Screening women aged 65 years or over for abdominal aortic aneurysm: a modelling study and health economic evaluation

Simon G Thompson,¹* Matthew J Bown,² Matthew J Glover,³ Edmund Jones,¹ Katya L Masconi,¹ Jonathan A Michaels,⁴ Janet T Powell,⁵ Pinar Ulug⁵ and Michael J Sweeting¹

¹Department of Public Health and Primary Care, University of Cambridge, Cambridge, UK

²Department of Cardiovascular Sciences and National Institute of Health Research (NIHR) Leicester Biomedical Research Unit, University of Leicester, Leicester, UK ³Health Economics Research Group, Brunel University London, London, UK ⁴Health Economics and Decision Science, University of Sheffield, Sheffield, UK ⁵Vascular Surgery Research Group, Imperial College London, London, UK

*Corresponding author sgt27@medschl.cam.ac.uk

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Plain English summary

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A bdominal aortic aneurysms (AAAs) are bulges in the main blood vessel in the abdomen. An AAA that gets too large can burst (rupture), an event that is usually fatal. Although AAAs do not usually cause any symptoms and are unlikely to cause problems until they burst, they can be easily diagnosed by simple ultrasound screening. In the UK, men aged 65 years are offered ultrasound to look for an AAA, and just over 1 in 100 men who are screened are found to have an AAA. If the AAA is large, men are offered an operation to prevent the aneurysm bursting; if it is small, they are offered regular scans to monitor their AAA.

Women are not currently screened for AAAs, mainly because they are less likely than men to have AAAs. Currently, there is no information on whether or not screening women for AAAs would save lives by preventing AAA rupture, or if such a screening programe would be cost-effective for the NHS. In this research, we have gathered together a wide range of available information about AAAs in women to find out if screening women for AAAs might be effective. We have developed a computer program to analyse all of this information and simulate what would happen if women were screened for AAAs.

Our research showed that offering women the same screening as men would have a very minor effect on the overall life expectancy of women, resulting in an average of just over 1 extra day of life for each woman invited to screening. Although there is considerable uncertainty, we estimate that around 4100 women would need to be invited to screening to prevent one death from AAAs, and that each death prevented by screening women for AAAs would cost the NHS £150,000.

Based on our findings, a national AAA screening programme for women would not be cost-effective for the NHS.

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This report

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