



Title	Population Ultrasound Screening for Abdominal Aortic Aneurysms
Agency	AETMIS, Agence d'évaluation des technologies et des modes d'intervention en santé 2021 avenue Union, suite 10.083, Montréal, Québec H3A 2S9, Canada; Tel: +1 514 873 2563, Fax: +1 514 873 1369; aetmis@aetmis.gouv.qc.ca, www.aetmis.gouv.qc.ca
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Aim

To assess the appropriateness and feasibility of an abdominal aortic aneurysm (AAA) screening program in Québec.

Conclusions and results

The evidence suggests that, theoretically, an AAA screening program would be effective (especially in men aged 65 to 74 years), assuming that criteria regarding the disease, screening test, treatment, and cost effectiveness are met. For women aged 65 years or older, the data are insufficient to clearly demonstrate those benefits. Even regarding men, the operation or actual effectiveness of such a program has not been demonstrated. No health authorities (with a recent exception in the UK) have decided to implement such a program, despite positive recommendations from HTA agencies. In Québec, the required epidemiological and organizational conditions for its implementation are not presently met. If this program were set up with a cohort of men aged 65 to 74 years and followed up for 41 months, it would yield approximately 100 preventable deaths per year. Presently, Québec has: a lack of family physicians and human and material resources required for ultrasound procedures; a need to optimize access to surgical resources; uncertainty about the eventual participation rate of the target population; and pressure to deal with other and more urgent health problems. However, this contextual analysis reveals several possible avenues for improvement. Accordingly, the MSSS (Department of Health and Social Services) and directly concerned professional organizations are invited to join in setting priorities and developing an action plan to improve the clinical and organizational aspects of managing people who present with AAA or associated risk factors, and to fully evaluate the real potential of a population screening program.

Methods

This report presents a systematic literature review of population screening for AAA, its acceptability and cost

effectiveness, and potential organizational requirements in Québec. To retrieve primary studies, various strategies were used to search MEDLINE, the Cochrane Library, and other databases. Articles were selected according to predefined inclusion and exclusion criteria. A single researcher extracted the data. The appropriateness and feasibility of AAA screening was analyzed, using the UK National Screening Committee criteria. Contextual data were obtained through semistructured interviews with medical and administrative stakeholders in Québec's public health system. A modeling exercise, including a sensitivity analysis, was conducted to estimate the potential yield of an AAA screening program if one were to be implemented in Québec.

Further research/reviews required

Studies would need to examine screening efficacy in a group of women who have a family history of AAA combined with other risk factors (age, known cardiovascular disease, and history of smoking). Studies on the actual effectiveness of AAA screening (in the UK) would also be required.