Evidence to Action: Capital Health, Public Health’s Evidence Gathering and Analysis Process (EGAP)

Presenter:

Nicole Druhan McGinn, Coordinator Research and Evaluation

May 1, 2014
Objectives:

• Share Capital Health, Public Health’s journey in evidence informed decision making through story.

• Provide an overview of the Evidence Gathering and Analysis Process (EGAP).
Background: What is Evidence Informed Decision Making in Public Health?
Background: Why should PH engage in EIDM?

*A public health practitioner is able to …*

**Public Health Sciences**
1.3 Apply the public health sciences to practice.
1.4 Use evidence and research to inform health policies and programs.

**Program Planning, Implementation and Evaluation**
3.1 Describe selected policy and program options to address a specific public health issue.
3.2 Describe the implications of each option, especially as they apply to the determinants of health and recommend or decide on a course of action.
3.3 Develop a plan to implement a course of action taking into account relevant evidence, legislation, emergency planning procedures, regulations and policies.
Background: Why should PH engage in EIDM?

“Public Health will: conduct assessments and seek understanding on the health of the population emphasizing:
- Understanding the evidence and best/promising practices for influencing supportive environments”

-Protocol Expectations Working Copy Release 0.1. Pg 41.
To what extent is PH engaging in EIDM?

“The use of research evidence to underpin public health policy is strongly promoted... However, its implementation has not been straightforward.”

Where’s the evidence?

Our Story…
What's freaking us out here is that we've found a correlation between owning cats and being struck by lightning.
This is not data analysis...

Try to grab that 84, it would look really good in our report
Practice Realities
Practice Realities
Practice Realities
What we did?

• Phase 1 Designed a process
• Phase 2 Developed tools and supports
• Phase 3 Outlined roles, responsibilities and accountabilities
• Phase 4 Test the process
The EGAP Process

Step 1: Develop a Conceptual Model
1. Define the practice issue
2. Identify team
3. Revise current knowledge
4. Draw conceptual model
5. Initiate the document that will become the final report

Step 2: Search the Evidence
1. Determine the question type
2. Develop PICOC/ECOS (terms/synonyms/alternative)
3. List the inclusion and exclusion criteria for the search
4. Refine the search strategy
5. Discuss results with supervisor to ensure right number of studies

Step 3: Critically Appraise
1. Obtain full-text articles from Step 2 searches
2. Identify the appropriate critical appraisal tool, based study type (systematic review, randomized controlled trial, qualitative analysis, etc.)
3. Critically appraise the research studies starting with the most recent article
4. Divide articles into weak, moderate, strong. Do not move forward with the weak articles

Step 4: Extract Data & Synthesize
1. Set up data extraction table (additional fields as necessary or changing the characteristics for relevance)
2. Fill in the table for each study
3. Group articles by proposed intervention in the data synthesis table (if applicable)
4. Synthesize and draft summary of recommendations from the literature

Step 5: Assess Applicability & Transferability
1. Select the relevant worksheet based on whether you are starting or stepping a program
2. Analyze intervention(s) using the A & T tool
3. Draft practice implications
4. Discuss results with decision makers
5. Determine proposed recommendations

Step 6: Document
1. Follow the 1:2:20 format: key messages, executive summary, full report
2. Fill out each section according to the report structure description

Step 7: Review & Utilize Manager Checklist
1. EGAP manager goes through the 21 steps on the manager checklist with team

Implement
Evaluate
Purpose

The EGAP is a systematic, reproducible and transparent process designed to support the evidence-informed decision-making needs of Capital Health, Public Health. EGAP is designed to be carried out more quickly, systematically and purposefully than a literature review, in order to have the best available evidence to inform decisions about practice, programming and policy making.
Systematic & Efficient

- Systems
  - Computerized decision support systems
- Summaries
  - Evidence-based clinical practice guidelines and evidence-based books
- Synopses of syntheses
  - Database of Abstracts of Reviews of Effects (DARE)
- Syntheses
  - Systematic reviews (Cochrane library)
- Synopses of studies
  - Journals with summaries of articles of good methodological quality
- Studies
  - Original articles published in journals
Reproducible & Transparent

http://libguides.cdha.nshealth.ca/PublicHealth-EGAP
Roles and Responsibilities - Partnership

Capital Health Librarian Educator & Librarians

• Reduced duplication
• Librarian performs search based on inclusion, exclusion and PICO/PECO/PS question developed by PH specialist
• Library staff use the EGAP site - they know our process and their role in it.
# Roles and Responsibilities

## Evidence Gathering and Analysis (EGAP) TASKS

### STEP 1

1. **Identify the public health or practice issue:** Front-line staff, teams, or management bring forward health issues, population needs, gaps in practice, or new ideas.

   - **Task:** Identify the public health or practice issue.
   - **Steps:**
     - 1.1a. Determine if this question has been investigated in another high quality rapid review (Fee, Durham).
     - 1.2. Receive and approve rapid review question: Director & Dr. Watson Creed approve the practice issue as appropriate & feasible for a rapid review. Contact Dr. Watson Creed’s AA to setup all RR meetings with Dr. Watson Creed & KB.
   - **Approval:**
     - **EGAP MOH:** I
     - **Director:** I
     - **EGAP Manager:** I
     - **EGAP Specialist:** I

2. **Receive and approve rapid review question:** Director & Dr. Watson Creed approve the practice issue as appropriate & feasible for a rapid review. Contact Dr. Watson Creed’s AA to set up all RR meetings with Dr. Watson Creed & KB.

   - **Task:** Receive and approve rapid review question.
   - **Steps:**
     - 2.1. Determine if this question has been investigated in another high quality rapid review (Fee, Durham).
     - 2.2. Receive and approve rapid review question: Director & Dr. Watson Creed approve the practice issue as appropriate & feasible for a rapid review. Contact Dr. Watson Creed’s AA to set up all RR meetings with Dr. Watson Creed & KB.
   - **Approval:**
     - **EGAP MOH:** I
     - **Director:** I
     - **EGAP Manager:** I
     - **EGAP Specialist:** I

3. **Confirm practice question (plain language) and review current knowledge:** RR team meets with Dr. Watson Creed & KB to identify the public health issue ‘on the table’ & the contextual influencing factors.

   - **Task:** Confirm practice question (plain language) and review current knowledge.
   - **Steps:**
     - 3.1. Confirm practice question (plain language) and review current knowledge: RR team meets with Dr. Watson Creed & KB to identify the public health issue ‘on the table’ & the contextual influencing factors.
   - **Approval:**
     - **EGAP MOH:** A
     - **Director:** A
     - **EGAP Manager:** P
     - **EGAP Specialist:** P
     - **Knowledge Broker:** G

4. **Begin change management:** Meet with relevant staff to consider the impact of potential practice changes on relevant staff. Engage in dialogue, reframe work, & clarify roles.

   - **Task:** Begin change management.
   - **Steps:**
     - 4.1. Begin change management: Meet with relevant staff to consider the impact of potential practice changes on relevant staff. Engage in dialogue, reframe work, & clarify roles.
   - **Approval:**
     - **EGAP MOH:** G
     - **Director:** G
     - **EGAP Manager:** P
     - **EGAP Specialist:** G

5. **Develop Conceptual Model:** Illustrate the practice issue using a model, if appropriate.

   - **Task:** Develop Conceptual Model.
   - **Steps:**
     - 5.1. Develop Conceptual Model: Illustrate the practice issue using a model, if appropriate.
   - **Approval:**
     - **EGAP MOH:** A
     - **Director:** P
     - **EGAP Manager:** P

### STEP 2

1. **Determine the question type:** Identify elements of a searchable question.

   - **Task:** Determine the question type.
   - **Steps:**
     - 1.1. Determine the question type: Identify elements of a searchable question.
   - **Approval:**
     - **EGAP MOH:** A
     - **Director:** P
     - **EGAP Manager:** G

2. **Develop the PICO/POC/OPS terms**

   - **Task:** Develop the PICO/POC/OPS terms.
   - **Steps:**
     - 2.1. Develop the PICO/POC/OPS terms.
   - **Approval:**
     - **EGAP MOH:** I
     - **Director:** I
     - **EGAP Manager:** G

3. **List inclusion and exclusion criteria for the search**

   - **Task:** List inclusion and exclusion criteria for the search.
   - **Steps:**
     - 3.1. List inclusion and exclusion criteria for the search.
   - **Approval:**
     - **EGAP MOH:** I
     - **Director:** P
     - **EGAP Manager:** G

4. **Develop search strategy:** In consultation with the librarian.

   - **Task:** Develop search strategy.
   - **Steps:**
     - 4.1. Develop search strategy: In consultation with the librarian.
   - **Approval:**
     - **EGAP MOH:** A
     - **Director:** P
     - **EGAP Manager:** G

5. **Conduct search, apply relevance criteria & discuss results with the EGAP Manager and Specialist:** Search

   - **Task:** Conduct search, apply relevance criteria & discuss results with the EGAP Manager and Specialist.
   - **Steps:**
     - 5.1. Conduct search, apply relevance criteria & discuss results with the EGAP Manager and Specialist: Search
   - **Approval:**
     - **EGAP MOH:** A
     - **Director:** P
     - **EGAP Manager:** G
How we did it-EGAP Timeline

Dec 2012
EIDM mentorship with Peel PH

Feb/ March 2013
Focus Groups post PHSR lit review informs need

May 2013
EIDM Workshop @ McMaster- established networks
-Health Evidence
-Peel
-Durham
How we did it-EGAP timeline (con’t)

**June 2013**
Project Charter
Proposed process adapting Peel/Durham PH, HE and NCCMT processes

**August 2013**
Completed process and website
Propose 2nd stage- Roles and Accountability Framework and training

**October 2013**
Draft an Accountability roadmap
Define a practice question

**Nov 2013-Mar 2014**
Test process and accountability framework experientially
Lessons Learned

• A clear process supports engagement and meaningful collaboration

• Accountability framework supports focus and guides the decision to dedicate resources

• Resource intensive

• Mentors are essential
Lessons Learned
Lessons Learned

No thanks!

We are too busy
Next Steps

• Revise the process based on what we learn by testing it.

• Train health promotion staff in supporting the process.