
Screening in Europe

Dr. Wija Oortwijn

RAND Europe, Leiden, The Netherlands

oortwijn@rand.org

Background

- Some screening programmes improve health
- Much useless and potentially harmful screening
- Screening needs to be critically evaluated
- Number of assessments increasing rapidly
- Key question: *What is the influence of these assessments on health policy and practice?*

Methods

- Brief analysis of the use of health technology assessment (HTA) in policies towards mass screening programmes
- HTA Europe project (1997-1999), ECHTA project (2000-2002) + literature update (2002-2004)
- Screening programmes in nine European countries (Austria, Belgium, Germany, Greece, Italy, The Netherlands, Sweden, Switzerland, United Kingdom):
 - *Mammography screening*
 - *Ultrasound screening in pregnancy*
 - *PSA screening*

Context – General observations

- Universal access to health care services
- Health care systems are quite diverse:
 - Tax based (Sweden, United Kingdom, Greece, Italy)
 - Insurance based (Austria, Belgium, Germany, The Netherlands, Switzerland)
- All countries have policies that influence screening

HTA and screening

- Screening subject to increasing evaluation in many countries
- Is there evidence that persons identified with early-stage disease through screening have better health outcomes than those who come to clinical attention without screening?
- Effectiveness of screening programmes determined by many factors (epidemiology, health care system, costs, quality, attendance rate etc.)

A framework for assessment of screening

- UK National Screening Committee

http://www.nsc.nhs.uk/uk_nsc/uk_nsc_ind.htm

- *Condition* - Important health problem, epidemiology must be understood, proven primary prevention interventions implemented as much as possible
- *Test* – Validated, safe and precise test should be available, distribution of test values in the population should be known as well as a suitable cut-off level, acceptable to the population, agreed policy on further diagnosis and choices available
- *Treatment* – All other options should have been considered, effective treatment exists, evidence based policy which patients should be offered appropriate treatment, clinical management should be optimized ex-ante, screening must be evidence-based, complete screening programme should be acceptable to both health professionals and public, benefits should outweigh harms, economically sound, quality assurance

Example – The Netherlands

- Since 1990 is HTA an important policy issue
- Relation between HTA and prevention
- Principles of Dutch prevention policy:
 - High priority to health protection
 - High priority to free choice regarding lifestyle
 - Preferably needs to improve healthy life expectancy
 - Need to be based on effectiveness and efficiency
 - Implemented programmes need to be effective and efficient
- Population Screening Act (WBO, 1996)
- Committee on the Population Screening Act

- To give advice on permits for population screening
- Permit request from Minister of Health:
 - Cancer screening
 - Screening involving the use of ionising radiation
 - Screening for serious diseases which can neither be treated nor prevented
- Refusal of permit:
 - Screening is not scientifically sound
 - Screening is not in accordance with the statutory regulations governing medical practice
 - Health risks outweigh the expected benefit

Mammography screening in Europe

- Effective for women over the age of 50
- International consensus favouring the practice
- Few countries have active policies: Sweden, Switzerland, The Netherlands, United Kingdom
- Cochrane review in 2001 – no reliable evidence to support the benefit of mammography screening
- Weak links between HTA, policy-making, and screening

Ultrasound screening in normal pregnancy in Europe

- Lack of assessments showing benefit but widespread use
- In some countries: nine scans or more
- Limitation of scans mainly based on fiscal grounds
- Assessment and use of ultrasound essentially uncoupled
- HTA has some influence on health policy

PSA screening in Europe

- Formally assessed in a number of countries
- Significant questions: lack of evidence of health benefit
- No country has positive PSA policy
- Nevertheless, PSA test is available, physicians support it and payment occurs because of its use as diagnostic tool
- New assessments are underway

Summary – The Netherlands

- HTA is given an important place in prevention/screening
- National prevention policy and national law on screening
- Implementation of breast cancer screening after formal assessment
- No formal policy toward ultrasound screening, but frequent use in normal pregnancy
- PSA screening not recommended, but its use is growing

Summary – Sweden

- Screening important part of national health policy
- Mammography screening recommended
- Routine use of 2 scans in all pregnancies recommended
- PSA screening not recommended
- Assessment and policy well linked, although practice does not always follow policy guidelines

Summary – Switzerland

- Criteria for reimbursement of screening programmes
- Mammography screening for women (50-69) in 3 Cantons
- Ultrasound in pregnancy for selected risk populations
- PSA screening not recommended

Summary – United Kingdom

- Effective implementation of HTA into policy decisions
- National screening program for breast cancer
- PSA screening is not recommended
- Use of ultrasound in pregnancy is left to clinicians, women and health planners

Conclusions

- HTA of mass screening is an important part of health policy
- Link between HTA, health policy and mass screening is obvious in the Netherlands, Sweden, Switzerland and the United Kingdom
- Practice is different from policy in the cases of PSA for prostate cancer and routine use of ultrasound in normal pregnancy
- What can be done in this respect? – Information sharing!