



# Knowledge Translation for Policymakers

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# Overview

- A framework and set of sub-frameworks
- A set of evaluations
- A pair of stories
- A figure
- Some analogies to other audiences (citizens and clinicians)



# Knowledge Translation for Policymakers = Supporting Evidence-informed Policymaking

- Evidence-informed policymaking means using the best available data and research evidence – systematically and transparently – in the time available in each of
  - Prioritizing problems and understanding their causes (agenda setting)
  - Deciding which option to pursue (policy development)
  - Ensuring that the chosen option makes an optimal impact at acceptable cost (policy implementation)
- ... alongside the institutional constraints, interest-group pressure, values and other sources of ideas that influence the policy process



# Knowledge Translation for Policymakers = Supporting Evidence-informed Policymaking (2)

- What types of data and evidence?
  - Prioritizing problems and understanding their causes (agenda setting)
    - Data plus evidence about comparisons and framing
  - Deciding which option to pursue (policy development)
    - Evidence about benefits, harms, cost-effectiveness, how and why it works, and stakeholders' views and experiences
  - Ensuring that the chosen option makes an optimal impact at acceptable cost (policy implementation)
    - Evidence about facilitators and barriers, as well as benefits, harms, etc. of implementation strategies



# Knowledge Translation for Policymakers = Supporting Evidence-informed Policymaking (3)

- Why use research evidence systematically and transparently?
  - It's a key part of the job in the public service?
  - It's better or more efficient than the alternatives?
    - E.g., using sources of pre-appraised, synthesized research evidence beats Google any day
  - It's a good way to save governments from embarrassment?
    - E.g., WHO in The Lancet in 2007; WHO and the World Bank in Healthcare Policy in 2009



# We Don't Know How Best to Support Evidence-Informed Policymaking

- (Nearly) empty systematic reviews of effects
- Two factors emerged with some consistency in a systematic review of 124 observational studies (case studies, interview studies, documentary analyses) of the factors that increased the prospects for research use in policymaking
  - Interactions between researchers and policymakers
    - Engage policymakers in priority-setting, research (including systematic reviews) and deliberative dialogues
  - Timing / timeliness
    - Facilitate retrieval of optimally packaged, high-quality and high-relevance systematic reviews, etc. (e.g., one-stop shopping, rapid-response units)



# Supporting Evidence-informed Policymaking Involves Five Types of Activities

- Improving climate / building demand
- Prioritization and co-production
- Packaging and push
- Facilitating pull
- Exchange



## Improving Climate / Building Demand

- E.g., Strong messages from all levels of government that research evidence is a key input to the policymaking process
- E.g., Performance criteria for government staff related to their use of research evidence
- E.g., Research evidence checklist that must be completed before briefing materials are submitted to Ministers or cabinet
- E.g., External audits of government reports and the reports produced by government-commissioned expert advisory groups
- E.g., Journalists that highlight when government statements aren't supported by research evidence



## Prioritization and Co-Production

- E.g., Applicants for research funding have to respond to government-articulated priorities and 25% of programmatic research budgets need to be 'held back' for responsive research
- E.g., Systematic and transparent processes for eliciting the short-, medium- and long-term priorities of policymakers (that can be addressed in weeks, months and years by evidence briefs, systematic reviews, and primary research, respectively)
- E.g., Researchers involve policymakers in all steps of the research (synthesis) process (i.e., what some call 'integrated KT), from articulating the question to designing the approach to merit review to end-of-project knowledge translation



## Packaging and Push

- E.g., Policymaker-targeted summaries of systematic reviews
- E.g., Evidence briefs that provide a context-specific summary of systematic reviews and local data/studies about
  - A problem and its causes
  - Options to address the problem and its causes
  - Key implementation considerations
- E.g., Proactive KT plans that address five questions
  - What's the message?
  - To whom should it be directed?
  - By whom should it be delivered?
  - How should it be delivered?
  - With what effect (or goal) should it be delivered?



## Facilitating Pull

- E.g., One-stop shops for pre-appraised research evidence that provide user-friendly summaries and free monthly evidence services
  - ACCESSSS for clinical evidence
  - Health Evidence for public-health evidence
  - Health Systems Evidence for evidence about how we organize ourselves to get the rights programs, services and drugs to those who need them
- E.g., Rapid-response service that provides a summary of the best available research evidence in 3, 10 or 30 business days
- E.g., Building capacity among policymakers to find and use research evidence as part of their policy analysis work



## Exchange

- E.g., Stakeholder dialogues where health policy challenges can be discussed with those who will be involved in or affected by decisions, all of whom are supported by
  - Best available research evidence (in the form of an evidence brief)
  - Systematically and transparently elicited values and preferences of citizens (through excerpts from a citizen panel summary that are included in the evidence brief)
  - Facilitation that draws out the full range of factors that will influence decision-making



## Conclusion

- Knowledge translation for policymakers = supporting evidence-informed policymaking
- We don't know how best to do this, but we know that
  - Timeliness and interactions are important
  - It typically involves five types of activities (and we have many examples of each, which need to be tested across issues/contexts)
    - Improving climate / building demand
    - Prioritization and co-production
    - Packaging and push
    - Facilitating pull
    - Exchange



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## What Have We Learned

- Evaluations of evidence briefs and stakeholder dialogues in Canada (but with similar findings in many African and Latin American countries)

	Briefs	Dialogues
Number evaluated in 7 years	45	45
Number surveyed	794	766
Response rate	84%	81%
Mean overall rating, out of 7 (SD)	6.2 (0.9)	6.2 (0.8)
Lowest-rated feature	No recommendations	No consensus
Mean intention to act, out of 7 (SD)	6.2 (0.8)	
Lowest rated factor	Outside my control = 4.7 (1.6)	



## What Have We Learned (2)

- Evaluations of citizen briefs and citizen panels

	Briefs	Panels
Number evaluated in 3 years	20	32
Number surveyed	419	419
Response rate	96%	98%
Mean overall rating, out of 7 (SD)	6.1 (1.1)	6.7 (1.1)
Lowest-rated feature	No recommendations	Diversity
Change in mean knowledge rating, out of 7 (SD)	1.2	



## What Have We Learned (3)

- Evaluations of the Ministry's internal rapid-response service

	Rapid reviews	Literature reviews
Number conducted in 7 years	181	316
Average response time (weeks)	Not available	7.5*
Average number of citations	26**	40
Average number of reviews cited	10**	6
Most common requester level	Fourth from top	Fourth from top

\*Request to completion (versus request to start = 3.7 weeks)

\*\*Based on a much smaller sample



## What Have We Learned (4)

- Evaluation of the Ministry's expert advisory groups (before changes)

	#
Number issuing reports in 10 years	27
Number focused on health system issues	22
Average number of citations	44
Average number of reviews cited	1.3*
Number with 1 or more methodologists	10
Number with 1 or more citizens	7

\*Although the reviews are not always on topic (e.g., 'home and community care' expert advisory group)



## Conclusion

- Stakeholder dialogues are highly rated, both overall and by design feature, and lead to strong intentions to act (and we have extensive anecdotal evidence of direct and indirect influences on policymaking)
- Citizen panels are also highly rated, both overall and by design feature, and lead to improvements in knowledge (and the insights derived from them are highly valued by dialogue participants and change the course of their deliberations)
- ‘Internal’ rapid response services are extensively used
- Expert advisory groups need changes to their composition and to supports for and expectations about their recommendations



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## First Story – Why Work with Other Countries, and Not Your Own?

- McMaster Health Forum is doing many things from the ‘outside’ ([www.mcmasterhealthforum.org](http://www.mcmasterhealthforum.org))
  - 1) Health Systems Evidence (>5,600 systematic reviews; ~11,000 registered users, 40% of whom receive a monthly evidence service)
  - 2) Rapid response (in 3, 10 and 30 business days)
  - 3) Stakeholder dialogues, informed by evidence briefs (46 dialogues)
  - 4) Citizen panels, informed by citizen briefs (33 panels and 21 briefs)
  - 5) Health Systems Learning (>100 workshops in > 30 countries)
- These programs address prioritization (2-4), packaging and push (1), facilitating pull (1, 2, 5) and exchange (3, 4); many of them address contextualization; and they’ll soon be complemented by a health-system profile



## First Story (2)

- Examples of the topics we've tackled at the request of health-system policymakers and stakeholders
  - Designing integrated approaches to support people with multimorbidity (i.e., multiple discordant chronic conditions)
  - Improving leadership capacity in primary and community care
  - Building a primary care 'home' for every citizen
  - Defining the mental health and addictions 'basket of core services'
  - Optimizing clinical practice based on data, evidence and guidelines
  - Addressing health-system sustainability
  - (Achieving worry-free surgery)



## First Story (3)

- Health-system profile
  - Building blocks
    - Governance arrangements (who can make what decisions)
    - Financial arrangements (how money flows)
    - Delivery arrangements (infrastructure and workforce)
  - Using the building blocks to provide care
    - Care by sector (home and community care, primary care, specialty care, rehabilitation care, long-term care, and public health)
    - Care for select conditions (mental health and addictions, work-related injuries and diseases, cancer, and end of life)
    - Care using select treatments (prescription drugs, complementary and alternative therapies, and dental services)
    - Care for select populations (Indigenous peoples)
  - Change and progress
    - Reforms
    - Assessments (against the ‘triple aim’)



## Second Story – From One of the Worst to Among the Best

- Ontario Ministry of Health is doing many things from the ‘inside’
  - 1) Strong messages from all levels of the ministry
  - 2) Health System Research Fund awards (all of which have to respond to ministry-articulated priorities, and 25% of budgets held back for ‘Applied Health Research Questions’)
  - 3) Rapid responses and literature reviews
  - 4) Health technology assessments
  - 5) Research Evidence Tool
  - 6) Capacity-building workshops (delivered by the Forum)
- These efforts address climate (1, 5), prioritization (2), and facilitating pull (2, 3, 4, 6); many of them address institutionalization; and the next priority is expert advisory groups

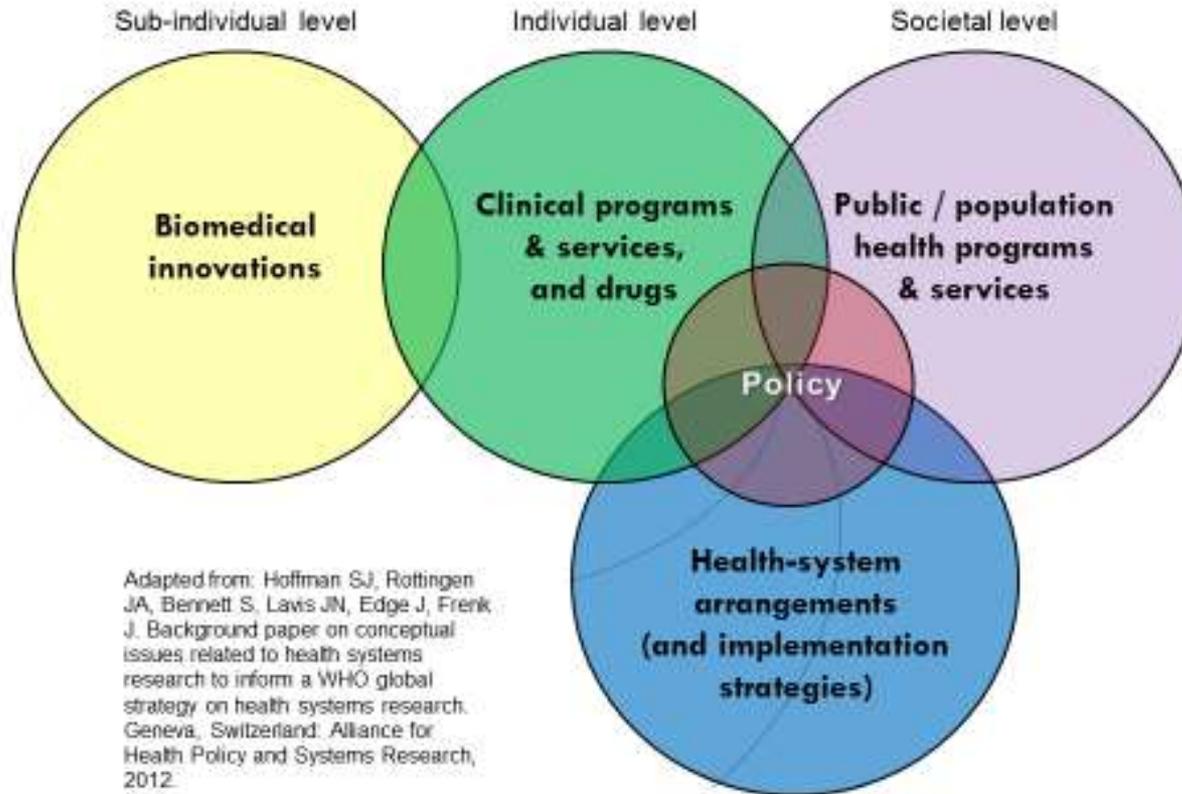


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# Supporting Evidence-informed Policymaking Looks Different Depending on the Type of Policy





## Some Key Questions to Ask

- What type of research are you undertaking?
  - Should it inform policy?
  - If so, what type of policy should it inform?
    - Policy about clinical issues? (e.g., which drugs should be added to a drug formulary)
    - Policy about public/population health issues? (e.g., should immunizations for toddlers be mandated? should a 'housing first' policy be used?)
    - Policy about health-system issues? (e.g., should pharmacists be allowed to prescribe?)
  - How is that type of policy made in your context?



## Some Key Questions to Ask (2)

- Will your research help with clarifying problems, framing options or identifying implementation considerations?
- Will you have the time and resources to
  - Put your research in the context of all of the other research evidence that addresses the same question (i.e., a systematic review)?
  - Put your research in the context of all of the other types of research evidence needed to inform policymaking (i.e., evidence brief for policy)?



## Some Key Questions to Ask (3)

What can you do from the 'outside'?

- Signal that research evidence is valued as a key input to the policy process [Climate for research use]
- Produce and synthesize relevant research [Prioritization] – **integrated KT**  
– e.g., responding to government-identified priorities? active engagement of targets?
- Make research evidence easy to use [Translation]
  - Communicate it effectively [Packaging and push] – **end-of-grant KT**  
– e.g., user-friendly summary of study/review/evidence brief/citizen brief?  
– e.g., what, to whom, by whom, how, and with what impact? (proactive KT plan)
  - Make it available when policymakers and stakeholders need it and in a form that they can use [Facilitating pull] – e.g., HSE
  - Prompt policymakers and stakeholders to use it in decision-making [Pull]
  - Convene stakeholder dialogues [Exchange] – **end-of-grant KT (if have prepared an evidence brief)**



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## Analogies

- ‘Knowledge translation’ initiatives seek to ensure that
  1. Citizens (patients, as well as families, informal caregivers, etc.) are supported to engage in healthy behaviours, effective self-management and appropriate care seeking
  2. Clinicians are supported to engage in evidence-based practice
  3. Policymakers are supported to engage in evidence-informed policymaking



## Knowledge Translation to Citizens

- Citizens need access to pre-appraised research evidence
  - McMaster Optimal Aging Portal ([www.mcmasteroptimalaging.org](http://www.mcmasteroptimalaging.org))
  - Decision Aids Database (<https://decisionaid.ohri.ca/>), the contents of which will soon be added to the Portal
    - “Tools that help people become involved in decision making by making explicit the decision that needs to be made, providing information about the options and outcomes, and by clarifying personal values”
- Citizens also need supports to engage in these ways ([www.healthsystemsevidence.org](http://www.healthsystemsevidence.org) and expand the ‘Implementation strategy’ topics and, within that, the ‘Consumer-targeted strategy’)



## Knowledge Translation to Citizens (2): McMaster Optimal Aging Portal

- Addresses a number of frustrations among citizens
  - There's too much scientific research coming out every day, it's often overhyped and can conflict with existing research, and I can't understand most of it
  - Scientific research often only partly answers one question among the many I have
  - The Internet is full of free health resources but it's hard to know which are worth a closer look
  - Newspapers cover lots of stories but the emphasis is usually on drama (dramatic findings from a new study, dramatic events with no mention of related scientific research), not substance



## Knowledge Translation to Citizens (3): McMaster Optimal Aging Portal

- Four types of content written specifically for citizens
  - Evidence Summaries
    - Key messages from scientific research that's ready to be acted on
  - Blog Posts
    - Commentaries on what the scientific research on a topic actually means and on why good science matters
  - Web Resource Ratings
    - Evaluations that tell you whether free health resources on the internet are based on scientific research
  - @Mac\_AgingNews
    - Tweets about NEWS and related EVIDENCE from the McMaster Optimal Aging Portal



# Knowledge Translation to Clinicians

- Providers need access to pre-appraised research evidence
  - ACCESSSS (<http://plus.mcmaster.ca/accessss>)
    - Contains only high-quality studies and reviews about clinical programs, services and drugs
  - Health Evidence (<http://www.healthevidence.org>)
    - Contains quality-appraised reviews about public health programs
- Providers also need supports to engage in evidence-based practice ([www.mcmasterhealthforum.org](http://www.mcmasterhealthforum.org) then Products, Healthcare organization, and Optimizing clinical practice)



## Knowledge Translation to Clinicians (2)

- Step 1: Iteratively identify the clinical practice to be optimized based on data, evidence and guidelines, as well as the causes of the problem (using meaningful stakeholder engagement)
  - Identify the clinical practice based on explicit criteria
  - Specify who (i.e., what professional group) needs to do what differently (i.e., what behaviour change)
  - Ascertain the causes of the problem at some or all of five levels
    - Motivation at the individual level (e.g., beliefs, emotion)
    - Tasks at the individual or team level (e.g., assessments)
    - Roles at the professional level (e.g., responsibilities)
    - Rules at the organizational level (e.g., authority)
    - Strategies at the system level (e.g., system arrangements)



## Knowledge Translation to Clinicians (3)

- Step 2 - Iteratively select and implement an approach to optimizing practice based on a good understanding of the issue and context (again using meaningful stakeholder engagement)
  - Select active ingredients (strategies like audit and feedback) based on a theoretical framework, research evidence, etc.
  - Assess the causal mechanism - how the active ingredients are likely to function) (e.g., increase knowledge, motivate, prompt)
  - Consider the mode of delivery - how the active ingredients could be delivered (e.g., website, personalized email, electronic health record)
  - Articulate the intended targets – what the active ingredients aim to change (e.g. motivation, tasks, roles, rules and strategies)



## Knowledge Translation to Clinicians (4)

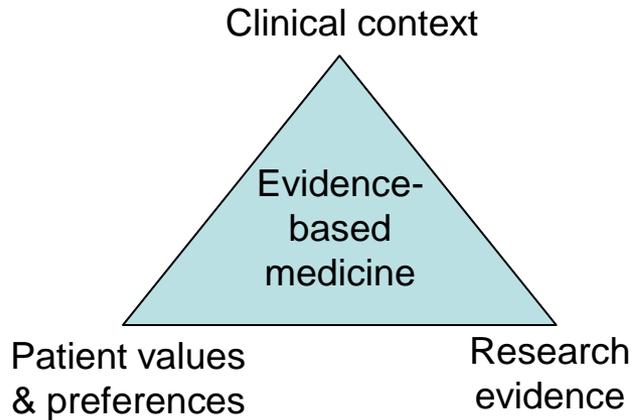
- Step 3 - Monitor, evaluate and review the selected approach to optimizing practice
  - Monitor the extent of implementation of the active ingredients and their update across different modes of delivery
  - (When resources allow) Evaluate the impacts on intended targets (effectiveness study), its costs and cost-effectiveness, the causal mechanisms (process evaluation), and the views and experiences of those involved (acceptability study)
  - Review the approach based on monitoring and evaluation data to decide whether it should be stopped, modified or scaled up



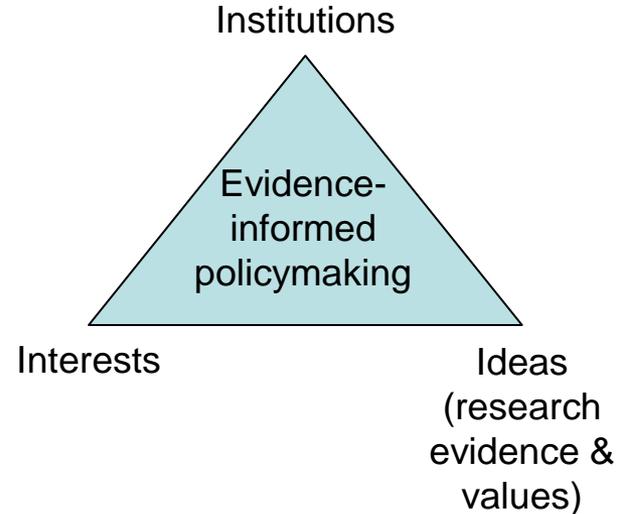
# Knowledge Translation for Clinicians and Policymakers Have a Key Similarity

- Research evidence is just one factor in a decision

## Clinical level



## Policy level





## Conclusion

- Knowledge translation for policymakers = supporting evidence-informed policymaking
- We don't know how best to do this, but we know that
  - Timeliness and interactions are important, as are contextualization/institutionalization
  - It typically involves five types of activities (and we have many examples of each, which need to be tested across issues/contexts)
    - Improving climate / building demand
    - Prioritization and co-production
    - Packaging and push
    - Facilitating pull – Rapid-response services are extensively used but expert advisory groups needs a big shake-up
    - Exchange – Stakeholder dialogues lead to strong intentions to act and have both direct and indirect influences on policymaking
- Supporting evidence-informed policymaking looks different depending on the type of policy (e.g., policy about clinical versus health-system issues)
- There are some important analogies across target audiences (e.g., access to pre-appraised, synthesized research evidence AND supports to do the right thing)



## Conclusion (2)

- What type of research are you undertaking and will your research help with clarifying problems, framing options or identifying implementation considerations? Is integrated KT an option? If so, how are you going to engage your target audiences in your research and make it worth their time?
- Will you have the time and resources to put your research in the context of all of the other research evidence that addresses the same question (i.e., a systematic review) or – better yet -- all of the other types of research evidence needed to inform policymaking (i.e., evidence brief for policy)? Is end-of-grant KT an option? If so, how are you going to support the use of this research (e.g., proactive KT plan? stakeholder dialogue?)