Adventures in KT: Travel tips for researchers and trainees

KT Connects Series

Drs Bev Holmes and Marla Steinberg

Friday October 14, 2016

By the end of this webinar, you should be able to:

- 1. Explain why KT is important for researchers
- 2. Distinguish among different KT purposes and processes
- 3. Discuss some critical success factors for KT (the travel tips!)
- 4. Decide whether KT is right for you
- 5. List ways you can learn more about KT

A few words about us and our KT journeys





Getting to know you.....

Please let us know how you typically describe yourself.....

- Researcher
- **□**Trainee
- ☐ Health care practitioner
- □Both (researcher and practitioner)
- **□**Other

In your work, have you been on, or begun, a KT journey?

□Yes

□No

☐ What the bleeeeeeeep is KT?????





A formal definition: Canadian Institutes of Health Research

CIHR Definition

1999999999999999

"a dynamic and iterative process that includes synthesis, dissemination, exchange and ethically-sound application of knowledge to improve the health of Canadians, provide more effective health services and products to strengthen the health care system".

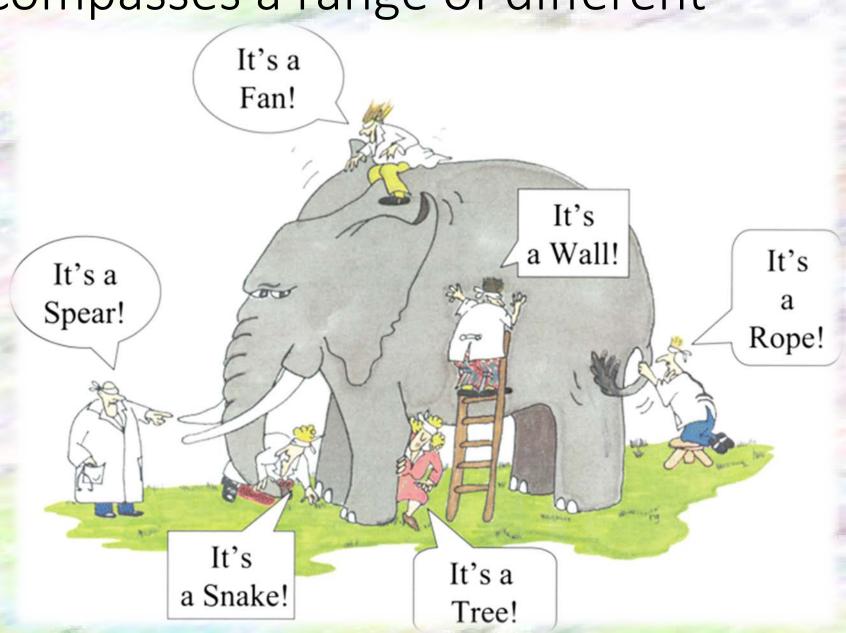


Tip #1 - KT encompasses a range of different

processes

Knowledge production
Knowledge synthesis
Diffusion
Dissemination
Implementation
Scale-up and spread

Evaluation



Tip #2 - KT is plagued by term turmoil

McKibbon et al (2010) collected 100
 KT-related terms



McKibbon, K. A. et al. (2010). A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel?. *Implementation Science*, 5(1), 1.

McKibbon et al. Implementation Science 2010, 5:16 http://www.implementationscience.com/content/5/1.



RESEARCH ARTICLE

Open Acces

A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel?

K Ann McKibbon^{1*}, Cynthia Lokker¹, Nancy L Wilczynski¹, Donna Ciliska^{2,3}, Maureen Dobbins^{2,3}, David A Davis⁴, R Brian Haynes¹. Sharon E Straus^{5,6}

Background: The study of implementing research findings into practice is rapidly growing and has acquired many competing names (e.g. dissemination, uptake, utilization, translation) and contributing disciplines. The use of multiple terms across disciplines pose barriers to communication and progress for applying research findings. We sought to establish an inventory of terms describing this field and how often authors use them in a collection of health literature published in 2006.

Methods: We refer to this field as knowledge translation (KT). Terms describing aspects of KT and their definitions were collected from literature, the internet, reports, textbooks, and contact with experts. We compiled a database of KT and other articles by reading 12 healthcare journals representing multiple disciplines. All articles published in these journals in 2006 were categorized as being KT or not. The KT articles (all KT) were further categorized, if possible, for whether they described KT projects or implementations (KT application articles), or presented the theoretical basis, models, tools, methods, or techniques of KT (KT theory articles). Accuracy was checked using duplicate reading. Custom designed software determined how often KT terms were used in the titles and abstracts of articles categorized as being KT.

Results: A total of 2,603 articles were assessed, and 581 were identified as KT articles. Of these, 201 described KT applications, and 153 included KT theory. Of the 100 KT terms collected, 46 were used by the authors in the titles or abstracts of articles categorized as being KT. For all 581 KT articles, eight terms or term variations used by authors were highly discriminating for separating KT and non-KT articles (p < 0,001): implementation, adoption, quality improvement, dissemination, complex intervention (with multiple endings), implementation (within three words of) research, and complex intervention. More KT terms were associated with KT application articles (n = 13) and KT theory articles (n = 18).

Conclusions: We collected 100 terms describing KT research. Authors used 46 of them in titles and abstracts of KT articles. Of these, approximately half discriminated between KT and non-KT articles. Thus, the need for consolidation and consistent use of fewer terms related to KT research is evident.

^{*} Correspondence: mckib@mcmaster.ca ¹Health Information Research Unit, Department of Clinical Epidemiology and Biostatistics, McMaster University Faculty of Health Sciences, 1200 Main



© 2010 McKibbon et al; licensee BioMed Central Ltd. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http://creativecommons.org/licenses/by/2.0), which permits unrestricted use, distribution, and

Tip #3 - "Déjà vu all over again" I say KT, you say....

- Applied research
- Action research
- Participatory research
- Community-based research
- Engaged scholarship
- Intervention research
- Translational research
- Program science
- Dissemination & implementation science
- Evaluation



• Estabrooks, C. A., et al. (2008). The intellectual structure and substance of the knowledge utilization field: A longitudinal author co-citation analysis, 1945 to 2004. *Implementation Science*, 3(1), 1.

Tip #4 - KT is (usually) more than communications

Some people think that "...whether or not the best and most relevant research reaches the person with the problem depends on the efficiency of the communications. Therefore...the usual prescription for improving the use of research is to improve the means of communication..." (p. 427)



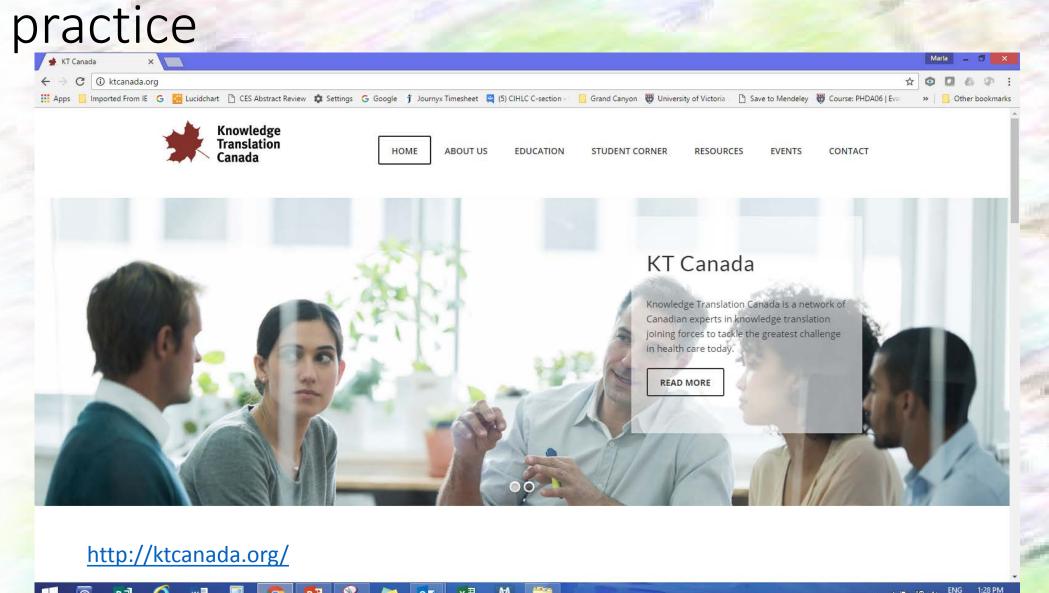


"Despite the considerable resources devoted to health research, a consistent finding in the literature is that moving evidence into practice and policy is slow and haphazard..." (p. 13)

Graham, I. D., et al. (2006). Lost in knowledge translation: time for a map?. *Journal of continuing education in the health professions*, 26(1), 13-24.



KT has emerged to help move evidence



A KT travel guide

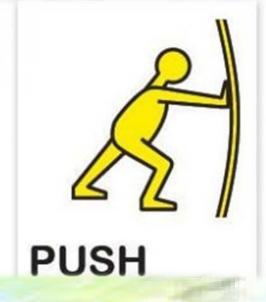


- Before you go (because planning is half the fun)
- En route (expect the unexpected)
- Reflecting on the trip (and planning the next one)



Tip #5 – There are three main routes for evidence to inform policy and practice

- 1. Researcher push
 - Typically end of grant KT
- 2. Knowledge user pull
 - Commissioning specific studies, syntheses, or policy briefs
 - Expert panels, "Best Brains Exchanges"



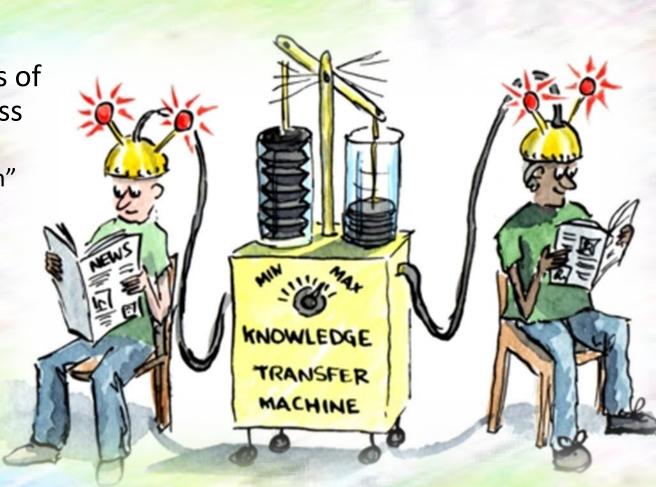




3. Integrated or iKT

 Researchers and knowledge users working together through all stages of the research and application process

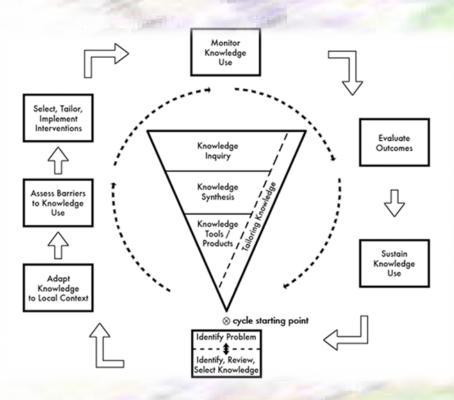
 Begins with jointly defining research questions or "the knowledge problem"





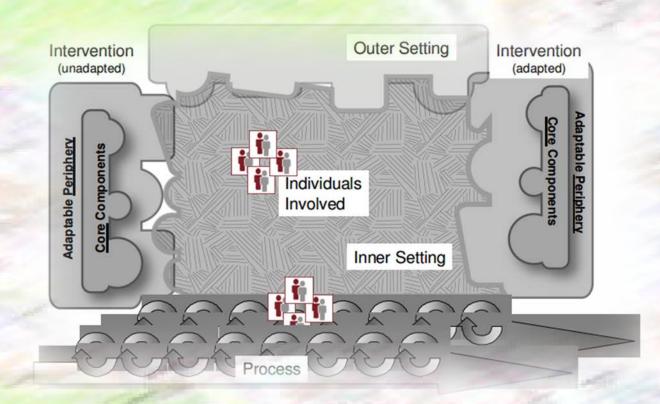


Tip #7 - Use maps and guides: there are lots!



The Knowledge to Action Cycle

A Process Model



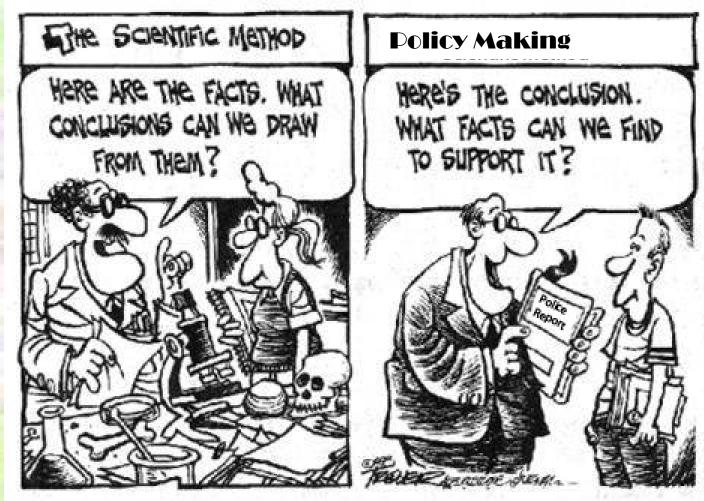
CFIR (Consolidated Framework for Implementation Research)

A Determinant Model

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. *Implementation Science*, 10(1), 1.

Tip # 8 - Researchers are from Mars, knowledge users are from Venus.....

- The research world rewards publications, not policy and practice changes
- The policy and practice world does not run only on research and typically has very short decisionmaking windows



Choi, B. C., et al. (2005). Can scientists and policy makers work together?. *Journal of Epidemiology and community health*, *59*(8), 632-637.

Tip # 9 - Learn the language of your target audiences (or pack your universal translator)



"Are we in complete agreement, then?"

Tip #10 - Your suitcase will be heavy: knowledge users need the full range of evidence

When implementing evidence-informed practice, practitioners and decision-makers need to consider different types of evidence; scientific research findings are only one type of evidence.



...and they need different types of information

- Nature and significance of the problem
 - How big? Who's affected? How has it changed over time / will it change?
- Nature of the proposed solutions/interventions and their differential impact
- External validity
 - Which settings? Which people? Under what conditions?
- Cost effectiveness
- Acceptability
 - To the target population, the public, other stakeholders, politicians
- Implementation knowledge
 - Barriers and facilitators, strategies, resources needed
- Implications of not acting



Tip #11 – Translate bodies of knowledge (more weight for your suitcase)

 KT that focuses on the results of individual studies may be misleading

 Knowledge syntheses are ideally the basic unit of knowledge translation Tip #12 - Consider using an established tour guide (KT seems to be everyone's business — and no one's responsibility)



Who is responsible for KT?
Who has the knowledge and skills?

- Researchers?
- Practitioners?
- Decision makers?
- KT brokers or specialists?

Learning check

Which of the following will add weight to your KT journey:

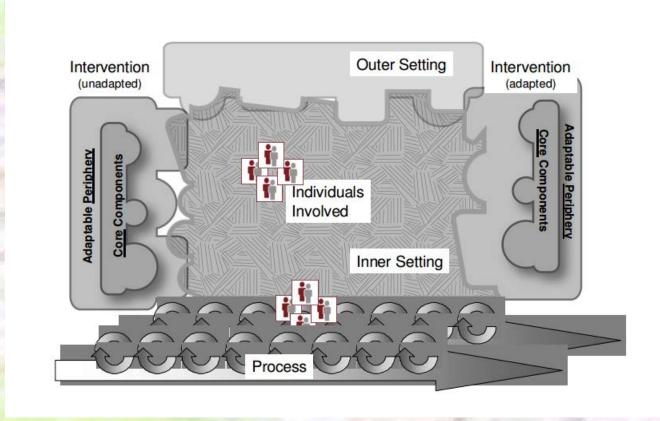
- a. The many terms for KT
- b. The different types of evidence knowledge users need
- c. The universal translator that helps you speak different languages
- d. All of the above
- e. None of the above



Tip #13 – Pay attention to your surroundings when travelling.

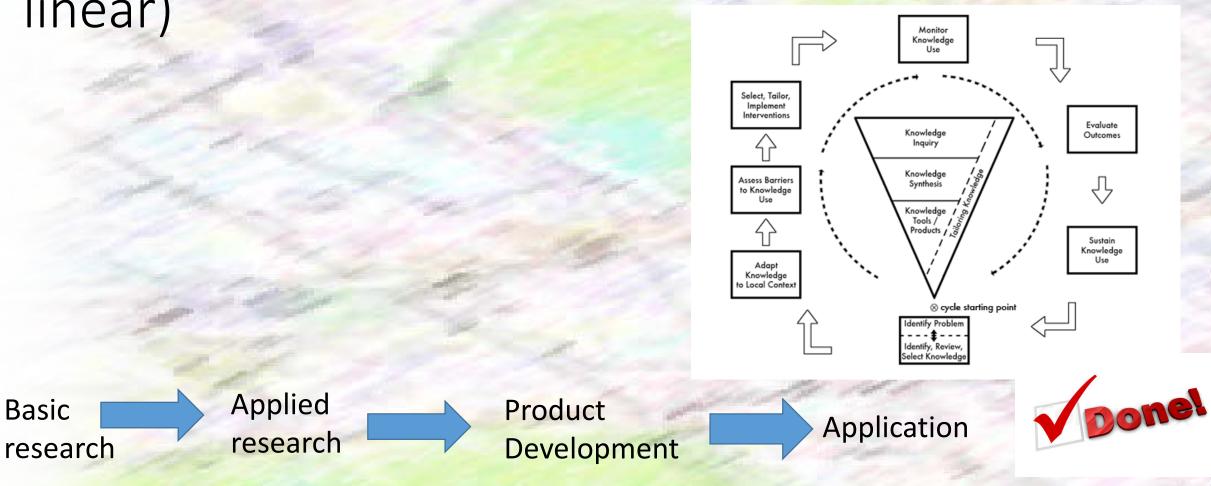
"...the ongoing interaction between an intervention and its context determines the outcome..."

This mean you need to attend to context when supporting implementation



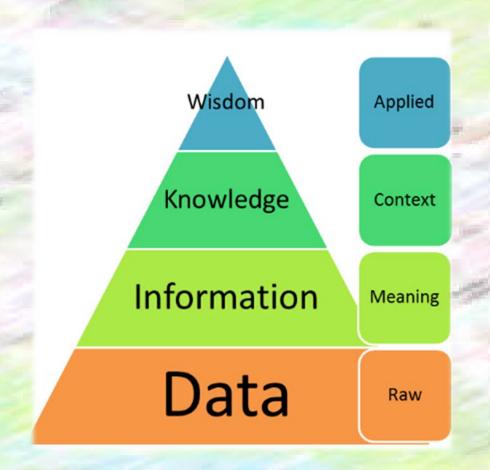
Holmes, B. J., et al. (2016). Mobilising knowledge in complex health systems: a call to action. Evidence & Policy: A Journal of Research, Debate and Practice.

Tip #14 - The KT journey is winding (not linear)



Best, A., & Holmes, B. (2010). Systems thinking, knowledge and action: towards better models and methods. *Evidence & Policy: A Journal of Research, Debate and Practice*, 6(2), 145-159.

Tip #15 - You may need to translate different things on your KT journey

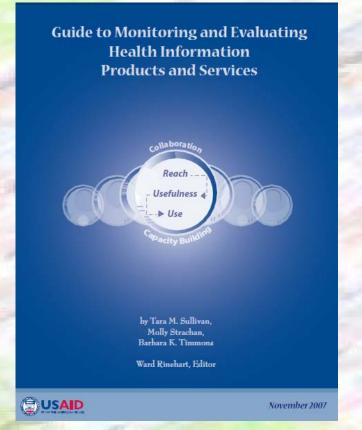


Reflecting on the journey

Reflection: Did it measure up?

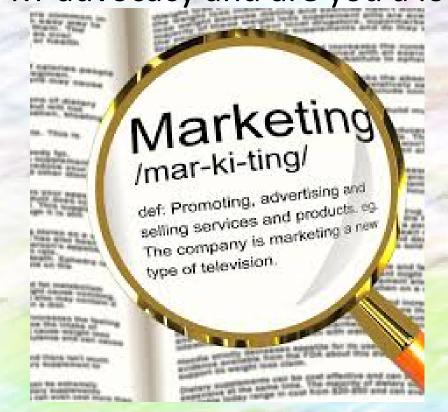
- Evaluation is ideally planned at the beginning of the journey
 - > Reach
 - Usefulness
 - > Use





Reflection: Were you comfortable on your journey?

- Is KT marketing and are you a salesperson?
- Is KT advocacy and are you a lobbyist?





The act of pleading or arguing in favor of something, such a large active support of an idea or active support of an idea or

A User's Guide to Advocacy Evaluation Planning
http://www.hfrp.org/evaluation/publications-resources/a-user-s-guide-to-advocacy-evaluation-planning
35

Reflection: Were your expectations realistic?

"It has been said that the two things one should never watch being made are sausages and public policy" (p. 2)

Lomas, J. (1997). *Improving research dissemination and uptake in the health sector: beyond the sound of one hand clapping* (pp. 1-45). Hamilton, Ontario: Centre for health economics and policy analysis.





Smooth sailing with our KT travel tips

- Tip #1 KT encompasses a range of different processes
- Tip #2 KT is plagued by term turmoil
- Tip #3: "It is déjà vu all over again" --- I say KT, you say.....
- Tip #4 KT is (usually) more than communications
- Tip #5 There are three main routes for evidence to inform policy and practice
- Tip #6 Don't travel alone: Take your knowledge users with you
- Tip #7 Use maps and guides
- Tip # 8 Researchers are from Mars, knowledge users are from Venus......
- Tip # 9 Learn the language of your target audiences (or pack your universal translator)
- Tip #10 Your suitcase will be heavy knowledge users need the full range of evidence and they need different types of information
- Tip #11 Translate bodies of knowledge
- Tip #12 Consider using an established tour guide
- Tip #13 Pay attention to your surroundings when travelling
- Tip #14 The KT journey is winding
- Tip #15 You may need to translate different things on your KT journey
- Tip #16 Reflect on your journey



Customs Declaration Card

- 1. Do you want your research to be useful?
- 2. Do you want your research to be used?
- 3. After reading the travel tips, are you still keen to embark on a KT journey?

If you answered yes to these questions, KT is right for you!



KT resources and training for researchers

MSFHR:

http://www.msfhr.org/our-work/activities/knowledge-translation/kt-resources

Guide to Knowledge Translation Planning at CIHR:

http://www.cihr-irsc.gc.ca/e/documents/kt lm ktplan-en.pdf

KT Canada:

http://ktcanada.org

Certificate in Knowledge Mobilization (University of Guelph- online):

https://www.knowledgemobilization.ca/

KT Planning Guides:

Scientist Knowledge Translation Plan Template: http://www.melaniebarwick.com/training.php

Public Health Agency of Canada KT Planning Primer: http://publications.gc.ca/site/eng/434858/publication.html

Recap: articles for new travellers

Best, A., & Holmes, B. (2010). Systems thinking, knowledge and action: towards better models and methods. Evidence & Policy: A Journal of Research, Debate and Practice, 6(2), 145-159.

Choi, B.C., et al. (2005). Can scientists and policy makers work together? *Journal of Epidemiology and Community Health*, 59(8), 632-637.

Coffman, J. (2009). A User's Guide to Advocacy Evaluation Planning. Harvard Family Research Project. Retrieved from http://www.hfrp.org/evaluation/publications-resources/a-user-s-guide-to-advocacy-evaluation-planning.

Estabrooks, C. A., et al. (2008). The intellectual structure and substance of the knowledge utilization field: A longitudinal author cocitation analysis, 1945 to 2004. *Implementation Science*, 3(1), 1.

Graham, I.D., et al. (2006). Lost in knowledge translation: time for a map? *Journal of Continuing Education in the Health Professions*, 26(1), 13-24.

Holmes, B.J., et al. (2016). Mobilising knowledge in complex health systems: a call to action. *Evidence & Policy: A Journal of Research, Debate and Practice*. http://dx.doi.org/10.1332/174426416X14712553750311

Lomas, J. (1997). Improving research dissemination and uptake in the health sector: beyond the sound of one hand clapping (pp. 1-45). Hamilton, Ontario: Centre for Health Economics and Policy Analysis.

McKibbon, K.A., et al. (2010). A cross-sectional study of the number and frequency of terms used to refer to knowledge translation in a body of health literature in 2006: a Tower of Babel?. *Implementation Science*, 5(1), 1.

Nilsen, P. (2015). Making sense of implementation theories, models and frameworks. Implementation Science, 10(1), 1.

Sullivan, T.M., Strachan, M. & Timmons, B.K. (2007). Guide to monitoring and evaluating health information products and services. US AID. Retrieved from https://www.k4health.org/sites/default/files/guide-to-monitoring-and-evaluating-health-information.pdf

Weiss, C.H. (1979). The many meanings of research utilization. *Public Administration Review*, 39(5), 426-431.

Questions/Comments?

- Which travel tips resonated with you?
- Do you have any travel tips of your own to add?

Bev Holmes bholmes@msfhr.org Marla Steinberg marlasteinberg@telus.net

