

Fostering knowledge exchange with researchers and decision-makers:
exploring the effectiveness of an interdisciplinary research planning workshop

Anna Gagliardi, PhD
Scientist, Sunnybrook Research Institute
Assistant Professor, Department of Surgery, and
Department of Health Policy, Management & Evaluation
Faculty of Medicine, University of Toronto



Background

- There is limited understanding of how to best influence use of research evidence by decision-makers (clinicians, managers, policy makers)
- In-person contact with researchers appears to be an important predictor
- Funders expect researchers to include interaction with decision-makers in research transfer strategies as a condition of funding



Knowledge Exchange (KE)

- Two-way communication between researchers and decision-makers
- Thought to occur through 'enlightenment' – each party exposed to constraints, realities of the other's practice
- This mutual learning may enhance research utilization, and should take place through the entire research cycle (ie. from planning to implementation)



Knowledge Exchange in AB

(Newton, Estabrooks, Norton et al., 2007)

- Applied researchers more frequently participated in KE than did basic researchers - 14% in medical faculties, 15% in other faculties
- Low rates attributed to academic emphasis on traditional dissemination through publications
- Many researchers may not be practicing KE
- Guidance is needed on how best to engage decision-makers



Research Priority Setting

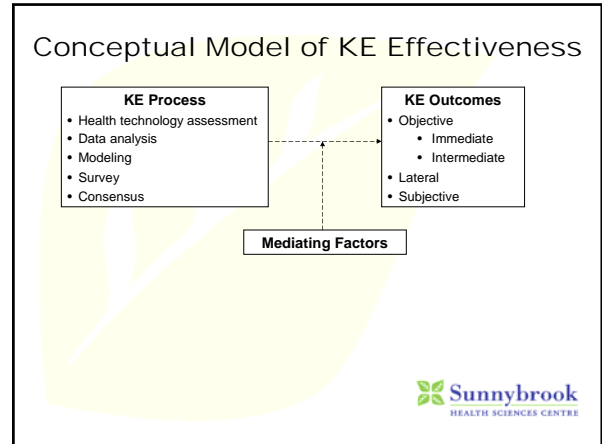
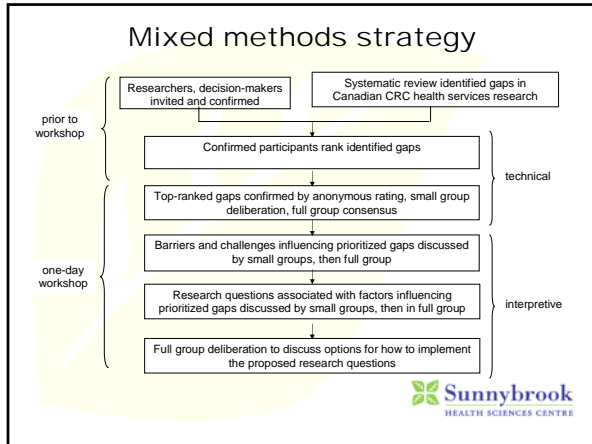
- Many methods, numerous shortcomings
- For example, modeling is resource-intensive, dependent on detailed data, fails to meet multi-stakeholder objectives
- Mixed methods approach is recommended to capitalize on value of different approaches:
 - Technical (based on quantifiable data)
 - Interpretive (consensus of informed participants)



Objectives

- Assess the effectiveness of a mixed methods approach to research planning for achieving KE
- Develop a conceptual framework by which to evaluate different forms of KE at different stages of the research cycle





- ### Outcomes of KE
- Objective – immediate
 - Gaps in knowledge identified
 - Consensus on research priorities established
 - Actionable research questions developed
 - Objective – intermediate
 - Steering committee established
 - Research group assembled
 - Research proposal developed
 - Research is funded
 - Lateral
 - Process/product cited/used by others
 - Spin-off events, groups, products developed
 - Subjective
 - Satisfaction with process/outcome
- Sunnybrook HEALTH SCIENCES CENTRE

- ### Factors Mediating/Influencing KE
- Predominance of technical vs interpretive approach
 - Complement of stakeholders assembled
 - Perceived relevance of research topics
 - Perceived feasibility of conducting research
 - Expected impact of research
 - Commitment from stakeholders
 - Contribution of stakeholders (perceived, actual)
 - Extent of learning among stakeholders
- Sunnybrook HEALTH SCIENCES CENTRE

Methods

Component	Data Collection
Approach	Tech (ranking, rating); Interp (consensus)
Complement of stakeholders	Survey
Relevance, feasibility, impact	Survey
Commitment	Observation, interviews
Contribution	Observation, interviews
Learning	Interviews
Outcomes	Systematic review (gaps), observation, interviews

Sunnybrook HEALTH SCIENCES CENTRE

Results - complement

Role	Last 5 Yrs	Dominant
Researcher	26	6
Clinician	22	13
Manager	24	5
Policy maker	13	5

Sunnybrook HEALTH SCIENCES CENTRE

Results – relev, feas, impact

- Pre-workshop ranking prioritized three broad topics:
 - Quality of surgery (margin status, various surgical outcomes)
 - Referral to, receipt of adjuvant therapy
 - Access to, utilization of screening
- Workshop rating found all three topics equally important
 - 5.5 to 6.5 on 7-point Likert scale for all criteria associated with relevance, feasibility and impact



Results – commitment

- Prior experience with KE
 - Twice per year on average
 - Prioritization, planning in interdisciplinary group novel to most
- Perceived professional obligation to take part in KE for research planning
 - Not formal professional obligation
 - Driven by personal interest or benefit
- Interest in the current topic
 - Would not have participated without payment of travel, accommodation



Results – contributions/learning

- Observed
 - Prioritization: 40 utterances, 11 participants
 - Research questions: 25 utterances, 12 participants
 - Implementation: 13 utterances, 7 participants
- Interviews
 - More easily identified their own contribution
 - Different perspectives
 - Positive – learning experience
 - Negative – barrier, clinical dominance



Results – objective outcomes

- Observed
 - Systematic review of Cdn health services research on the organization, delivery of CRC identified many gaps:
 - Compliance with performance measures (14)
 - Factors influencing variable compliance (17)
 - Interventions designed to improve variable compliance (5)
 - Consensus on priorities (ranking, rating, discussion)
 - Several research questions proposed (next slide)
- Interviews
 - Agreement that consensus achieved, questions proposed
 - Many thought sharing perspectives, programs itself an outcome
 - A few thought that outcomes were unclear (negative)



Results – research questions

- influence of surgeon attitudes on multidisciplinary care
- surgeon / pathology teamwork
- barriers to regionalization of rectal cancer
- options for decision-making when evidence is conflicting
- short-term surgical outcomes (ie. margins)
- how to provide performance data to surgeons
- role of quality managers in clinical quality improvement
- evaluation of a care path/case manager following positive screen



Results – other outcomes

- Subjective
 - Interesting, well organized, useful
- Lateral
 - Most read the summary report distributed after the event
 - Little sharing of report with others, or plans for use
 - No subsequent events, projects, groups



Results – challenges

- Group dynamics influenced perceived outcomes
 - Designated small group facilitators
- Lack topic focus
 - Do most work a priori using technical means, or have others do most work and consult them on product
 - In person deliberation important
- Lack clarity on objectives
 - Presentations on research topics, and knowledge translation
 - Pre-circulation of print material not useful
- National collaboration
 - Pros versus cons



Discussion

- Many suggested greater emphasis on technical methods
 - Half participated in ranking; rating failed to distinguish priorities; most did not read background material; three cancelled, others could only take part in half-day
 - Other commitments, lack experience, comfort, incentives
- Successive days, or series of staggered events where some component of it involves in-person deliberation
 - Intensity of effort for all stakeholders, cost
 - To what degree are researchers responsible?
- Ongoing research
 - Evaluate effectiveness of different KE strategies
 - What KE strategies have been employed by funded research? (what stakeholders were involved, in what decisions, how did they contribute, level of funding)

