local programme and commissioners of monthly activity whilst the KPIs are related to the performance of programmes.
Annex A: Criteria for Programme Selection

1. Minimum population 800,000

2. Demonstrates a strategic fit within a geographically acceptable region (understanding that Vascular Networks may straddle SHA boundaries)

3. VSGBI Quality Improvement Framework guidelines have been adopted

4. Every Surgeon should be submitting data for all their elective infra renal aortic aneurysm procedures to the NVD, including:
   - At least 100 consecutive cases for all Surgeons in the programme together
   - Statistically robust estimate of elective mortality for infra renal aortic aneurysm procedures at 6% or less for all surgeons in the programme together. If criteria are met but there is a higher mortality rate then the case mix will be reviewed. *Mortality = 30-day mortality in patients undergoing aortic aneurysm procedures with elective admission and operation*
   - Free and unlimited access to NVD at a local level by the National Programme Centre to allow judgements to be made on a programme by programme basis
   - Verification of data and outcomes via review visit

   Points 3 and 4 will be verified through external pre-implementation quality assurance run by the National Programme Centre using the NVD and other vascular surgical databases held locally.

5. Lead PCT/Commissioner identified

6. All PCTs signed up
Annex B: Guidelines for Writing your Business Case

Executive Summary
Summary of why Abdominal Aortic Aneurysm screening is necessary. Give details of the ‘must do’ status including deadline for implementing. Stipulate that there are national protocols, national IT system and approved equipment, training and support provided centrally.

Evidence Leading to Policy:

Strategic Context
• Factual background as to how AAA screening fits into relevant service frameworks and strategies
• Requirement for PCTs to provide effective, patient friendly services and abide by clinical governance issues

Health Service Need
• Evidence of poor outcomes from emergency surgery
• Aim for a shift from emergency care to elective care
• NAAASP best practice

Current Local Screening Activity
• Coverage
• Duration
• Outline process and pathway

Outline Service Provision
(appropriate patient journey for the screening model)

Screen location, timing (include home, private and out of area men aged 65)
• Identification of home, private and out of area men aged 65
• Missed screens – how will these be identified; where will they be screened?
• Targets for date of screen completion (be aware of national targets)

Data flow
How will results
1) Be entered on to the national IT system?
2) Be given to subjects?
3) Be given to professionals?
   o Which professionals will be informed about screen outcomes and in what format?
   o When and how will data from equipment be archived?

Referral from the screen
• Location of referral
• How will appointments be made?
• Targets for date of assessment after screen completion (be aware of national targets)
• Proposed assessment methods

Multi-agency support involvement
• Training
• Vascular Services
Local and national audit (Quality Assurance and accountability)

- Outline the Quality Standards to be met
- The Director and Coordinator will be responsible for producing reports for the local team and national team

Requirements for Implementing NAAASP

Site Information
This information is also found on the implementation contacts pro formas part 1A and B.

Commissioning PCTs

AAA Details
- Names of primary Vascular Units
- AAA rate per unit (resident and non-resident)
- AAA rate per PCT
- Number of out of area treatments, men aged 65

Ultrasound Technician (UT) Details
- Number of UT bases
- Number of UTs

Staffing
- Whole time equivalent (wte) screeners proposed
- Actual screeners proposed
- wte Coordinators proposed
- wte admin and clerical staff proposed

Screening equipment
- Numbers
- Models

Accommodation
- Screener and/or Coordinator base location (accommodation) and location of IT Hardware

IM&T
- IT checklist issued three to four months prior to training
- Number of PC workstations required
- Location of workstations

Admin/Stationary/Office

Training
- Provided by NAAASP

SLA Between Local AAA Screening Programme and PCTs
- Compliance with national protocols and NAAASP quality standards
- Continued use of the national protocols for screening, the national IT system, and patient information
- Provision of patient friendly services
Ongoing commitment to work across health and training sectors
Annex C: Implementation Outline Business Plan

This outline business plan needs to be developed with Primary Care Trusts and NHS Trusts prior to submission to your Strategic Health Authority.

Please see the NHS AAA Screening Programme Standard Operating Procedures (SOPs) and Workbook and the Commissioning document prior to completing the outline business case.

1. **Name of Screening Programme**

2. **Local Organisations**
   Please detail: host/lead PCT, other PCTs covered by programme, Vascular surgical units included in this plan. Provide confirmation that the PCTs are ‘signed up’ to the proposal and will support implementation as described. If your proposed programme includes part PCT populations we will need an indication of how your programme fits at a strategic level.

3. **Summary**
   Please give an overall summary of your proposed programme including total size of population and likely timescales for implementation.

   Is the plan for a complete screening programme or for one area within a future larger screening programme?

4. **Local Information**
   4.1 **Current local screening activity**
   Describe any current AAA screening (including number of men invited per year, number of years of screening)

   Describe any previous AAA screening (including number of men invited per year, number of years of screening)

   Describe any local plans that have been developed for implementing AAA screening

   4.2 **Vascular Network**
   Describe your current Vascular Network. Hospitals, geography, population size, patient volumes

   Describe your proposed Vascular Network (if different from current). Hospitals, geography, population size, patient volumes

   4.3 **Local clinical data submission**
   Describe for each Vascular surgical unit, the past and current completeness of data submitted to the National Vascular Database

5. **Screening Population**
   Please describe:

   Total population size in 2012/13 for the implementation plan area

   Number of men aged 65 in 2012/13 for the implementation plan area

6. **Locations**
   6.1 **Screening Office**
   Outline the location and accommodation for the screening office

   6.2 **Screening locations**
Outline the proposed community screening locations

7. Proposed staffing in place

7.1 Screening staff

Outline proposed numbers of:

Ultrasound Screening Technicians – WTE or Ultrasonographers – WTE

Senior Sonographer (training and supervision) WTE

7.2 Clinical Staff

Director – WTE

Lead Ultrasound Clinician (quality assurance) – WTE

Nurse Practitioner - WTE

7.3 Office Staff:

Co-ordinator WTE

Clerical officer WTE

8. Vascular surgical units

For each Vascular surgical unit:

Number of Consultants (WTE)

List surgeons:

Number of elective AAA repairs per year per surgeon:

Number of emergency AAA repairs per year per surgeon:

Mortality rate for AAA elective operations per surgeon

Mortality rate for AAA emergency operations per surgeon

9. AAA Screening Working Group

A local AAA Screening Working Group will be required in order to develop plans for implementation. Outline the current or proposed membership.

10. Timescale for implementation

Proposed start date for invitations to be sent out

Proposed start date for screening

Proposed target date for completion of screening for the first cohort of men aged 65

11. Costs

A total of 18 months funding will be made available centrally and is based on an implementation during the period of October to April. Full year costs are provided with 50% of those costs being made available as start-up costs.

Ultrasound equipment will be purchased separately and should not be included in the submission to the National Programme Centre.

Taking account of the cost information below, what is the anticipated screening cost requirement for the first full year of screening? This is not based on actual activity but on that of the MASS trials. Please note that during 2011 the results of the post-war baby boom have resulted in the number of 65-year-old men increasing in some places by up to 50%.
<table>
<thead>
<tr>
<th>Each invitation or re-invitation</th>
<th>£1.70</th>
</tr>
</thead>
<tbody>
<tr>
<td>Each man screened (80%)</td>
<td>£32.30</td>
</tr>
<tr>
<td>Each man re-screened as part of surveillance (3%)</td>
<td>£68.00</td>
</tr>
</tbody>
</table>

12. **Equipment Checklist**

The equipment checklist should be completed and returned as part of the business case. The equipment checklist is on the extranet pages of the national programme website. Contact the National Programme Centre if you require access to these pages.

13. **Contact details** (Name, Title, email address, Phone number)

**Lead Co-ordinator and organisation for this Outline Business Case:**

**SHA Screening Lead:**

**Primary Care Trust:**

**Vascular Network Lead:**

**Date:**

**Further information:**

Essential Elements in Developing an Abdominal Aortic Aneurysm (AAA) Screening and Surveillance Programme – Standard Operating Procedures and Workbook.
Annex D: Key Studies

The NHS AAA Screening Programme is predicated upon the largest ever randomised trial of aneurysm screening, the Multicentre Aneurysm Screening Study (MASS) (Lancet, Nov 2002).

The MASS trial and all the other key research studies into abdominal aortic aneurysms and AAA screening are contained in the national programme's online bibliography which is regularly updated at http://aaa.screening.nhs.uk/bibliography. The bibliography is divided into six categories: Basic Science, Screening, Cost effectiveness, Treatment, Growth, Associated conditions, Measurements, Epidemiology/risk factors/genetics and Workload.
Annex E: Clinic room requirements and site survey form

Minimum requirements
Two rooms ensuring patient privacy, plus a small waiting area.
Ground floor or with lift access so they are accessible for infirm men.

Room 1
This room is used by the screener to explain procedures, answer queries, check personal details (e.g. address, date of birth, registered GP).
Minimum requirements: 2 chairs, small table and power point.

Room 2 (will need this for both rooms if using two Screening Technicians)
To take sonographic measurements, give results verbally and in writing, offer further information, advice and counselling if required.
Minimum requirements: Full-length height adjustable examination couch, power points x2; small desk, subdued lighting, curtains/blinds.

Waiting area
Seating for up to 6 people, close to the above rooms

Site
To ensure the smooth running of the screening programme, it is essential that the programme Coordinator views potential clinic rooms and available facilities are determined. A suggested site survey form is shown.
<table>
<thead>
<tr>
<th>Name of Centre Contact</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rooms available</td>
<td></td>
</tr>
<tr>
<td>Clinics</td>
<td>Times</td>
</tr>
<tr>
<td></td>
<td>Days</td>
</tr>
<tr>
<td></td>
<td>Dates</td>
</tr>
<tr>
<td>Waiting area</td>
<td></td>
</tr>
<tr>
<td>Signs / directions</td>
<td></td>
</tr>
<tr>
<td>Facilities</td>
<td></td>
</tr>
<tr>
<td>1. Ultrasound room</td>
<td>Height adjustable couch; curtains / blinds; power points; telephone; N3 connection with PC</td>
</tr>
<tr>
<td>2. Meet and greet room</td>
<td>Desk; power point; N3 connection with PC</td>
</tr>
<tr>
<td>Communications between screening centre &amp; clinic</td>
<td>a) From screening centre (clinic lists)</td>
</tr>
<tr>
<td></td>
<td>b) To screening centre (clinic results)</td>
</tr>
<tr>
<td>Emergency procedures</td>
<td>a) Medical</td>
</tr>
<tr>
<td></td>
<td>b) Fire</td>
</tr>
<tr>
<td>Access to facilities for screening staff breaks</td>
<td></td>
</tr>
<tr>
<td>Parking</td>
<td>a) Staff</td>
</tr>
<tr>
<td></td>
<td>b) Patients</td>
</tr>
<tr>
<td>Storage of Equipment &amp; consumables</td>
<td></td>
</tr>
<tr>
<td>Clinical Rubbish</td>
<td></td>
</tr>
<tr>
<td>Linen</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
Manuals for screening staff and office staff will need to be developed demonstrating local policies.

1. IT system - getting in and out
2. Initial procedures – Accessing patient lists and mortality
3. Initial procedures – arranging clinic rooms
4. Initial procedures – arranging screening staff rotas
5. Initial procedures - hospital (referrals; surgical data)
6. Generating clinic lists and appointment letters
7. Rearranging appointments
8. Circulating clinic lists and clinic consumables
9. Processing clinic results
10. Processing QA scan results
11. Setting up and running a surveillance programme
12. Clinic refusers
13. Non-attendees and patient reminders
14. Results and summary reports to GPs
15. Backing up and storage of images
16. Obtaining and recording AAA surgery
17. Obtaining and recording mortality in patient group (particularly those under surveillance)
18. Downloading and reporting data for quality assurance
19. Producing regular reports
20. Arranging routine equipment maintenance and servicing
21. Authorising staff pay and expenses
22. Ordering and authorising the purchase of equipment and services
23. Ordering and authorising the purchase of consumables
**Annex G: Self-referral form and NHS number guidance**

**Abdominal Aortic Aneurysm (AAA) Screening Programme**

**Self-referral form**

Self referrals can only be accepted if all fields marked * have been completed

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name</td>
<td></td>
</tr>
<tr>
<td>Address</td>
<td></td>
</tr>
<tr>
<td>Postcode</td>
<td></td>
</tr>
<tr>
<td>Date of Birth</td>
<td></td>
</tr>
<tr>
<td>NHS Number</td>
<td>_ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _ _</td>
</tr>
<tr>
<td>(see overleaf)</td>
<td></td>
</tr>
<tr>
<td>GP name and address</td>
<td></td>
</tr>
</tbody>
</table>

**About NHS Numbers**

Your NHS Number is unique to you and is used to help healthcare staff and service providers match you to your health records. It is an important step towards providing you with safer patient care. Everyone registered with the NHS in England and Wales has their own NHS Number.

Your NHS Number is the 10-digit number which is printed on your NHS medical card. An example of an NHS Number is 450 557 7104.
Some older medical cards include an old-style NHS Number which consists of both numbers and letters. Although having an old-style NHS Number will not affect the NHS care provided to you, the old style numbers have now been replaced with the new-style format which was first introduced in 1996 and the NHS AAA Screening Programme will only be able to offer screening if you provide details of your current (10-digit) NHS Number.

**How do I find my NHS Number?**
If you want to know your NHS Number, or you have an old style number and want to know your new one, please follow the instructions below:

**If you are registered with a GP, you will already have an NHS Number**

To find out your NHS Number you can contact your GP surgery (family doctor) and ask them to look it up. To protect your privacy, they may ask you to show them a passport, driving licence or some other proof of identity.

**If you are not currently registered with a GP, but think you already have an NHS Number**

To find out your NHS Number, you can ask your local Primary Care Trust (PCT) to look it up. To find out the telephone number of your nearest PCT, either:

- Visit the [NHS Choices website](https://www.nhschoices.nhs.uk) – select ‘NHS trusts' and enter your postcode; or
- Call NHS Direct on 0845 4647 (maximum 5p per minute from a BT landline).

When you telephone your local PCT, ask for the Patient and Practitioners' Service Agency. Registration staff will take your name, date of birth, address and then issue you with a medical card, usually within two days.

**If you have never registered with a GP practice, you will not have an NHS Number**

When you register with a local GP, you will be sent an NHS Number as part of registration. You can either go to a GP surgery to register or ask your local PCT to put you on the list of a local GP practice.

To find out the telephone number of your nearest PCT, either:

- Visit the [NHS Choices website](https://www.nhschoices.nhs.uk) – select ‘NHS trusts' and enter your postcode; or
- Call NHS Direct on 0845 4647 (maximum 5p per minute from a BT landline).

**Your personal information (sometimes called personal data):**

Your personal information will only be used by the NHS AAA Screening Programme. It will not be passed on to third parties other than healthcare professionals directly involved in screening or any subsequent investigations and treatment. As a national NHS screening programme, we are required to record statistics and may also contribute to research linked to abdominal aortic aneurysms or screening programmes. In the event that your data is used for these purposes, we will not identify any of your personal details other than where there is a clear legal basis.

If you choose not to take up this offer of screening, we will keep a record to demonstrate that we have contacted you, and we may let your GP know that you have not been screened. We also share personal information with the Vascular Society of Great Britain and Ireland so that we can monitor mortality from AAA disease and improve the effectiveness of the screening programme.
Annex H: Screening in Prisons

Introduction
This section describes the process for screening subjects who are long-term residents in secure organisations such as prisons and mental health units, and who may not be registered with a community-based GP practice. The process was developed in conjunction with local screening programmes that were already undertaking screening in prisons and from information from the NHS Bowel Cancer Screening Programme.

Procedure
The NAAASP Screening Management and Referrals Tracking (SMaRT) system attributes Screening Due Dates for everyone eligible for screening. Prisoners are not excluded from this, but there are differences between prisoners and the general population as far as screening is concerned.

- Prisoners are unlikely to have notified their GP of their current address in prison. As a result, any invitations to be screened may not reach them
- Secondly, access to screening by prisoners can only take place with the support of prison staff who are required to provide the local AAA screening programme and the prisoners with information and support
- As prisoners can only access screening with the help of a third party, they have to give consent to their involvement and the sharing of demographic and clinical information

Step 1
The local programme Coordinator will inform prison authorities requesting their cooperation in the screening process.

Screening can be provided to eligible prison populations only where:

- The prison management supports prisoner access to screening
- A named member of the prison staff group is identified to liaise with the local programme (normally a member of the prison health centre) to provide demographic and other information to enable screening to take place

Step 2
The local screening programme and the prison meet to outline the screening pathway; the process for selection for screening; the information requirements; the arrangements in the event of any prisoners requiring ongoing surveillance; issues of confidentiality and security; issues of consent; practicalities for undertaking the screening in the prison (rooms, couches, security of staff etc).

Step 3
The prison will identify male prisoners in their 65th year and over and provide them with the Guidance for Prisoners (available on the NAAASP website). Where the prisoner wishes to be screened, the prison will take their consent on the form provided and provide the following details of the prisoner to the local screening programme:

- NHS Number
- Title, Forename, Surname
- Date of Birth
- Correspondence address for the prisoner
- Details of their GP practice or prison health service
Step 4
The local AAA screening programme adds the consenting prisoners to the SMaRT system. A dummy GP practice code may need to be assigned to the prison’s health service if the prisoners are not registered with a valid GP practice. This can be done by Northgate Public Services’ AAA Helpdesk.

Some subjects may already exist on the SMaRT system as they will have registered at their home address and GP practice. In these cases, the programme Coordinator may need to ask the ‘home’ local programme to transfer the subjects to their programme to enable them to be screened in the prison.

Step 5
The local programme arranges screening sessions for the prisoners added in step 4. The screening clinics should be booked and appointment letters and leaflets sent to the prisoners at their current address (or via the contact at the prison).

Step 6
The prisoners are screened at an appropriate location in the prison and given their results at the screening appointment as per normal screening procedures.

Step 7
Result letters are produced and sent to the individuals, the prisoner’s GP (if known) and the prison health department.

Step 8
For subjects who require surveillance it is important that the man knows when he is next due for surveillance. He should be advised that if he moves prison or is released he should contact the screening programme to enable his details to be updated. Prisoners are often moved around the country so it is important that any surveillance subjects are aware they must inform the programme if they move. For subjects on three-month surveillance it may be possible to ask the prison to put the prisoner on ‘medical hold’ so they are not moved.

Referrals will need to be made as soon as possible and should be done with the cooperation of prison staff. Once the subject has been referred normal local procedures should be followed to enable the man to attend hospital for review.
Annex I: Guidance on consent for the storage and use of personal information

How we use your personal information
(sometimes called personal data)

It is important that you understand how we use your personal information. Please read this card and let us know straight away if you have any questions or concerns.

To help us offer a safe and effective screening service, we record information about you and about your visit to the screening clinic in our computer system (the National AAA Screening System). This information includes your responses to questions about your health, images of your aorta and measurements that we record at the clinic.

We ask your permission:

1. To store and keep information about you and your visit to the screening clinic on the National AAA Screening System and to use this information to help us offer safe and effective screening
2. To screen you for an Abdominal Aortic Aneurysm (which involves an ultrasound scan of your abdomen) and to inform you of the result
3. If you are found to have an AAA, to access your healthcare records to help us offer appropriate care
4. If you are found to have an AAA, to share your personal information with a vascular surgeon through the National Vascular Database (NVD)
5. To contact you, asking whether you will allow us to use your personal information for research purposes

Your personal information will only be used by the NHS AAA Screening Programme. It will not be passed on to third parties other than healthcare professionals directly involved in screening or any subsequent investigations and treatment. As a national NHS screening programme, we are required to record statistics and may also contribute to research linked to abdominal aortic aneurysms or screening programmes. In the event that your data is used for these purposes, we will not identify any of your personal details other than where there is a clear legal basis.

If you choose not to take up this offer of screening, we will keep a record to demonstrate that we have contacted you, and we may let your GP know that you have not been screened. We also share personal information with the Vascular Society of Great Britain and Ireland so that we can monitor mortality from AAA disease and improve the effectiveness of the screening programme.

If you have any concerns or queries about how your information is used or stored, please let us know before you are screened.

Email: aaa.screening@nhs.net
Website: http://aaa.screening.nhs.uk