INESSS
LE SAVOIR PREND FORME
CSA PerMed
Workshop 1
March, 27-28, 2014
Maritim ProArte
Berlin
Health Technology Assessment for adding Value to Innovation
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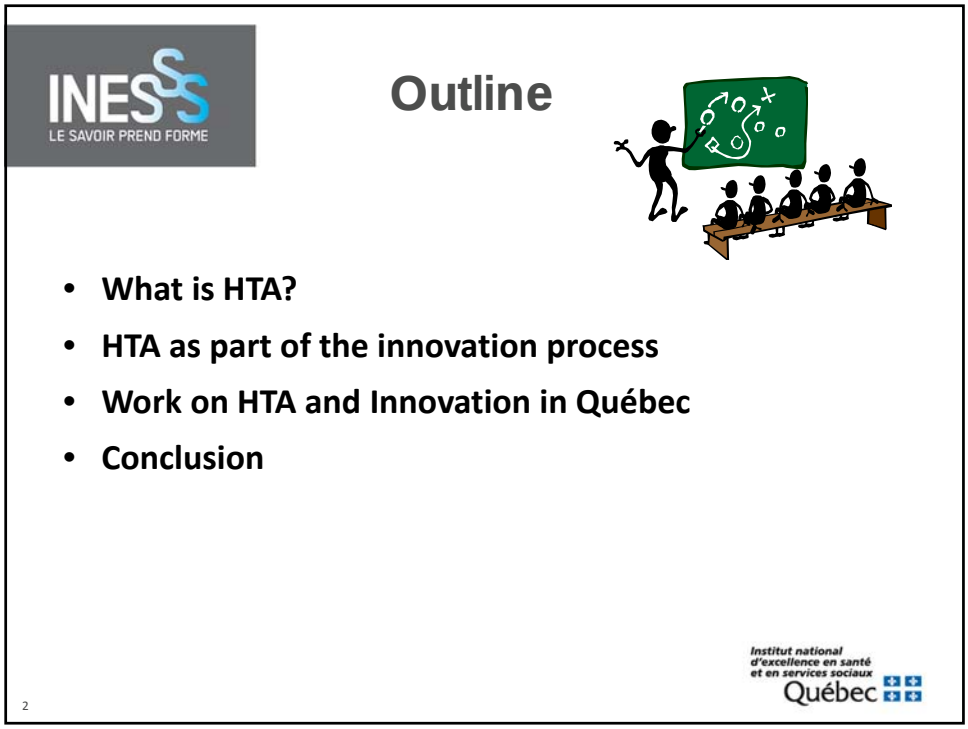
Institut national d'excellence en santé et en services sociaux
Québec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Outline
What is HTA?
HTA as part of the innovation process
Work on HTA and Innovation in Québec
Conclusion
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Once upon a time .....

Request of the US Congress Senate Committee on Human Resources to OTA in 1974:
« whether a reasonable amount of justification should be provided before costly new medical technologies and procedures are put into general use»

- **Knowledge Pull from Decision-makers**
- **Paradigm of Evidence-informed decision-making**
- **HTA Institutions as Boundary Organisations**

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Characteristics of HTA

- Usually practiced in public HTA institutions that are part of the Health System
- HTA institutions as Service Organisations for the stakeholders in the Health System
- Multidisciplinary approach centered on decision-making issues
- Scientific rigour and scientific independancy
- Delimiting the uncertainties and thus risks for the decision-maker
- Institutional arrangements for fostering social credibility

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Networks in HTA

- International Network of Agencies for Health Technology Assessment
- Health Technology Assessment international (HTAi)
- International Information Network on New and Emerging Health Technologies (EuroScan)
- Regional Networks

INAHTA

HTAi

EuroScan International Network

RedETSA

eunethta

HTAsiaLink

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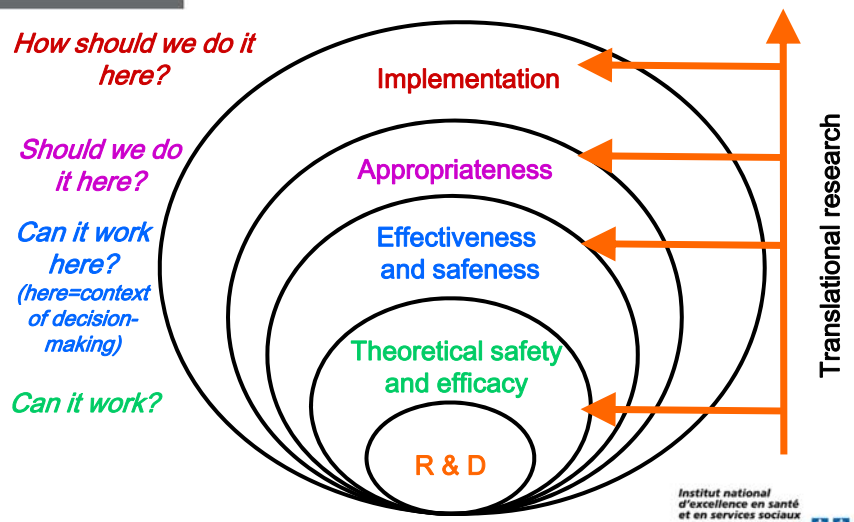
Reasoning in HTA



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Adapted from Health technology assessment of medical devices. WHO Medical device technical series, 2011. Available at: http://whqlibdoc.who.int/publications/2011/9789241501361_eng.pdf

Defining innovation

- "Technological innovation as a device, procedure or organizational support system that is perceived as new by a proportion of key stakeholders in a healthcare organization, discontinuous with previous practice and which is intentionally introduced and directed at improving health outcomes" *Robert et al,2010*
- Conceptually new vs. Contextually new *Mytton et al,2010*
- *"*Innovation refers not only to the invention of new devices but also to adjustments to, or incremental improvements of, existing devices and clinical practices.*" WHO,2010*
- Incremental innovations vs disruptive innovations *Hwang et Christensen,2008*

Robert et al., Adopting and assimilating new non-pharmaceutical technologies into health care: a systematic review. *Journal of Health Services Research & Policy*,2010,15(4): 243–250.
Mytton et al., Introducing new technology safely .*BMJ Quaity and Safety,* 2010;19(Suppl 2):i9-i14
WHO. Medical devices: managing the mismatch: an outcome of the priority medical devices project,2010
Hwang J et Christensen CM. Disruptive innovation in health care delivery: a framework for business-model innovation. *Health Affairs* 2008;27(5):1329-35.

Definition used at INESSS

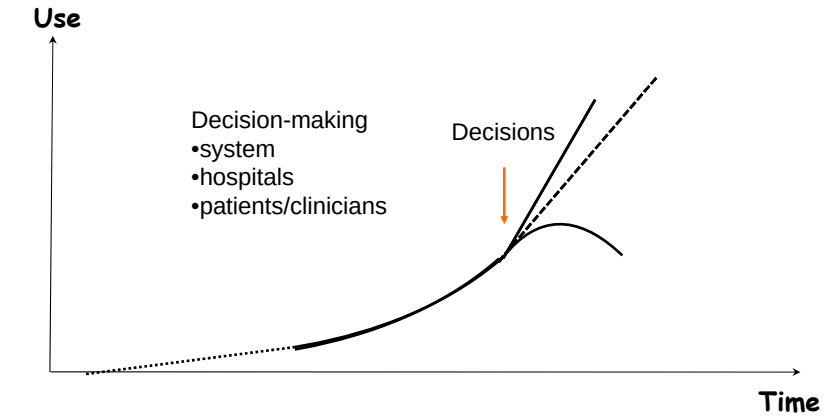
A definition inspired by the Global Forum for Health Research

Innovation encompasses the entire process from the generation of new ideas, to their transformation into useful services, products, methods, management practices and policies in health and social services.

- Innovation is characterized by the added value it offers compared to what is currently used
- Invention becomes an innovation when adopted by the health system
- Mobilizing a range of stakeholders
- Transforms the context

Global Forum for Health Research (GFHR) (2010). Innovating for the health of all. Genève, Suisse. Available at : bit.ly/1gFuWxJ

Technology diffusion is conditional to different levels of decision-making



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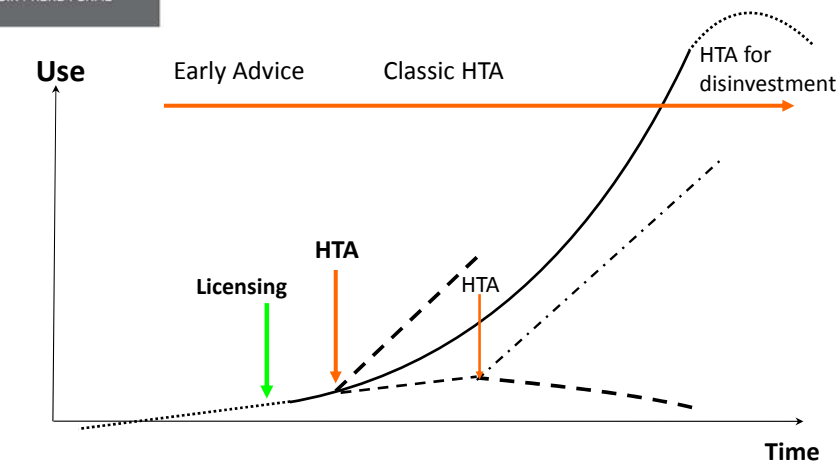
HTA and Innovation



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HTA and Innovation

- Innovation is about added values…for the patient, for the health system, for families..
- Uncertainties are a fundamental characteristic of innovative technologies
- HTA adds value by defining the uncertainties, risks and conditions of introducing the innovative technologies
- Under conditions of high uncertainties of desired innovative technologies HTA should be followed by field evaluations, by prospective focussed evidence development under real world conditions

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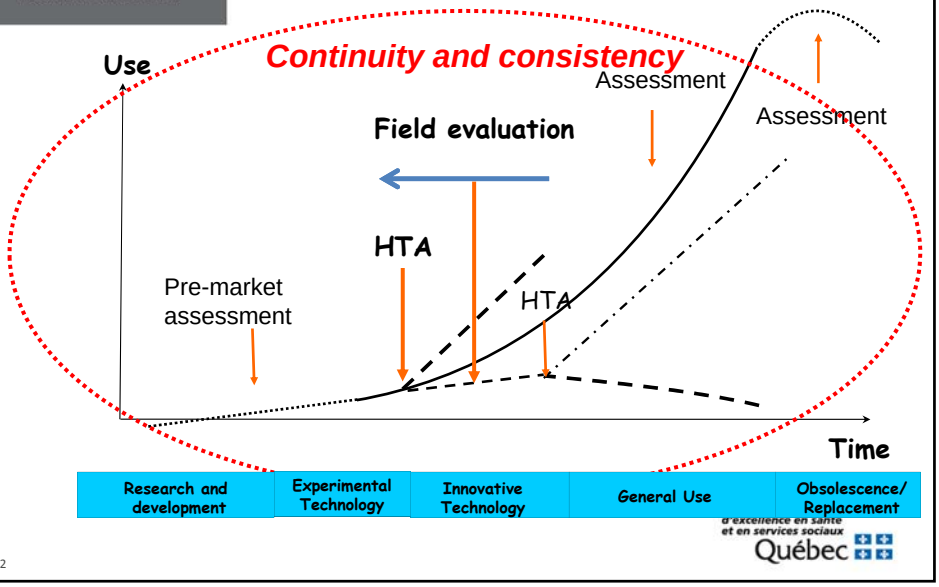
HTA and innovative technologies



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Challenges for HTA

- HTA needs to adapt to:
- the unavailability of evidence
- the pace and the dynamics of innovation
- values and expectations of clinicians, patients and citizens
- the challenges of innovation for network managers

Need for new policy tools and HTA methods that favour evidence-based decision making without hindering innovation

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Work on HTA and Innovation in Québec

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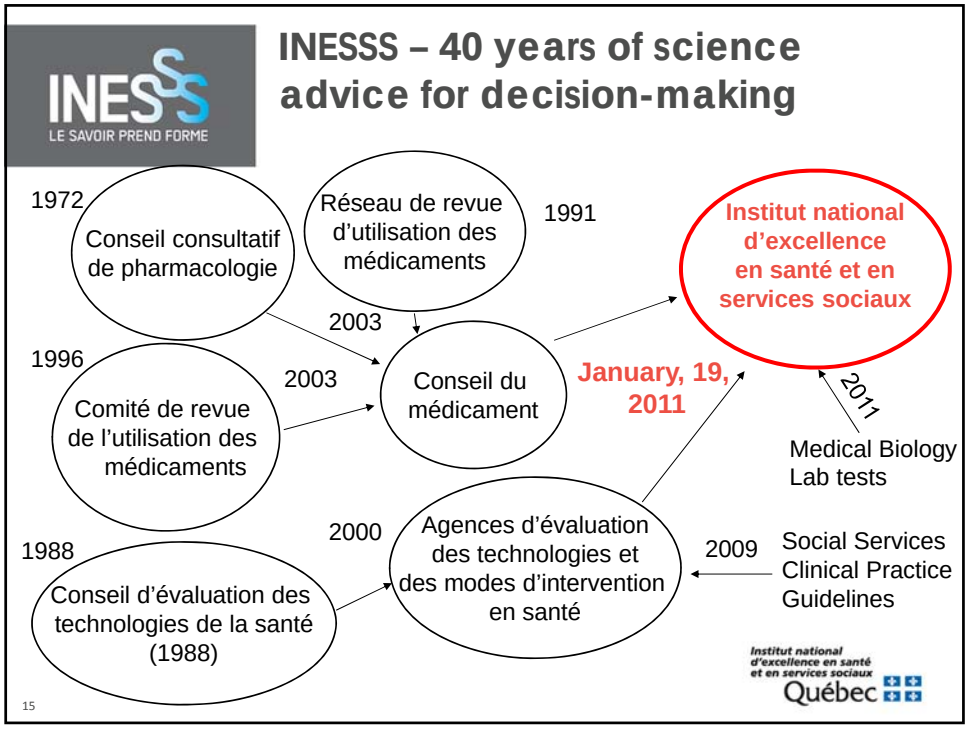
INESSS – 40 years of science advice for decision-making
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1972
Conseil consultatif de pharmacologie
Réseau de revue d'utilisation des médicaments
1991
Institut national d'excellence en santé et en services sociaux
2003
1996
Comité de revue de l'utilisation des médicaments
2003
Conseil du médicament
January, 19, 2011
2011
Medical Biology Lab tests
2000
Agences d'évaluation des technologies et des modes d'intervention en santé
2009
Social Services Clinical Practice Guidelines
1988
Conseil d'évaluation des technologies de la santé (1988)
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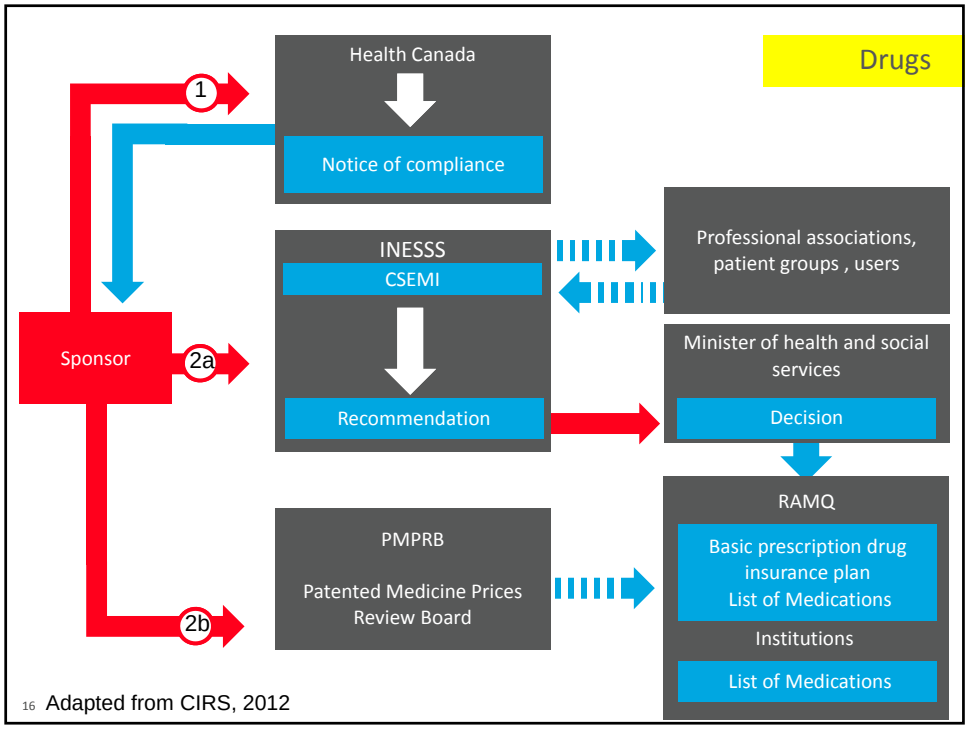
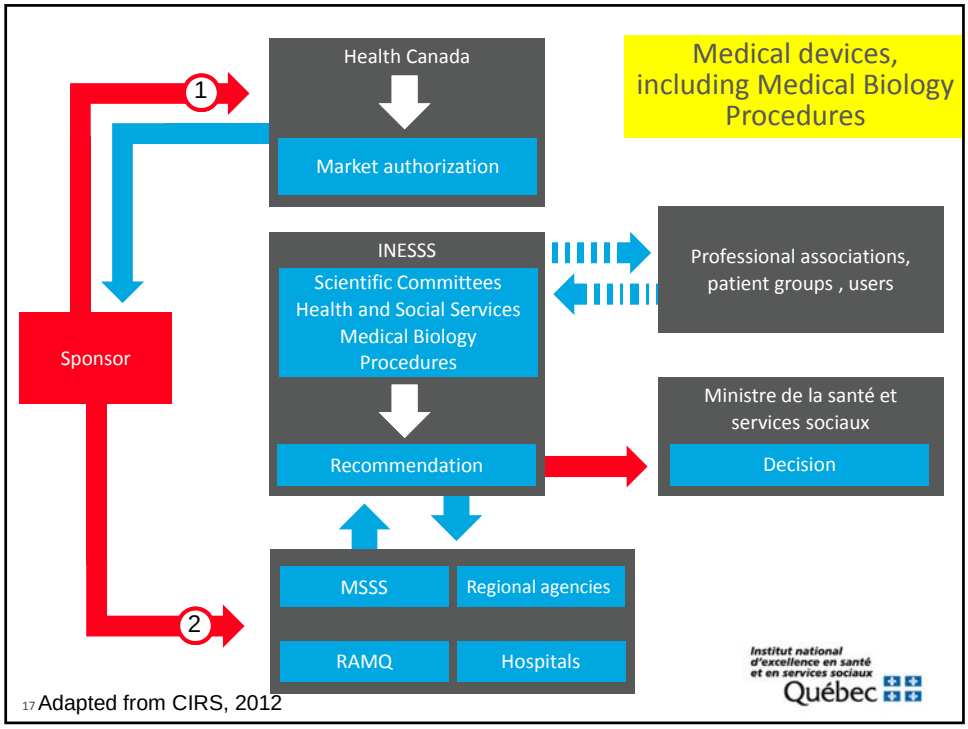

Drugs
Health Canada
Notice of compliance
1
Sponsor
2a
2b
INESSS
CSEMI
Recommendation
Professional associations, patient groups , users
Minister of health and social services
Decision
RAMQ
Basic prescription drug insurance plan
List of Medications
Institutions
List of Medications
PMPRB
Patented Medicine Prices Review Board
16 Adapted from CIRS, 2012



17 Adapted from CIRS, 2012

Québec HTA and Innovative Technologies Advisory Committee: Stakeholder Representation

- Patient Groups
- Physicians and Pharmacists
- Health Care Managers (local, regional, ministry of health)
- Industry (pharmaceuticals, devices, …)
- Research (FRQ-S, ministry, Génome Québec)
- HTA producers (INESSS and hospital-based HTA)
- Ministry of Finance and Economic Development

→
- Agree an a common language on innovation
- Foster a shared understanding of the challenges
- Identify potential solutions
- Support a dialogue in a public event

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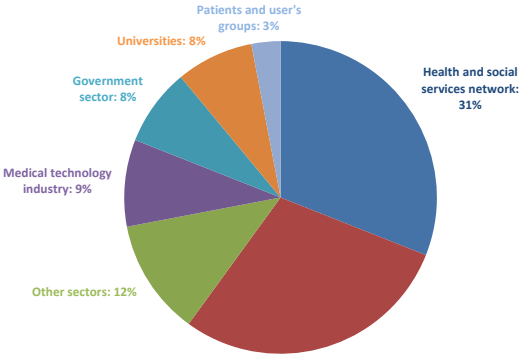
Better Innovation Through Assessment

Event December, 3, 2013

- Present 12 month of work of the advisory committee on HTA and innovative technologies
- Enhanced dialogue on challenges and solutions
- Comitments of Stakeholders
- Suggest workplan for the committee

Breakdown of participants, by sector



250 participants

http://www.inesss.qc.ca/en/networks-andpartnerships/bridging-mechanisms.html

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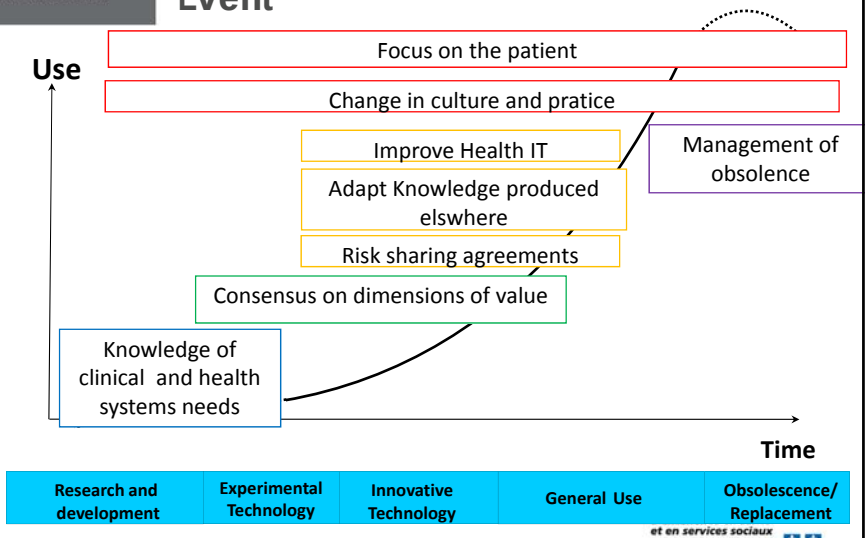
Mapping of proposed solutions at Better Innovation Through Assessment Event



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Overview of challenges presented to Quebec Network for Personalized Healthcare (19-3-2014)

- Need to demonstrate the added value of desirable innovations
  - Balance the uncertainties of added value with the opportunity of improving patients' health and health systems
  - Define the organisational conditions necessary for creating the added value
  - Manage the risks of introduction under uncertainty
- Collaboration and trust between stakeholders
  - Development of knowledge depends on partnerships between industry, health system and academia
- Culture change for access to innovative technologies
  - Innovative access programs in pilot projects
  - Development of learning health systems and agile health systems (rapid feedback loops between knowledge production and health system organisation)

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Conclusions

- HTA and other forms of evaluation are an essential tool for informing decision-making in Health Systems and for economic development.
- The introduction of promising innovative technologies in Health Systems should be accompanied by knowledge production on their real world impact with retroaction to decision-making.
- Health Information systems are essential for supporting rapid and effective evaluation of the real world impact of innovative technologies: Improving the Innovation Process through Big Data, Open Data and Linked Data.
- A rigorous and transparent process requires a strong commitment from all stakeholders, public and private.

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