Dear Colleague

Scottish Abdominal Aortic Aneurysm Screening Programme

This CEL outlines the plan for the implementation of the AAA screening programme and sets out the roles and responsibilities during and following roll out.

It provides information on the support available to NHS Boards and the steps which NHS Boards will need to take to provide clinical assessment and follow up care for men with an enlarged aorta and the roles of Special Health Boards.

Further information regarding the programme is included in the background information.

Action

NHS Boards should:

• Establish a multidisciplinary steering group locally who will take forward planning and implementation

• Agree collaborative groupings for delivery of screening and surveillance and delivery of treatment to meet required guidelines

• Develop local (but within collaborative groupings) implementation action plans and submit them to NSD by the 28th May 2010

• Develop business cases and identify funding for the investigation and follow up of screen positive cases

• Establish robust failsafe mechanisms for all men referred to vascular services from the programme

• Ensure that the data required for the monitoring of the screening programme is available and submitted to agreed timetable

• Performance manage the screening programme and provide data to ISD to ensure that Key Performance Indicators are met

• Ensure that all aspects of the screening programme are delivered against national standards and protocols

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• Chief Executives to agree a national overview plan for implementation by September 2010, identifying the sequence of NHS Board rollout over a period from autumn 2011 to 2013

NHS Boards are asked to bring this letter to the attention of those who will be involved in the planning and implementation of the screening programme and the treatment of men referred by the screening programme.

Yours sincerely

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CMO
Abdominal Aortic Aneurysm Screening Programme

Background
An abdominal aortic aneurysm is an increase in the diameter of the abdominal aorta to over 3cm. The aneurysm gradually enlarges over time and when the diameter exceeds 5.5cm there is a significant risk of the aorta rupturing. These aneurysms are around six times more common in men than women and are strongly related to increasing age, with most aneurysms found in men aged over 65 years. Other important risk factors are hypertension, smoking, other vascular disease and a positive family history of AAA.

The prevalence of AAA is gradually increasing over time and around 5% of men in Scotland aged between 65 and 74 years have the condition. In around 71% of cases the aneurysm is between 3.0-4.4 cm, in 17% of cases the aneurysm is 4.5-5.4 cm and in a further 12% it is greater than 5.4 cm. The risk of rupture is significantly higher with a diameter greater than 6 cm and increases with increasing size.

When an aneurysm ruptures less than half of patients will reach hospital alive and even when an operation is possible mortality is high, meaning the overall chance of death from rupture is as high as 85%.

In 2005 the UK National Screening Committee (UK NSC) reviewed the evidence of clinical effectiveness and cost effectiveness of screening for AAA. The committee included representatives from across the health service, including vascular services and drew expertise from the various trials that were assessing the effectiveness of AAA screening. The UK NSC decided that AAA screening could be offered to men aged 65, provided that the men invited were given clear information about the risks of elective surgery, and that steps were taken to create networks of vascular surgical services to allow further specialisation, bigger throughput and therefore lower risk, because of the evidence relating to volume and quality. A copy of the business case can be obtained by contacting National Services Division, NSS.

Aim of the Screening Programme
The screening programme aims to reduce the mortality associated with the risk of aneurysm rupture in men aged 65 years and older by shifting the balance of care from reactive emergency management of rupture to elective management through early diagnosis.

This will be achieved by identifying men who have an aortic diameter of greater than 3.0 cm by way of ultrasound examination of the aorta. If the measurement is under 3.0 cm, the man is unlikely to develop an aneurysm and will be discharged from the screening programme.

The estimated figures show that the programme could save up to 170 lives per year when all men over 65 have been offered screening.

Programme Scope
The programme will call all men in their 65th year for an ultrasound examination. The patient pathway is included in the background information. Men will be able to self refer to the programme above this age. The programme will include a number of screening centres which will provide call/recall facilities and arrange appointments. Screening can take place in local areas. Men will be given results immediately and either discharged, returned for surveillance or referred to vascular services, with confirmation by letter.
When the individual is referred to vascular services, they will leave the screening programme. At this point the man with a screen detected aneurysm will require assessment for surgery, including information on the available interventions and advice on the risks and benefits of these. The interventions include open repair and endovascular repair (EVAR) with a “stent graft”. This will be the responsibility of the vascular service receiving a referral from the screening programme. There is no re-referral back to the screening programme following discharge from the programme (either to vascular services or because no follow up is required).

**Collaborative Groupings**

The Business Case set out proposed collaborative groupings. However, following further discussion with NHS Boards the following collaborative groups have been agreed:

- NHS Lothian and NHS Borders
- NHS Grampian, NHS Orkney and NHS Shetland
- NHS Highland and NHS Western Isles
- NHS Fife and NHS Tayside
- NHS Greater Glasgow and Clyde

The following Boards have yet to confirm their preferred collaborative grouping;

- NHS Dumfries & Galloway
- NHS Ayrshire & Arran
- NHS Lanarkshire
- NHS Forth Valley

**Impact on Services**

When the programme is fully rolled out, projections show there will be approximately 30,000 ultrasound examinations and 350 men referred to vascular units for assessment and treatment in each calendar year. Further information will be supplied to NHS Boards by NSD. However, over time, there will be a reduction in emergency procedures required.

The most significant impact of the screening programme will be on vascular surgery services and theatres. The number of elective operations will increase but there will be a decrease in the number of emergency operations over time. Almost all patients who survive emergency repair of a ruptured AAA are admitted to ITU and prolonged ITU admissions are common. After elective open AAA repair most patients in Scotland are admitted to HDU rather than ITU. After EVAR repair most patients are admitted to an HDU for one day but in some hospitals in Scotland patients are admitted to the vascular surgery ward after the procedure and do not occupy critical care beds.

AAA Screening is different from other screening programmes in that the mortality of treatment is significant; 3 - 5% for open surgery and 1 – 3% for EVAR. The success of the programme is therefore dependant on low operative mortality which can only be demonstrated by units undertaking a significant number of procedures per year (minimum of 20 per unit rising in time to an estimated 32, National Vascular Society (NVS) Guidelines 2009). Patients found to have an AAA should be referred to services which are able to undertake both open and endovascular repair of the aneurysm and to offer advice to each patient on which procedure is most appropriate.

Thus referrals made from the screening programme will only go to vascular services which can demonstrate compliance with NVS guidelines; undertaking a current minimum activity of 20 AAA surgery and interventional repairs per unit. All referrals must be assessed for
suitability for EVAR. It is estimated that 50% of screen detected aneurysms will be suitable for endovascular repair.

There may be a small impact on Primary Care services from men requesting further information on the screening programme. Information on the screening programme will be circulated to Primary Care prior to roll out. GP practices will be notified of patients who are on surveillance or referred to vascular services.

NHS 24 may also see a small increase in AAA related activity as men will be provided with numbers for NHS 24 and Breathing Space.

Roles and Responsibilities

Scottish Government Health Directorates
The SGHD provide policy direction for national screening programmes. All local implementation plans will be collated to form a national implementation plan which the SGHD will sign off.

National Services Division/NHS National Services Scotland
National roll out is scheduled to commence in the autumn of 2011; NHS Boards will be phased in between 2011 and 2013 with national coverage achieved in 2013. No decisions have yet been taken on the order in which NHS Boards will be phased in. NSD will liaise with planners and other nominated individuals within each NHS Board to commence work on local implementation plans, which will then inform a national plan. NSD will be responsible for the project management of the roll out in collaboration with NHS Boards.

NSD is commissioning the central elements of the programme including the IT system.

NSD will regularly inform Chief Executives and Regional Planning Groups of progress during the implementation of the programme. Following implementation NSD will continue to inform the Chief Executives on the programme’s performance.

The National Screening Co-ordinator of NHS Scotland Screening Programmes based within NSD, NSS will be responsible for monitoring and co-ordination of the national screening programme.

Territorial NHS Boards
NHS Boards will be responsible for the delivery of treatment services according to national quality standards (e.g. NHS QIS & National Vascular Society). NHS Boards have provided NSD with a nominated Clinical Lead for Vascular Services, Public Health Consultant and Vascular Service Manager. We would now like to invite NHS Boards to nominate a Clinical Lead for the screening programme and a programme manager.

Local implementation will be facilitated through multidisciplinary steering groups chaired by either the screening programme Clinical Lead, Public Health Consultant or vascular service/project manager. Decisions on the frequency and structure of these groups will be agreed locally and must address local needs.

Throughout the implementation period the above individuals will meet NHS Scotland Screening Programmes’ staff regularly to review monitoring data and disseminate quality and performance information. NHS Boards will assist in ensuring an appropriate infrastructure is put in place that supports a screening programme co-ordinated in parallel with the vascular services.
Implementation Plans should be developed locally to identify the treatment needs of the Screening Programme and associated funding requirements. Guidance for the development of these plans will be issued shortly from National Services Division.

NHS Boards will assure programme quality is delivered; by ensuring data capture is sufficient to support performance management of the programme. Failsafe mechanisms must be agreed prior to commencement of the programme to ensure that outcomes of screening referrals can be identified.

On completion, the national implementation plan (identifying the sequence NHS Boards will be phased in) will be submitted to the Chief Executives for final agreement during August 2010.

**Information Services, NHS National Services Scotland**

Information Services (ISD), NSS, will undertake the overall monitoring and evaluation of the programme. ISD will also have a role in reporting and publishing national data. Monitoring of surgical outcome data will also be the responsibility of ISD.

**NHS Quality Improvement Scotland**

NHS QIS will have responsibility for developing and publishing quality standards for the screening programme taking account of the existing standards and for conducting future peer reviews.

**NHS Health Scotland**

NHS Health Scotland will have an ongoing responsibility for developing, publishing and reviewing national information material for the programme. This will include information on the risks and benefits to individuals in participating in the programme.

**NHS Education Scotland**

NHS Education Scotland (NES) will take forward an accredited course for undertaking AAA Screening Ultrasound measurements. Further information on workforce can be found in the attached guidance document.

**Regional Planning Groups**

The National Planning Group is represented within the Implementation Advisory Group. In addition Ms Deirdre Evans is reporting to the Regional Planning Groups on a regular basis, providing up dates on the development of the screening programme.

NHS Boards should liaise closely with Regional planners to ensure that the regional planning structure is integrated into the programmes development.

**Funding Requirements and Commissioning Arrangements**

When roll out of the programme is completed it is estimated that the total cost of the programme will be approximately £2.5 million per year. Further discussion on the commissioning arrangements will follow and will be agreed by Chief Executives.

NHS Boards will have to provide the resources needed to deliver assessment, treatment and aftercare for those who are referred to vascular services from the screening programme. Local and Regional funding arrangements may need to take into account the possible need for investment in developing vascular technologies and any other additional resources needs such as additional multidisciplinary staff.
It is estimated that 4.9% of males aged 65 will have an aneurysm but only a small proportion of these men will have an aneurysm of a size which requires an assessment for treatment based on their first scan. The proportion of interventions that are performed in the emergency context is expected to decline from 27% to 16% and should result in a cost saving.

**IT System**
NSD will commission the procurement, development and implementation of the IT system for the call/recall within the screening centres. This will manage the surveillance of patients up to the point of referral to vascular services.

Currently, the IT system is being commissioned and it is expected that procurement will be complete by May 2010, development and user acceptance testing will be complete by May 2011 and delivery of the system will take place during autumn of 2011.