

Theory-based Approaches for Practical Evaluation

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Canadian Evaluation Society – Annual Learning Event
February 21, 2012

Information. **Insight.** Improvement.

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What are Theory-based Approaches?

- A way of structuring analysis (not a specific method)
- Explicit theory(ies) of change (logic model / results chain)
- Set of assumptions, risks and external factors
- Tested by empirical evidence
- Not so different from what you likely do now!

What Does a Theory-based Approach Look Like?

- Use a results chain with a theory or theories of change
- Identify a few critical assumptions, external factors and risks
- Assess whether the theory of change makes sense (draw on past related experiences)
- Confirm that the planned activities were carried out, resulting in planned outputs
- Confirm via monitoring data that (some) immediate and intermediate outcomes occurred
- Conduct original data collection to test the theory of change – is it working (i.e. is there a significant contribution to outcomes?) or are other influencing factors playing a larger role?
- Conclude on the extent to which the program activities are most likely making a difference (and with whom to what extent and why?)

(derived from Mayne 2011)

Use in Evaluation

- Much discussed – limited real use
- Challenges
 - ‘Loose’ results logic
 - Methods driven ideas of rigour
 - Fear of ‘exposure’ ?

The Cause and Effect Conundrum

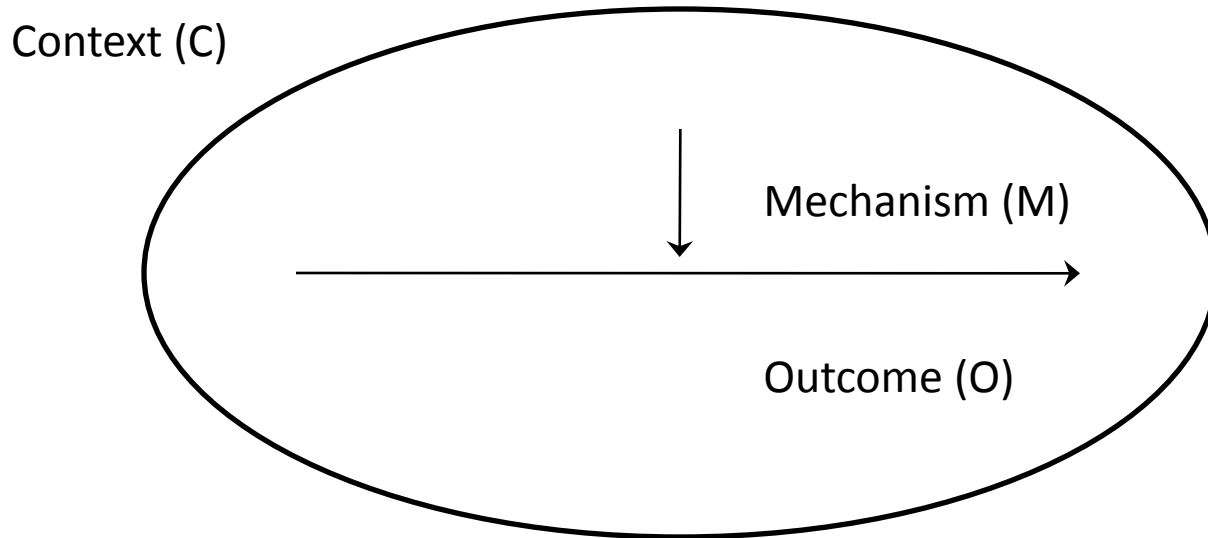
- We want to know whether we make a difference (i.e. cause and effect)

BUT

- Classic method-oriented approaches work less and less well* (complicated and complex environments, limited evaluative resources)

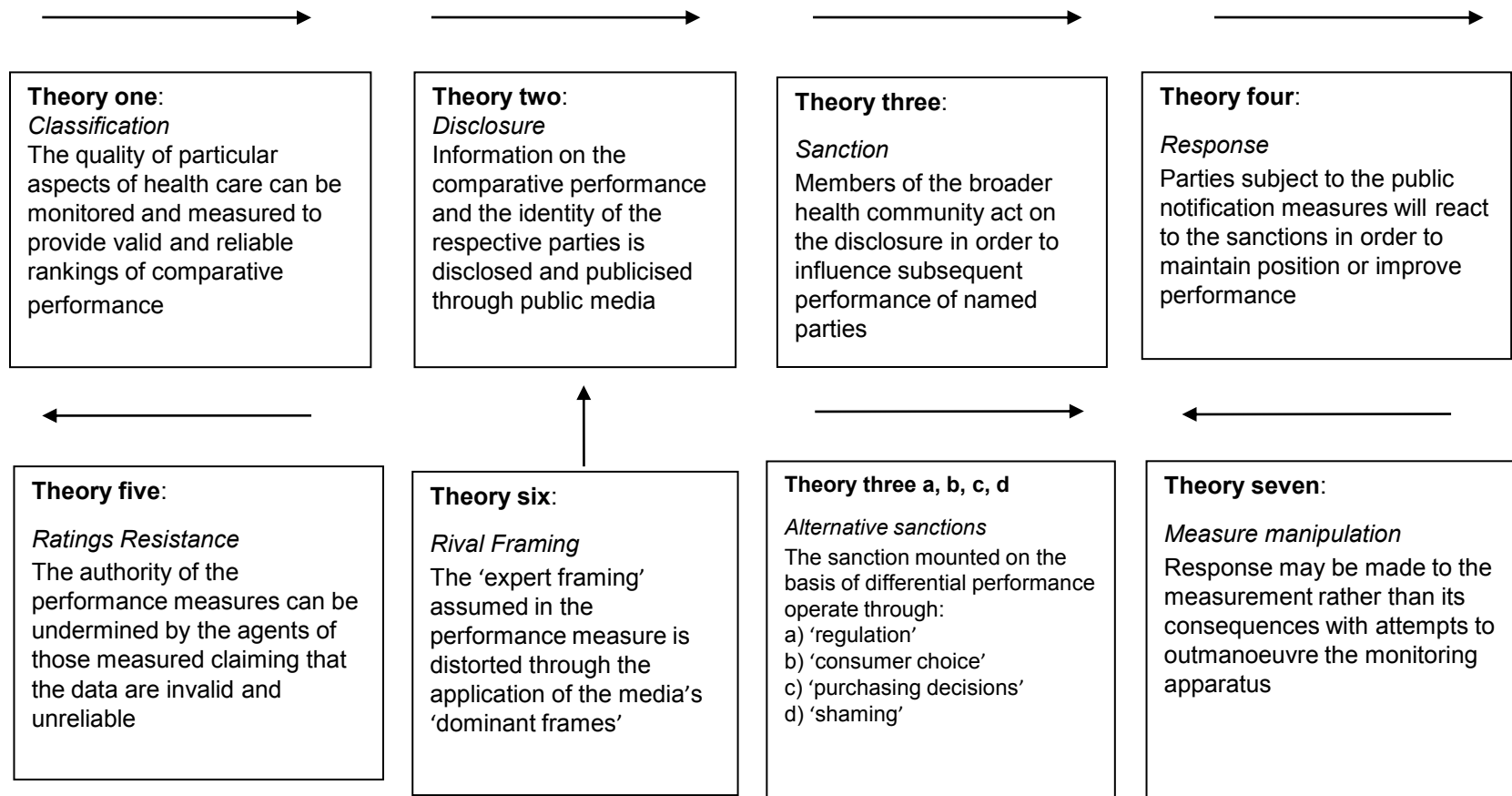
*see Pedersen and Rieper *Is Realist Evaluation a Realistic Approach for Complex Reforms?* Evaluation Vol 14(3) 2008

Realist Synthesis (Evaluation)



Source: Pawson, R. Evidence-based Policy A Realist Perspective Sage Publications 2006. Figure 2.1 page 22

An Initial 'Theory Map' of the Public Disclosure of Health Care Information



Pawson, R., T. Greenhalgh, G. Harvey and K. Walshe (2005). Realist review – a new method of systematic review designed for complex policy interventions. *Journal of Health Services Research & Policy*, 10(Supp 1): 21-34.

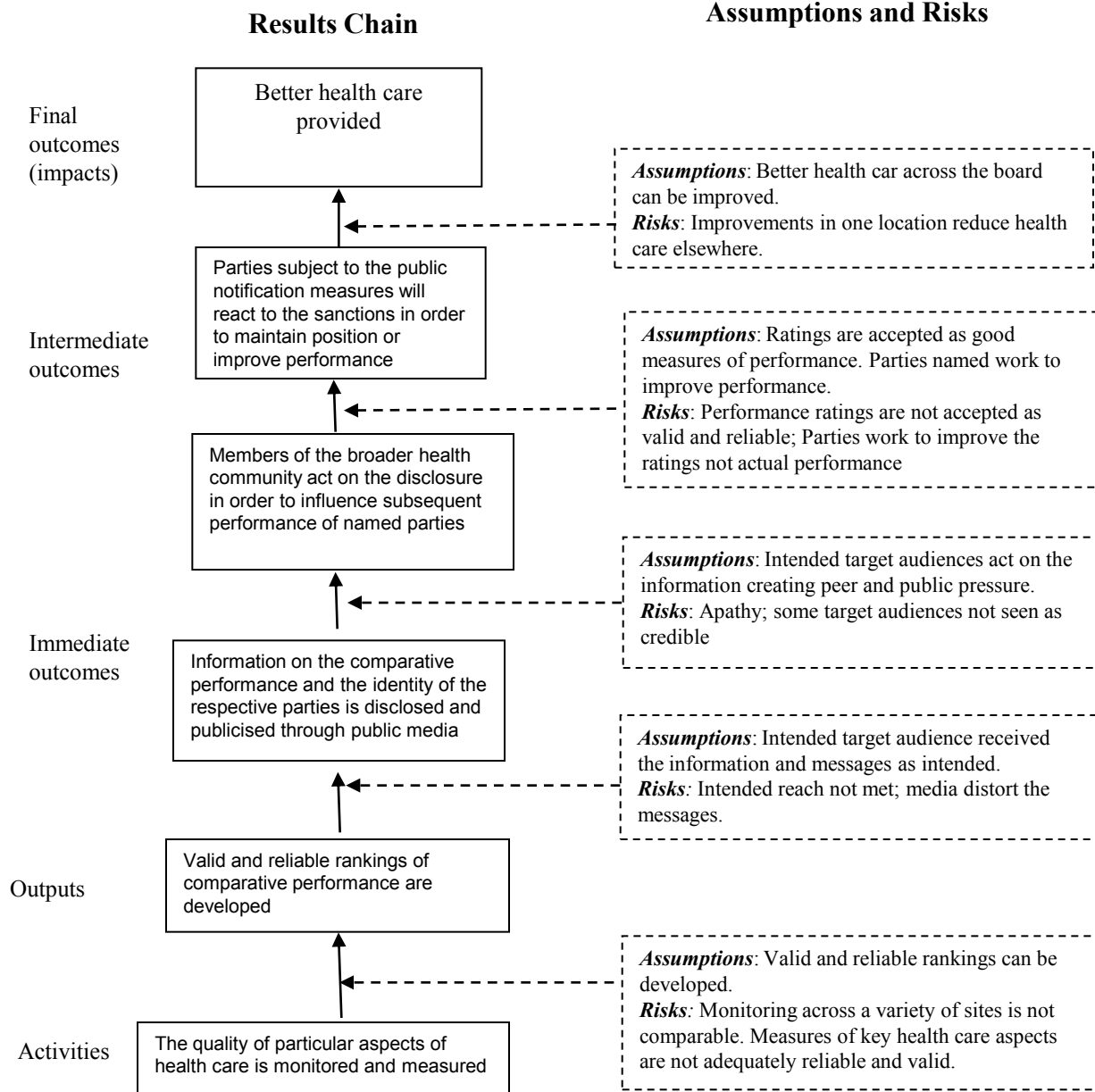
The Theories 'Thicket'

- Need to understand the underlying theory or theories in an intervention

BUT

- Theories can be multiple and sometimes contradictory – at minimum they are messy
- Results chains can provide a map

An Initial 'Theory Map' of the Public Disclosure of Health Care Information

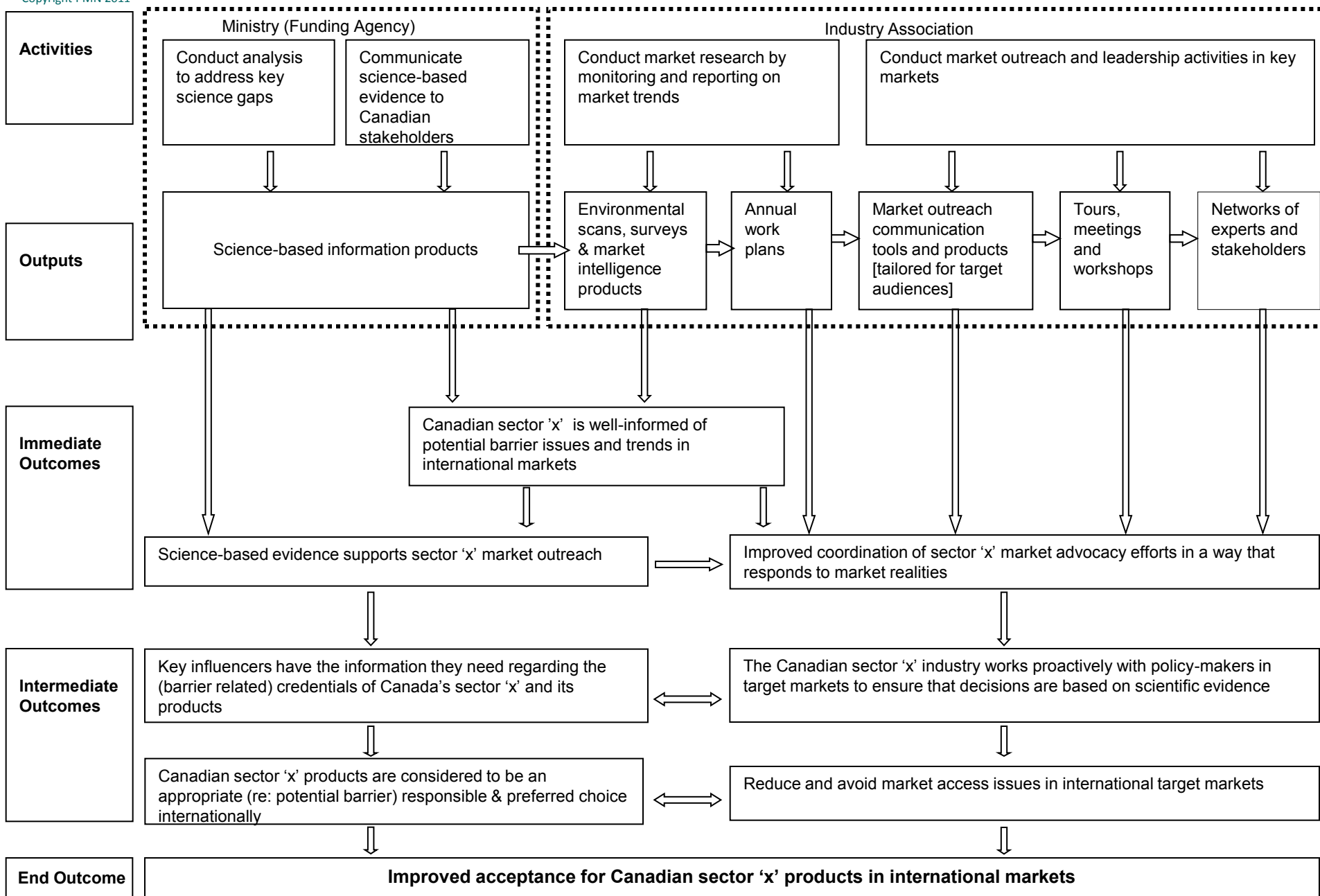


Source: John Mayne
mimeo April 30, 2009

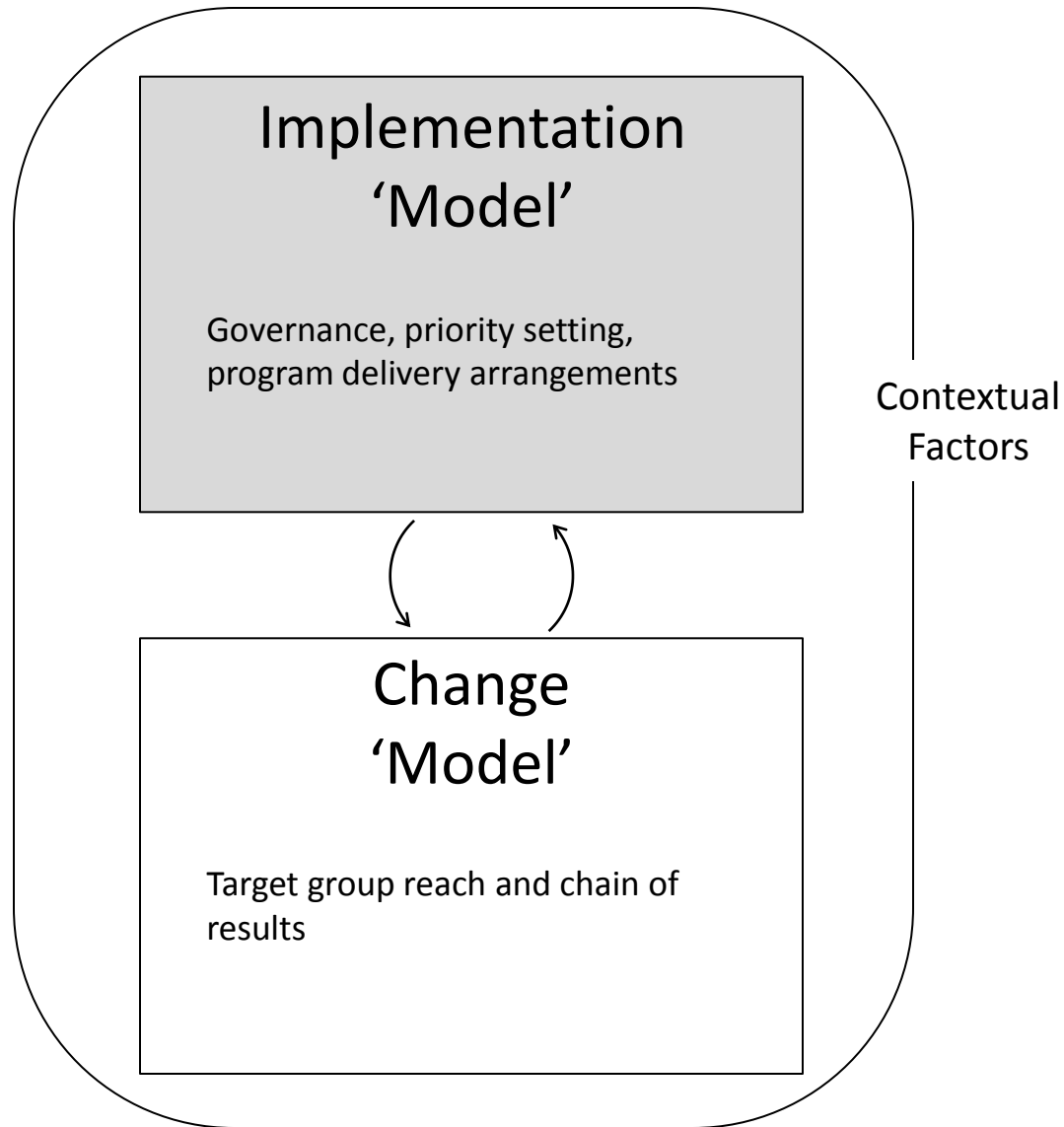
What About Logic Models?

- Logic models contain theories of change
- Most current logic models need adjustment to be rendered into theories of change for testing

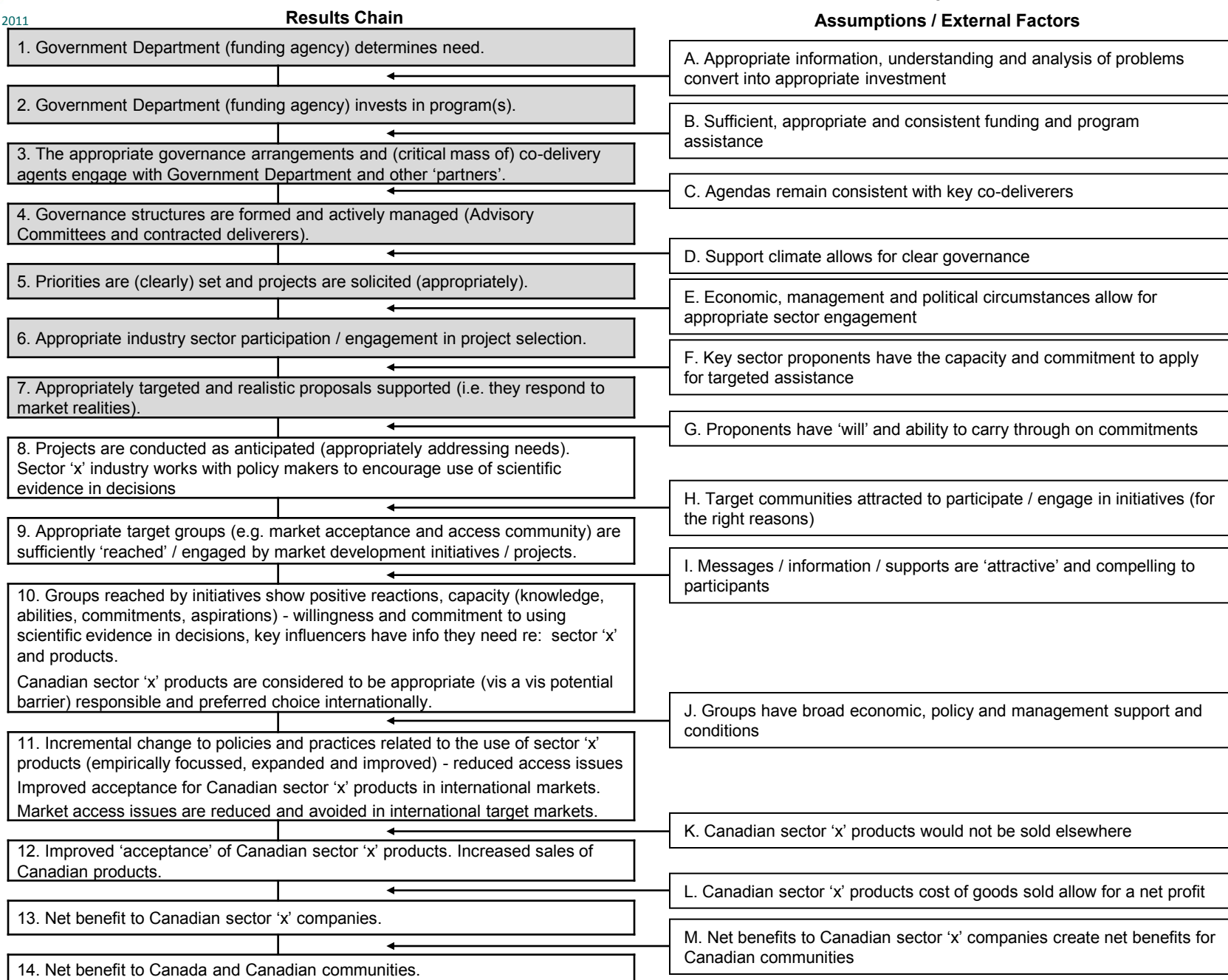
Original Sector 'X' Market Access / Development Program



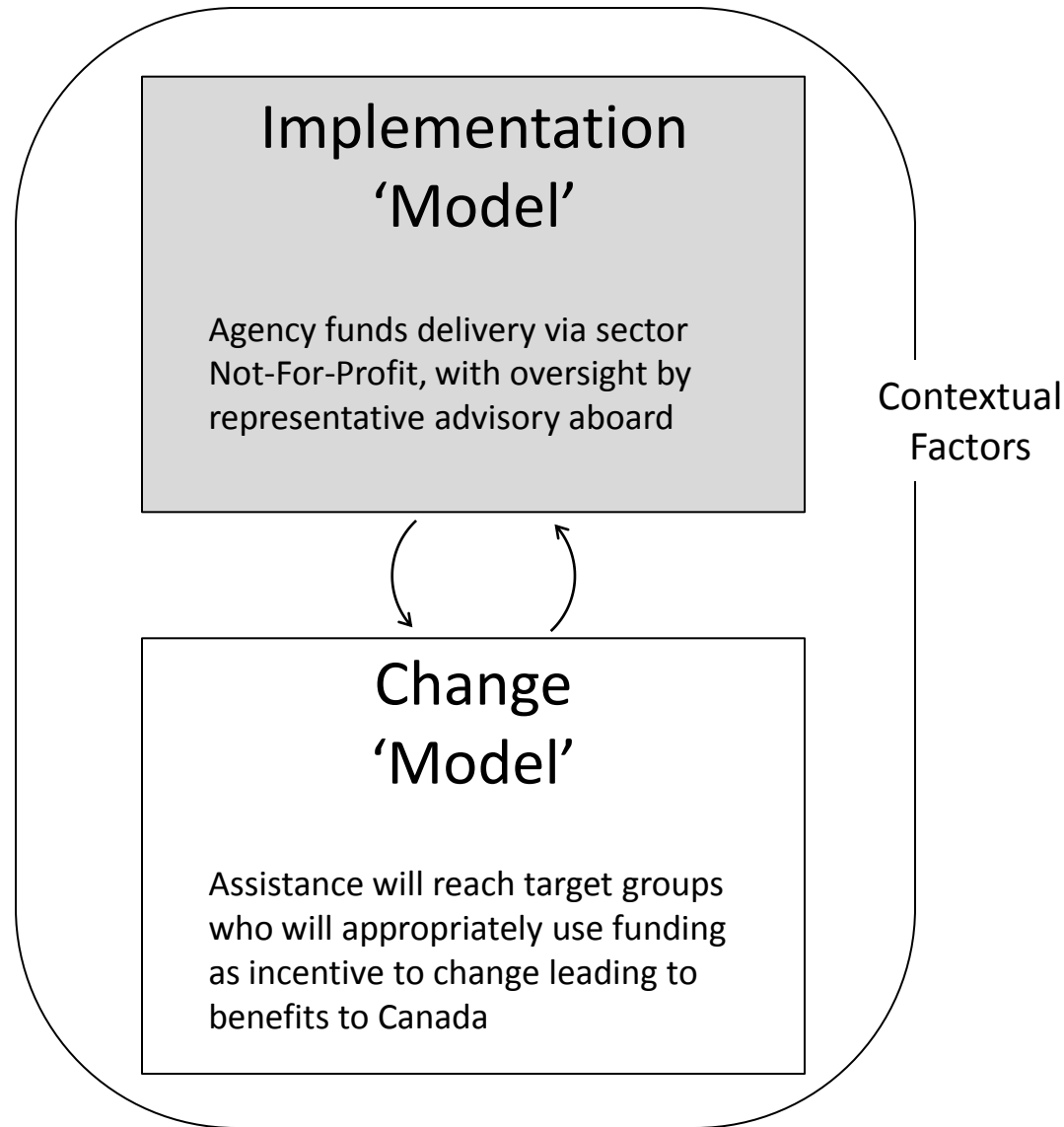
Summary Theory of Implementation and Change



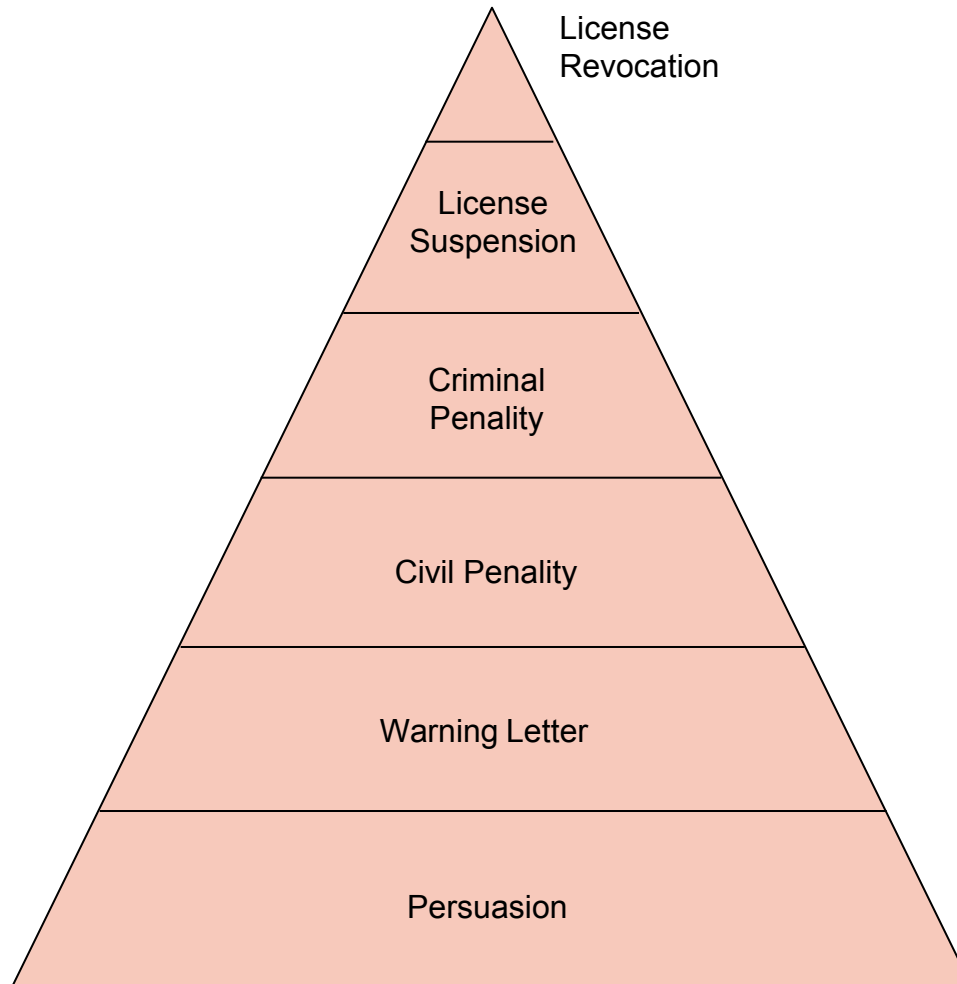
Alternative Results Chain for Sector X Market Access / Development



Summary Theory of Implementation and Change

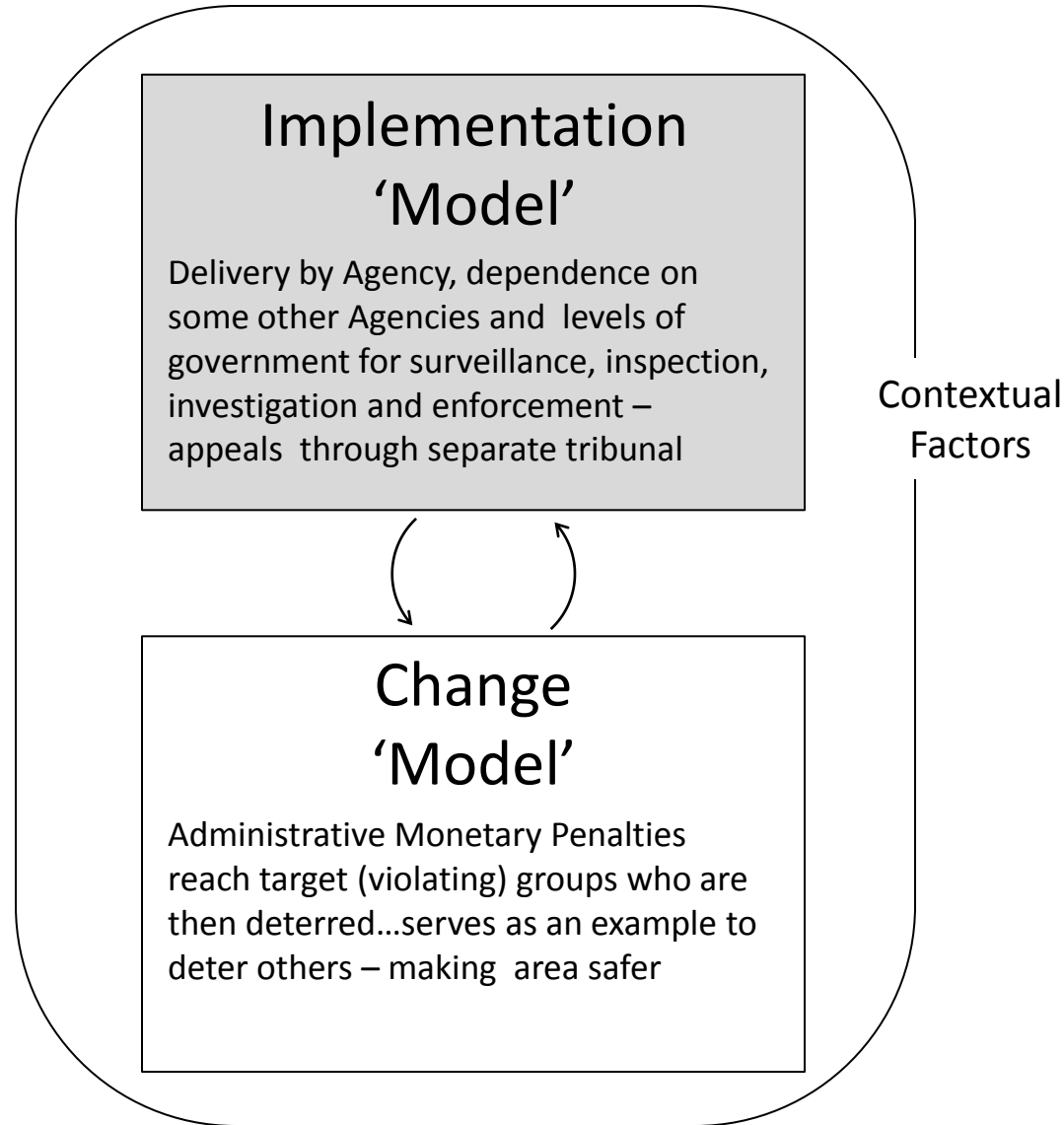


Theory of Deterrence



Source: Ayres and Braithwaite (1992)

Summary Theory of Implementation and Change



Evaluation Use: Observations to Date

- Implementation and Change Theory ‘dialogue’ is very useful
- ‘Honed’ evidence
- Rigorous *thinking* before rigorous *methods*
- No ‘surprises’ when theories (and assumptions, factors, risks) laid out early and often
- Can actually increase engagement of stakeholders
- Cost-effective and timely in early applications

Speculations

- Generative learning approach will allow for better community learning re: what works for whom in what conditions and why
- Addresses contribution where it's too complex for attribution
- Stand alone or front end to bigger studies?
- Can this help enhance the relevance of evaluations and the evaluation function?



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Evaluation of Administrative Monetary Penalties – Realist Approach

Evaluation Directorate

February, 2012

What are administrative monetary penalties (or AMPs) ?

- Essentially fines imposed on regulated parties
- Fill a deterrence gap between warnings and prosecution (see compliance pyramid)
- Designed and intended to be cheaper, quicker and easier than prosecutions
- Inspectors identify possible violations of regulations and acts, and send file to investigators.
- Investigators may issue an AMP with warnings, or with penalties between \$500 and \$15,000

EVALUATION CHALLENGE

- CFIA management requested cost-benefit and effectiveness study. Context included whether use of AMPs should be extended to other acts (currently *Health of Animals and Plant Protection Acts*)
- Insufficient data
 - Compliance rates are a common CFIA performance measure, but attribution to inspection and investigation is usually difficult because of the complex environment with multiple players

REALIST SOLUTION

- PMN Networks Inc. (Steve Montague) proposed a realist evaluation approach to identify where AMPs were working for whom, in what conditions, and why
- No attempt at designing a research study to confirm attribution, e.g., quasi-experimental design (Impossible to fine some while not fining others for same infractions)
- Questions designed to identify the conditions where AMPs were working and where they weren't, i.e., the context.
- Extensive interviews, file and document review and database analysis



RESULT

- Detailed program description outlining program myths, assumptions and the variety of perspectives on how AMPs were working and supposed to work
- Quantitative evidence also used to identify conditions
 - E.g., the roughly 400 cases of appealed AMPs (out of over 3,000 in 10 years) supported list of situations where they don't work well, such as unclear regulatory language, complex accountabilities and marginal industry players
- Approval of evaluation report by CFIA Senior Management
 - Report's list of prime conditions for AMPs noted as very helpful to policy and operational management