

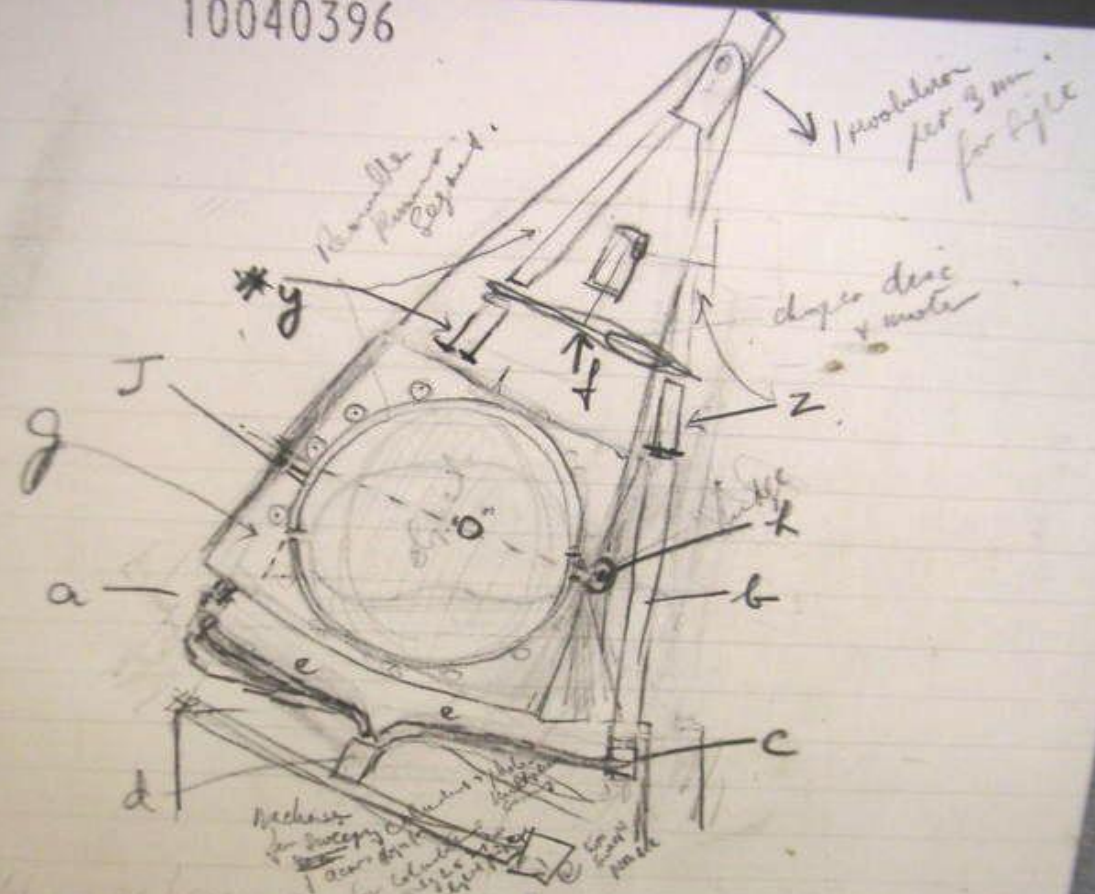
# **Health Technology Assessment (HTA)**

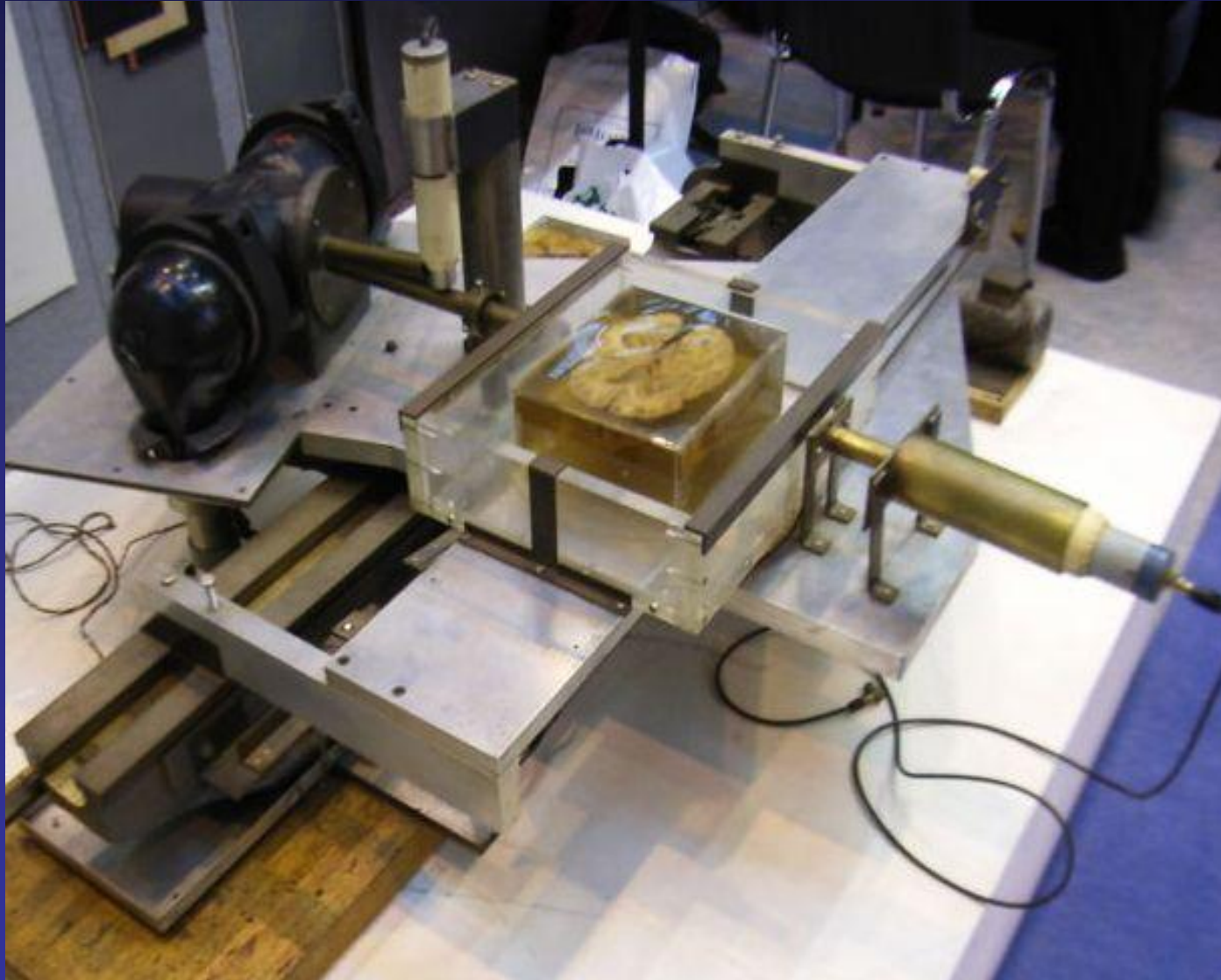
**Objectives, principles,  
expectations and outcome**

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# Definition of Health Technology

The drugs, devices, equipment, and the medical, surgical and other procedures used in health care, as well as measures for prevention and rehabilitation of diseases and disorders.

# Objectives of HTA

- ❑ To assist policy makers by providing evidence based information on the costs and benefits of technologies
- ❑ To specify the indications for appropriate use of a technology
- ❑ To identify technologies that lack evidence to warrant payment from public funds

# Expectations and outcomes of HTA

- ❑ Improve quality of care and reduce risks
- ❑ Speed up the diffusion and use of effective and cost-effective technology
- ❑ Identify technologies in need of evidence of effectiveness and cost-effectiveness
- ❑ Reduce waste

# Examples of cost savings from HTA

- ❑ **Appropriate preoperative routine testing**  
30 million USD per year
- ❑ **Appropriate use of diagnostic imaging in unspecific back pain**  
20 million USD per year
- ❑ **Light therapy in depression**  
7 million USD per year
- ❑ **CT instead of observation in hospital for mild head injury**  
5 million per year
- ❑ **Appropriate treatment of osteoporosis in the elderly**  
5 million/year



# Principles of HTA

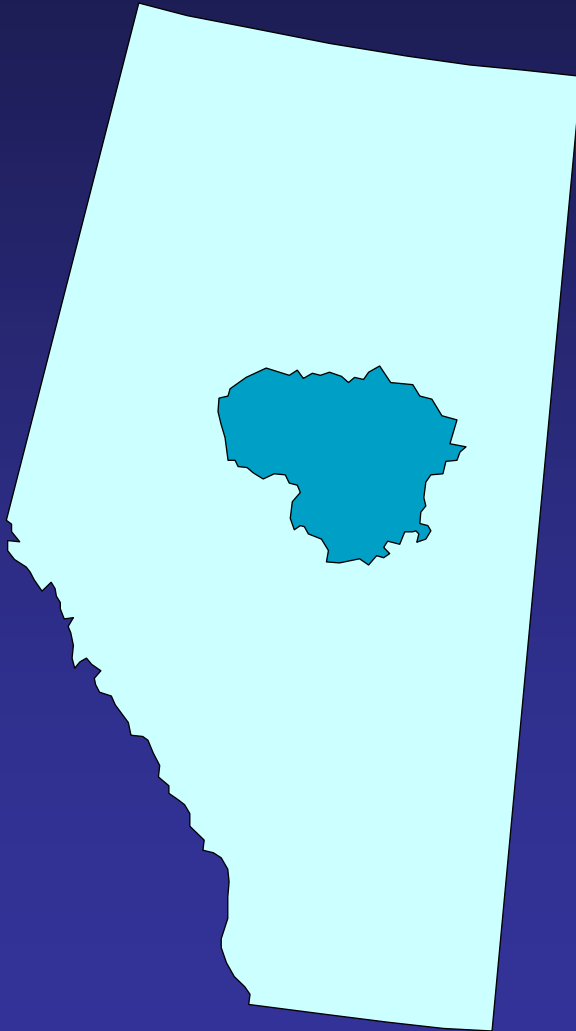
- ❑ Do a systematic review of the evidence available on safety, efficacy, and effectiveness
- ❑ Perform a context specific economic analysis, including modeling and cost-effectiveness of the implications of the technology, as well as its budget impact
- ❑ Make a synthesis of the findings and provide it in a form that is understandable, and of help to a policy decision maker.

# Canada

Population 35 million



# Comparing Lithuania and Alberta in Canada



## Lithuania

## Alberta

### Population

3.2 million

### Population

3.5 million

Area ~ 65,000kms<sup>2</sup>

#### Alberta

661,848 kms<sup>2</sup>

N-S = 1217 kms

W-E = 93-650 kms

Area ~660,000 kms<sup>2</sup>

#### Lithuania

65,200 kms<sup>2</sup>

N-S = 100 kms

W-E = 373 kms

Per capita on health care 2009 in USDppp

1,300

Per capita on health care 2009 in USDppp

5,000

CT-scanners per million population 2010

18

13

# Health technology assessment in Alberta

- ❑ Ministry of Health has one committee for drugs and one committee for all other health technologies
- ❑ Each committee is composed of representatives of the academia, industry, and .the government
- ❑ The non-drug committee meets for a full day every second month –reviews about 15 new technologies
- ❑ Decides on the need of HTA, and allocates the work to be done, either to the IHE or to the Universities

# **Alberta Advisory Committee on Health Technology**

## **Examples of topics**

- ❑ First and second trimester screening
- ❑ Screening newborns for hearing
- ❑ Preschool hearing and vision screening
- ❑ Bariatric treatment
- ❑ Treatment with insulin pump
- ❑ Assistive reproductive technologies
- ❑ Fecal transplantation

# Alberta Advisory Committee on Health Technology

## Examples of topics

- ❑ Surgical robotics
- ❑ Hysteroscopic tubal sterilization
- ❑ Interventions for symptomatic varicose veins
- ❑ 24 hour blood pressure monitor
- ❑ Renal denervation for resistant hypertension
- ❑ Transcranial magnet stimulation
- ❑ Proton beam therapy



# Alberta Advisory Committee on Health Technology

## Examples of topics

- ❑ Transcutaneous bilirubinometry for neonatal jaundice
- ❑ Makoimplantation for knee arthroplasty (a three dimensional CT scan for surgical guidance)
- ❑ Biofilm for prevention of pseudomonas
- ❑ Radiofrequency ablation for low back pain
- ❑ Transcatheter aortic valve implantation
- ❑ Kryptonite bone cement in orthopedics

## Alberta Advisory Committee on Health Technology

- ❑ When an HTA has been performed the committee makes a recommendation to the Ministry
- ❑ The Deputy Minister of Health writes a policy recommendation
- ❑ The recommendation is brought to the Minister of Health for decision about payment from public funds

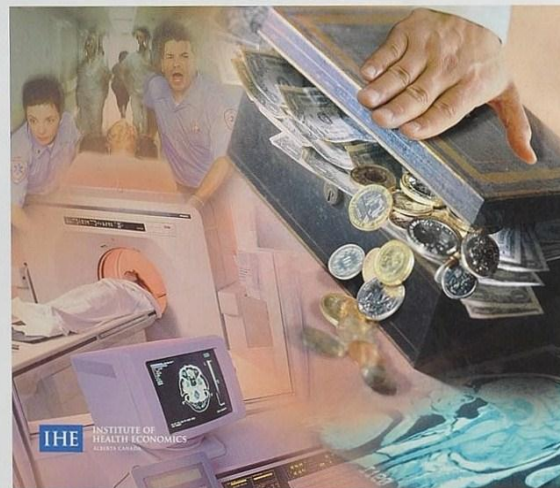
Health Care and Disease Management

Edited by John Rapoport,  
Philip Jacobs and Egon Jonsson

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BLACKWELL

# Cost Containment and Efficiency in National Health Systems

A Global Comparison



# Cost of FASD in Alberta

Total cost \$900 million per year

Incremental cost per case prevented  
\$900,000

