

DEBATE: SHOULD WE EXPAND AAA SCREENING TO MORE WOMEN?

Population Screening With Ultrasound For Early Detection Of AAA Is Recommended For Women Age >65 Years, With A History Of Smoking Or A Family History Of AAA, And For Women Age >75 Years, With A History Of Smoking If They Are Otherwise In Good Health

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Disclosures

- None

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rAAA Mortality

- rAAA mortality remains high despite the introduction of EVAR
- Prophylactic repairs offer much lower mortality

Lo et al., JVS (2013)

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Current AAA Screening Guidelines

USPSTF

- Screen men 65-75 who have ever smoked
- Selective screening for men 65-75 with family history or other risk factors
- Insufficient evidence for women 65-75 with smoking or family history

2006: Implementation SAAVE Act

2007: CMS Reimbursement

- Men 65-75 who have ever smoked
- Men/women 65+ with family history

Gulraj-Gibler et al., JAMA (2019)

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Impact of Screening Policy on rAAA Incidence

- Screening likely contributed to a decrease in rAAA repairs
- However, many patients admitted for rAAA or undergoing rAAA repair are ineligible for screening

Conroy et al., JVS (2022)

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Screening Ineligibly for AAA

Epidemiology of endovascular and open repair for abdominal aortic aneurysms in the United States from 2004 to 2015 and implications for screening

Kinsten D. Dansey, MD,* Bens R. B. Vankeisev, BS,* Nicholas J. Swerdlow, Luke E. V. M. de Guere, BS,* Patrick Liang, MD,* Christina Marcaccio, MD,* Brett J. Carroll, MD,* and Marc L. Schermerhorn, MD,* Boston, Mass; and Utrecht, The Netherlands

68% of patients admitted with rAAA

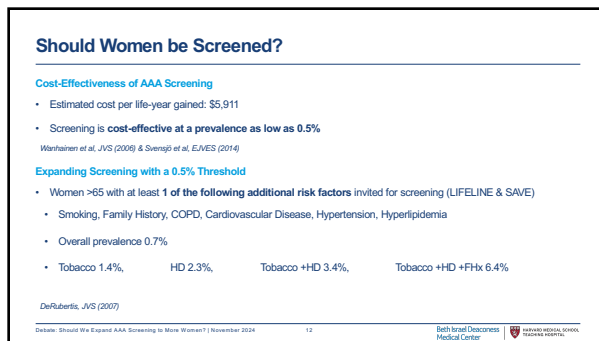
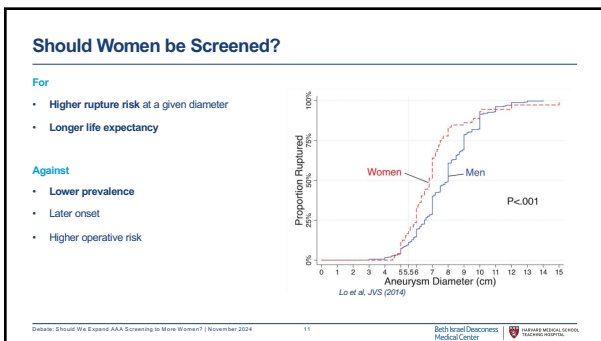
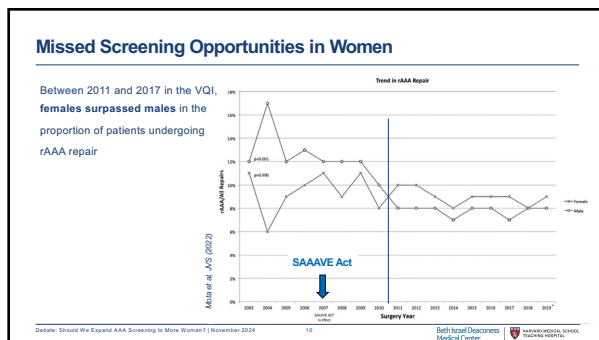
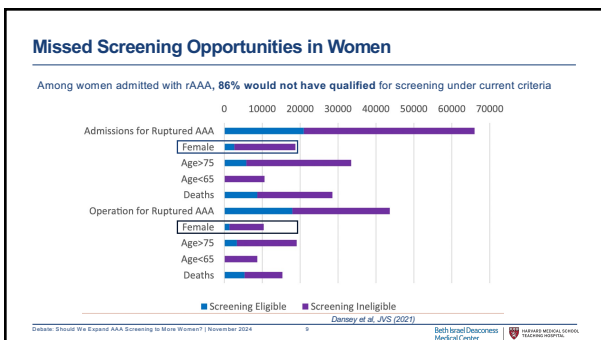
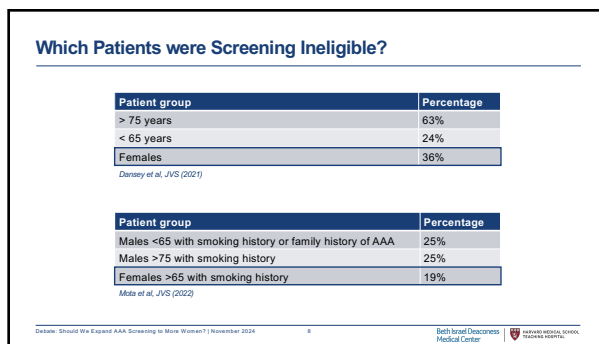
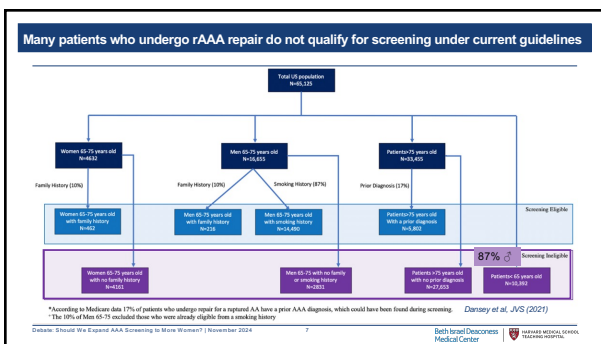
59% of patients who underwent rAAA repair

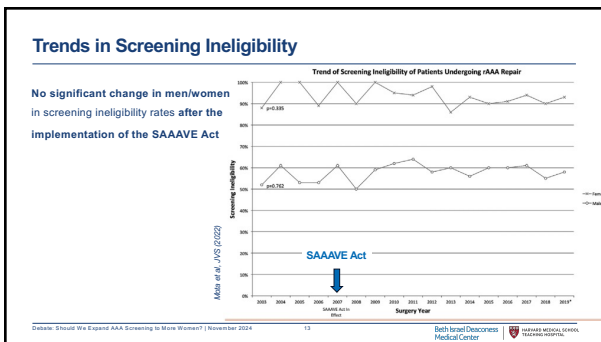
Overview of screening eligibility in patients undergoing ruptured AAA repair from 2003 to 2019 in the Vascular Quality Initiative

Lucas Mota, MD,* Christina L. Marcaccio, MD,* Kinsten D. Dansey, MD,* Thomas F. X. O'Donnell, MD,* Peter A. Soden, MD,* Sara L. Zettervall, MD,* Marc L. Schermerhorn, MD, FACS,* Boston, Mass; Utrecht, The Netherlands

66% of patients who underwent rAAA repair

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Current AAA Screening Guidelines

Based on RCTs in an era where the predominant modality of repair was open surgery

The Multicentre Aneurysm Screening Study (MASS) into the effect of abdominal aortic aneurysm screening on mortality in men: a randomised, controlled trial

H.A. Ashton¹, M. J. Baines, N.E. Day, L. G. Kir, T. M. Mahieu, R. A. P. Scott, S. G. Thompson

2002

Long-term benefit and cost-effectiveness analysis of screening for abdominal aortic aneurysms from a randomized controlled trial

J.S. Lindholt¹, J. Sørensen, R. Sgaard, E. W. Hennings

2010

Influence of screening on the incidence of ruptured abdominal aortic aneurysm: 5-year results of a randomized controlled study

R.A. Scott¹, N.M. Wilson, H.A. Ashton, D.H. Kay

1995

Population based randomised controlled trial on impact of screening on mortality from abdominal aortic aneurysm

Paul E Norman¹, Konrad Jamrozik, Michael M Lawrence-Brown, Max T Q Li, Cai Raywin J Tsuchi, Richard W Parsons, James A Dickinson

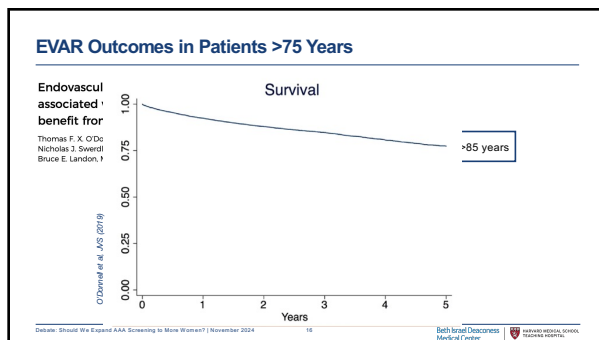
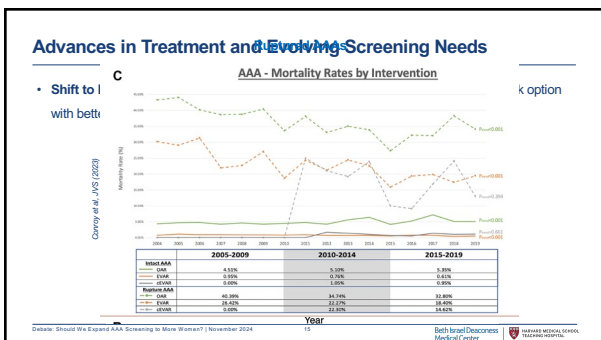
2004

127,891

9342

64-83 years old

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Overview

- Most patients presenting with rAAA do not meet the criteria for screening
- Current screening guidelines are based on outdated operative risk factors
- Screening is cost-effective at a prevalence as low as 0.5%, often exceeded in females
- Patients currently excluded are likely to benefit from screening expansion

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2018 SVS AAA Screening Guidelines

Strong recommendation

- Women 65-75 with smoking history

Weak recommendation

- Women 65-75 with a family history
- Women >75 with smoking history

We recommend a one-time ultrasound screening for AAAs in men or women 65 to 75 years of age with a history of tobacco use.

Level of recommendation: 1 (Strong)
Quality of evidence: A (High)

We suggest ultrasound screening for AAA in first-degree relatives of patients who present with an AAA. Screening should be performed in first-degree relatives who are between 65 and 75 years of age or in those older than 75 years and in good health.

Level of recommendation: 2 (Weak)
Quality of evidence: C (Low)

We suggest a one-time ultrasound screening for AAAs in men or women older than 75 years with a history of tobacco use and in otherwise good health who have not previously received a screening ultrasound.

Level of recommendation: 2 (Weak)
Quality of evidence: C (Low)

If initial ultrasound screening identified an aortic diameter >2.5 cm but <3 cm, we suggest rescreening after 10 years.

Level of recommendation: 2 (Weak)
Quality of evidence: C (Low)

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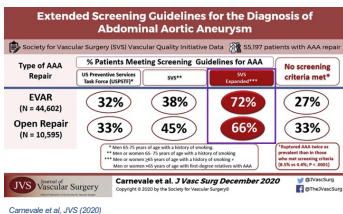
Screening Ineligibility with SVS Expanded Guidelines

Expanded SVS guidelines include

- Male/female >65 years with smoking history
- Male/female >65 years with first-degree relatives with AAA
- Male/female >75 with smoking history or first-degree relative with AAA

Expanded SVS guidelines capture

- 72% of EVAR
- 66% of open repairs



Debate: Should We Expand AAA Screening to More Women? | November 2024

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Recommendations Should be Changed

Screening in female smokers aged 65-75 years old

Screening in females (and males) >75 years with a smoking history and a reasonable 5-year life expectancy

Develop a more sensitive screening algorithm based on established risk factors to identify high-risk patients better in currently excluded groups

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Thank You



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