Vaccine Decision-Making in Canada: Processes and Guidelines for Using Economic Evidence

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Background

- In Canada, National Advisory Committee on Immunization (NACI) makes recommendations on human vaccine use
- Provinces and territories subsequently use the advice to make decisions on public funding and implementation
- Traditionally, NACI reviewed vaccine characteristics and burden of illness
- Mandate was recently expanded in 2019 to now consider cost-effectiveness via economic evaluations

Methods

- Convened two task groups to develop the "***Economic Process***" and "***Guidelines for the Economic Evaluation of Vaccination Programs in Canada***"
- Conducted environmental scans to inform work, as well as engaged with government partners, decision-makers, academics, national immunization technical advisory groups from other countries, HTA agencies, industry, patient groups, ethicists, among others

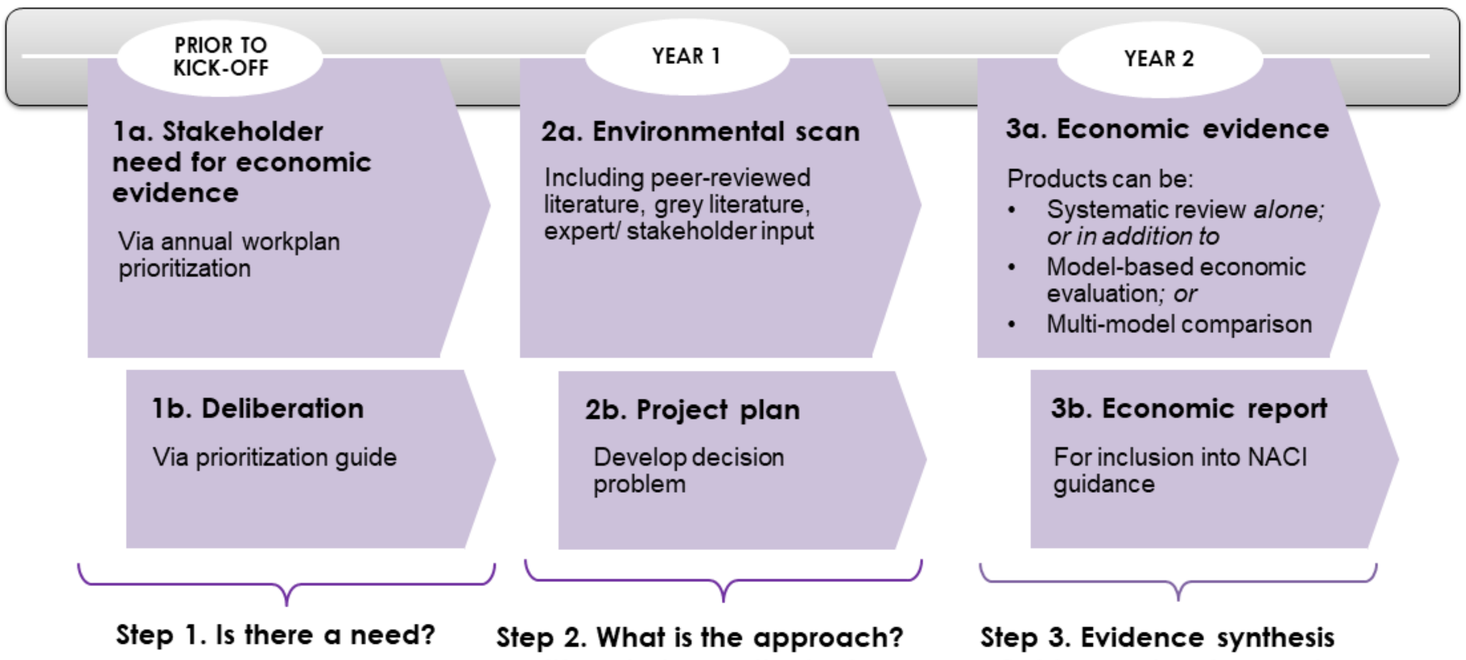
Objective

To develop new processes and guidelines to formalize the incorporation of economic evidence into federal vaccine decision-making

Economic Process
Outlines when and how NACI incorporates economic evidence for vaccine recommendation

Economic Guidelines
Inform best practices on how to conduct and report economic evaluations

Process Highlights



Tools developed to support the process:

Prioritization Guide

Guidelines:
- Submission Criteria for Model-based Economic Evaluations
- Systematic Review
- Economic Evaluation
- Reporting

Presentation Templates:
- Proposed Workplan Items for Economics
- Systematic Review
- Economic Evaluation

Guideline Highlights

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Key statements:

Types of Evaluation	Use cost-utility analysis (CUA) as reference case; May consider cost-benefit analysis (CBA) alongside CUA
Study Populations	(1) Intended for the vaccination program (2) At risk for the disease of interest, and (3) Indirectly affected either through externalities or spillover effects
Reference Case Perspectives	(1) Publicly funded health system –healthcare and public health (2) Societal
Equity	Explore using methods such as distributional cost-effectiveness analysis and extended cost-effectiveness analysis where possible; Report equity implications of vaccine externalities including intergenerational effects (e.g., disease eradication programs; programs that impact antimicrobial resistance or fertility)

Key broad impacts to consider in economic evaluation of vaccination programs:

Health Outcomes
- Persons vaccinated
- Informal caregivers
- Population

Health System Costs
- Publicly funded
- Not publicly funded

Non-Health Impacts
- Productivity
- Consumption
- Education
- Environment
- Others

Conclusions

The NACI processes and guidelines fill an unmet need and promote standardization. They advocate for transparency, allowing evidence to be used across different jurisdictions.

CBA = cost-benefit analysis; CUA = cost-utility analysis; FPT = federal/ provincial/ territorial; HTA = health technology assessment; NACI = National Advisory Committee on Immunization; QALY = quality-adjusted life year

https://www.canada.ca/en/public-health/services/immunization/national-advisory-committee-on-immunization-naci/methods-process.html

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