

Abdominal Aortic Aneurysm (AAA) Screening

1. **Author(s) of Paper**

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2. **Purpose of Paper**

To inform the NSS Board of the SGHD's acceptance of the business case for AAA screening that was submitted by NSD on 30 May and the subsequent request for NSD to establish an Implementation Group. The announcement that a national screening programme for AAA would commence from 2011 was made by the Cabinet Secretary at the Better Health Better Health conference on 24 June.

3. **Key Issues**

Screening for AAA represents an opportunity to realise a real and proven health benefit for the population. The approach is clinically effective, cost-effective and has the potential to save many lives each year.

The NSS Board is asked to note that NSD is responsible for co-ordinating AAA Screening Programme implementation and that interdivisional working and partnership working with NHS Boards will be required to achieve implementation from 2011.

4. **Financial Implications**

Indicative costing was undertaken for a 6 centre collaborative model recommended by the NSD steering group. Recurring costs are estimated to be £2,456,459 per year for Scotland. Non-recurring capital costs will need to involve provision of an information technology package and outlays for scanning equipment at a total cost of around £4,290,450.

Costs will be met from SGHD.

5. **Resource Implications**

NSD has allocated Programme Director, Programme Manager and project support resource to lead on this work. Expertise will be required from other divisions such as ISD, PSD, CLO, Health Facilities Scotland and National Procurement at various stages in the programme. Additional expertise will be required for procurement of the AAA Screening IT system.

The work will be taken forward in partnership with the 14 NHS Boards, NHS QIS and NHS Health.

6. **Risk Implications**

A formal programme risk and issues register will be compiled. Detailed consideration will need to be given in the implementation phase to issues around minimising potential harm from screening, to establishment of high quality data collection, governance and quality assurance and to maximising potential ancillary benefits through other preventive activities. Recruitment of skilled sonographers, a shortage specialty, will also be an issue.

7. Equality & Diversity Implications

An impact assessment using the NSS Equality & Diversity Rapid Impact Assessment Toolkit will be carried out.

8. Partnership Working

Representation will be sought from professional bodies.
Service user involvement is being sought from the Men's Health Forum.

9. Recommendation(s) for Decision

The Board is invited to note the announcement made by the Cabinet Secretary and the timescale for implementation of AAA Screening from 2011.

**NHS National Services Scotland
Board Meeting
Date of Formal Board Meeting – Friday, 29th August 2008**

1. Abdominal Aortic Aneurysm (AAA) Screening

The announcement that a national screening programme for AAA would commence in Scotland from 2011 was made by the Cabinet Secretary, Nicola Sturgeon at the Better Health Better Health conference on 24 June 2008. This will be Scotland's first male only screening programme and all 65 year old men will be offered an ultrasound scan to detect if an aneurysm is present. On 3 July the Scottish Government Public Health and Wellbeing Directorate formally requested that National Services Division (NSD) set up an implementation group. Programme planning is at an early stage but the NSS Board is asked to note that NSD is responsible for co-ordinating the AAA Screening Programme implementation and that interdivisional working and partnership working with NHS Boards will be required to achieve implementation from 2011.

2. Background

2.1 The Scottish Government Health Directorates asked NSD to produce a business case for the introduction of a national screening programme for abdominal aortic aneurysms, involving a single screening ultrasound scan for 65 year old men in line with recommendations from the National Screening Committee (NSC) of the United Kingdom.

2.2 The disease is mostly a problem of older men with around 5% of men aged 65-74 having an AAA, many of whom will not know they have the condition.

2.3 The main risk is death from rupture of the aneurysm, which is especially likely when the aneurysm reaches more than 5.4cm in size. Around 50-85% of those who do rupture will die despite access to emergency surgery.

2.4 Ultrasound scanning is easily undertaken using portable scanning machines, it accurately measures the aorta, and it indicates whether referral to vascular services is needed. After referral, a patient will be considered for either open surgery or insertion of a stent-graft in a procedure known as an endovascular aneurysm repair (EVAR).

2.5 In Scotland between 2001 and 2005, an average of 284 men aged 65 years and older died from AAA each year, with around 60% of these deaths being preventable with ultrasound screening.

2.6 In the first year of scanning 65 year old men, between 4 and 6 lives could be saved with this figure rising to around 170 lives or more saved each year once a point is reached when all men older than 65 years have been offered screening. This represents many more years of life added to the male Scottish population.

2.7 One scan only is required at age 65 which, if negative, effectively rules out life-threatening disease for the rest of that man's life. If an aneurysm is found, regular surveillance scans should be undertaken within a screening programme to watch for enlargement and the potential need for intervention.

3. Benefits

3.1 As the mortality of elective open repair can be up to around 5%, extensive clinical trials have been undertaken over the last two decades and an extensive evidence base has been established that has proved offering screening to men aged 65-74 years is effective in saving lives and is cost-effective for the NHS. The evidence has shown there is no benefit in offering screening to women or younger men. On this basis the National Screening Committee has recommended screening men aged 65 years and pilot projects are underway across England with a view to national rollout of screening.

3.2 A three year pilot in NHS Highland and NHS Western Isles commenced in 2001 which demonstrated success in a rural and remote area of Scotland and provided vital experience and data on how best to screen for AAA in the Scottish context. The NSD steering group considered that it is important for Scotland to continue and enlarge this work nationally, avoiding any disparity with other parts of the United Kingdom as screening is introduced across the UK.

3.3 Additional workforce will need to be trained to provide scanning and this could be provided through focused courses provided in Scotland.

4. Numbers

4.1 Modelling has been undertaken to estimate numbers of eligible men, scans required and likely numbers of interventions by Health Board for a programme commencing in 2010 (assumed for the purpose of the business case). This showed that, if uptake of screening is 80% across Scotland, around 20,568 scans will be needed in the first year of the programme across Scotland and this will rise to around 26,726 by the tenth year. This translates to around 96 referrals nationally to vascular services in the first year rising to around 316 by the tenth year.

4.2 The NSD business case recommended that men-aged 66-74 are permitted to self-refer for a scan, and, if around 2% of those in this group do so a year, the expected numbers of scans will increase to 24,594 in the first year rising to 26,911 by the tenth year. This would mean more interventions with 115 expected in the first year rising to 325 by the tenth year.

5. Impact on treatment services

5.1 Given the highly unpredictable utilisation of operative and critical care resources by emergency AAA patients, it is significant that modelling indicates a quality-controlled screening programme will reduce the number of deaths from ruptured AAA and over time through a reduced emergency AAA patient load, at a cost of increased numbers of elective interventions.

5.2 Compared to 2010 as the baseline year (assumed for the purpose of the business case), total costs to treatment services could peak at just over 25% above baseline around five years into the programme, and will decline slightly after that time.

6. Risks

6.1 Detailed consideration will need to be given in the implementation phase to issues around minimising potential harm from screening, to establishment of high quality data collection, governance and quality assurance and to maximising potential ancillary benefits through other preventive activities.

7. Costs

7.1 Indicative costing was undertaken for a 6 centre collaborative model recommended by the NSD steering group. Recurring costs are estimated to be £2,456,459 per year for Scotland. Non-recurring capital costs will need to involve provision of an information technology (IT) package and outlays for scanning equipment at a total cost of around £4,290,450.