**BACKGROUND INFORMATION ON THE ABDOMINAL AORTIC ANEURYSM SCREEENING PROGRAMME IT PROCESSES**

This background document explains:

1. the current arrangements for the Abdominal Aortic Aneurism (AAA) Screening Programme in England **(Section 1)**
2. the requirements and purpose of the future contract for a AAA national screening management and referral tracking IT system **(Section 2)**

**Section 1**

1. **Background**

The aim of the NHS Abdominal Aortic Aneurysm Screening Programme (NHS AAA) is to reduce AAA related mortality by providing a systematic population-based screening programme for men and individuals assigned male gender at birth during the year, 1 April - 31 March, in which they turn 65 and, on request, for men over 65 years.

An AAA is defined as an aortic diameter of 3cm or greater in the maximum anterior-posterior measurement measured from the inner wall to inner wall. There is no aneurysm present if the aortic diameter is less than 3cm.

A screen detected AAA must be treated in a vascular unit with a proven track record of excellence in AAA care to reduce the risk of harm.

The objectives of the NHS AAA Screening Programme are to:

* identify eligible men and invite them for screening
* make sure that ultrasound scans are undertaken on eligible men in accordance with national guidance and standards
* identify AAAs accurately
* provide appropriate health advice to surveillance men
* make sure that men with a AAA of 5.5cm or greater or an aneurysm that has grown by more than 1cm in 1 year are referred to appropriate specialised vascular services
* provide clear, high-quality information that is accessible to all, enabling men to make an informed choice about taking up the offer of screening and the management of their AAA, where present
* minimise the adverse effects of screening, including anxiety and unnecessary investigations
* promote audit and research

**2.** **Current service model**

The NHS AAA Screening Programme offers men a single scan during the year, 1 April - 31 March, in which they turn 65.

Inclusions:

* all men eligible for NHS care registered with a GP within the commissioned screening service boundaries. Men should be offered screening during the year in which they turn 65. Men who are resident in England but registered with a GP in Wales are also eligible to be screened by the English programme men aged over 65, who self-refer.
* men resident in local prison establishments and in secure mental health facilities during their 65th year
* men in their 65th year known to have a small/medium AAA <5.5cm.

Exclusions:

* men who have already had a scan through the NHS AAA Screening Programme and the aortic diameter measured less than 3cm indicating there is no aneurysm present
* men who have previously been diagnosed with an AAA that is equal to or greater than 5.5cm or have previously undergone surgery for AAA repair
* GP advises that a man should not be screened due to other health concerns
* In rare cases a ‘best interest’ decision may need to be completed in line with the principles enshrined in the Mental Capacity Act. Decisions should be made on a case-by-case basis by the local screening service in conjunction with the GP, family, commissioner and power of attorney.

Men who have asked to be permanently removed from the NHS AAA Screening Programme are not excluded from screening. Services should record the reason for exclusion on the man’s record and supporting evidence if available, in the event of a future query.

Ineligible:

* men under the age of 64
* individuals identified as female at birth (unless they undergo gender reassignment (see below)
* previous AAA surgery
* over 65 and on local surveillance for an AAA

Individuals who undergo male to female gender reassignment retain the male genetic risk of developing AAA in later life. However, the local provider will not receive their demographic data if they have registered as a woman; Individuals may self-refer to the programme.

Females undergoing gender reassignment who register as a male, will be identified as part of the cohort by NHS Spine.

**Screening pathway**

The screening procedure is divided into the following stages:

**Identification** – Each provider will have access to their entire cohort list approximately five months prior to the start of the screening year to allow for clinical planning. The unique identifier for each man will be the NHS number.

**Invitation** – Eligible men are invited by letter, sent from the local screening office, to screening clinics held in the community. All call and recall appointments are organised and generated from the central administrative office within the local screening service.

**Inform** – At the clinic, the screening technicians verify the identity of the man being screened and obtain his consent for screening.

**Test** – Screening Technicians using a portable ultrasound machine take two anterior-posterior (AP) measurements of the maximum aortic diameter. These are saved onto the ultrasound machine and the results transferred into the man’s record live in clinic. Results are communicated to all men verbally in clinic.

* If the aorta is less than 3cm, the man is advised that there is no aneurysm present, and no further follow-up screening will be arranged.
* If the aorta is 3cm or greater, the man is advised that an aneurysm has been detected. The man will be placed on appropriate surveillance.
* If the aorta is 5.5cm or more or the aorta has grown by more than 1cm in 1 year (for those on surveillance), a referral is made to a vascular surgeon within 1 day to be seen within 2 weeks.
* If the aorta cannot be visualised to measure the diameter accurately, the man is invited for one further scan.
* If the outcome is still non-visualised at a second screening scan, the man must be referred to the vascular lab/medical imaging department. The vascular lab/medical imaging department should notify the screening office of the outcome of the scan. It is the responsibility of the screening office to send the correct information and action accordingly, depending on the presence and size of an aneurysm. Men on surveillance should be followed up in one of the screening programme’s community clinics unless this is otherwise advised. If the aorta still cannot be visualised after this imaging scan, the individual case must be discussed with the director/clinical lead.

The screening pathway does not include CT/MRI scanning for non-visualisation as routine. This is not considered to be cost effective and has associated risks. This should not be carried out unless considered important by the director/clinical lead, considering the wishes and circumstances of the man involved. The director/clinical lead should come to an agreement with local commissioners and local services as to who would fund this additional imaging, should it be deemed appropriate.

**Surveillance** – If the AAA measures:

* 3.0-4.4 cm, a follow-up will be arranged on an annual basis
* 4.5–5.4 cm, a follow-up will be arranged for every three months

* Men will be offered a face-to-face appointment to see a vascular nurse specialist within 12 weeks of the screen positive scan and an opportunity to see the nurse again if they move from annual surveillance to three-monthly surveillance
* Following a positive screen with the aorta measuring 3cm to 5.4cm, the GP will be sent a letter, with the result of the scan and an outline of the interval for next the scan

**Referral** - If the AAA measures 5.5cm or greater or an aneurysm that has grown by more than 1cm in 1 year:

* the man should be informed verbally at the clinic of the need to be referred to a vascular consultant in a hospital outpatient department, and the reasons for this referral explained. This verbal confirmation should be followed up with written confirmation. He should also be given the appropriate referral information leaflet. If a man declines a referral, 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 man should be informed that he should contact the DVLA regarding his aneurysm if the AAA measures 6cm or more (see section above)
* the screening clinic should contact the local co-ordinator/manager to inform them of the need for a referral
* the referral should then be made by the local co-ordinator/manager, within one working day of the clinic, to the appropriate vascular unit (see below)
* a letter should be sent to the man and the GP along with a summary of previous screening results
* the letter should be sent in line with the specialised vascular service policy. Local process should dictate the quickest and most effective way of making this referral
* the local co-ordinator/manager should verify the referral has been received and acted upon

At the same time the GP practice should be informed in writing, 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 man and/or GP may choose to alter the referral location (within three working days of contact with the practice).

All referrals should be seen in the vascular outpatient department within two weeks of the scan. 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. Local services should have a standard operating procedure in place for AAAs greater than or equal to 7cm.

On referral to the vascular unit:

* should a repeat imaging test show the AAA to be less than 5.5cm in diameter or confirmed as not rapid growth, 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 due to a referral or for surveillance, they must not be referred back to the local screening service for them to monitor
* any inappropriate referrals must not return to the local screening service. Decisions of care must be made by the director/clinical lead
* the screening office should be advised by letter of the outcome and results of each consultation

**Treatment/Intervention** -The vascular unit undertaking surgical treatment should consider the guidelines of The Vascular Society of Great Britain and Ireland (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.

**Section 2 Purpose of the RFI**

AAA Screening Management and Reporting tools:

To support the AAA Screening Programme, a national information management system was established in 2009. The current contract is due to end in March 2025.

The current model is a web-based system, part of the software as service concept, that supports local Screening services via six main components:

1. Identification of Screening cohort via Subject Population Index (SSPI) - The purpose of this is to identify people eligible for screening, and to provide and maintain demographic data for all identified screening subjects. This provides AAA Screening with the eligible cohort and provides demographic updates from GPs through NHS England Live services. The cohort is supplied to each provider approximately five months prior to the start of the screening year to allow for clinical planning.
2. Management of administration, screening and referral - This supports the core functionality for the screening programme, as described in the background above:
   1. the collation of a screening cohort for each local screening programme
   2. administration of screening subject call and recall,
   3. management of the surveillance programme
   4. recording of the screening process and associated outcomes,
   5. management of referrals for those screened positive
   6. collation of audit and performance management data for the programme.
   7. Where men have asked to be permanently removed from the NHS AAA Screening Programme; recording the reason and removing contact details.
3. The data for the AAA Screening programme stored in a single national database, and each Local screening unit only has access to the patients for whom they are responsible. The boundaries of local screening programmes are defined by the list of GP practices to which they are responsible for offering screening.
4. Recording of AAA surgery and outcomes - measuring the effectiveness of the screening programme by collating data on AAA Screening outcomes (whether following a positive screen or not) and linking findings with the National Vascular Registry (NVR) to support the National Vascular Network.
5. Details of all AAA surgery performed by the vascular unit should be entered on to the NVR by the vascular surgeon using the man’s NHS number and made available to the screening office though the IT systems (the NHS number must be entered to allow the records to be linked automatically).
6. Managed service desk support services

The system aligns with the AAA Screening patient pathway and captures KPI reporting data used to benchmark all screening services in England.