Building organizational capacity for evidence-informed decision making with an online skills assessment tool

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Public Health 2019
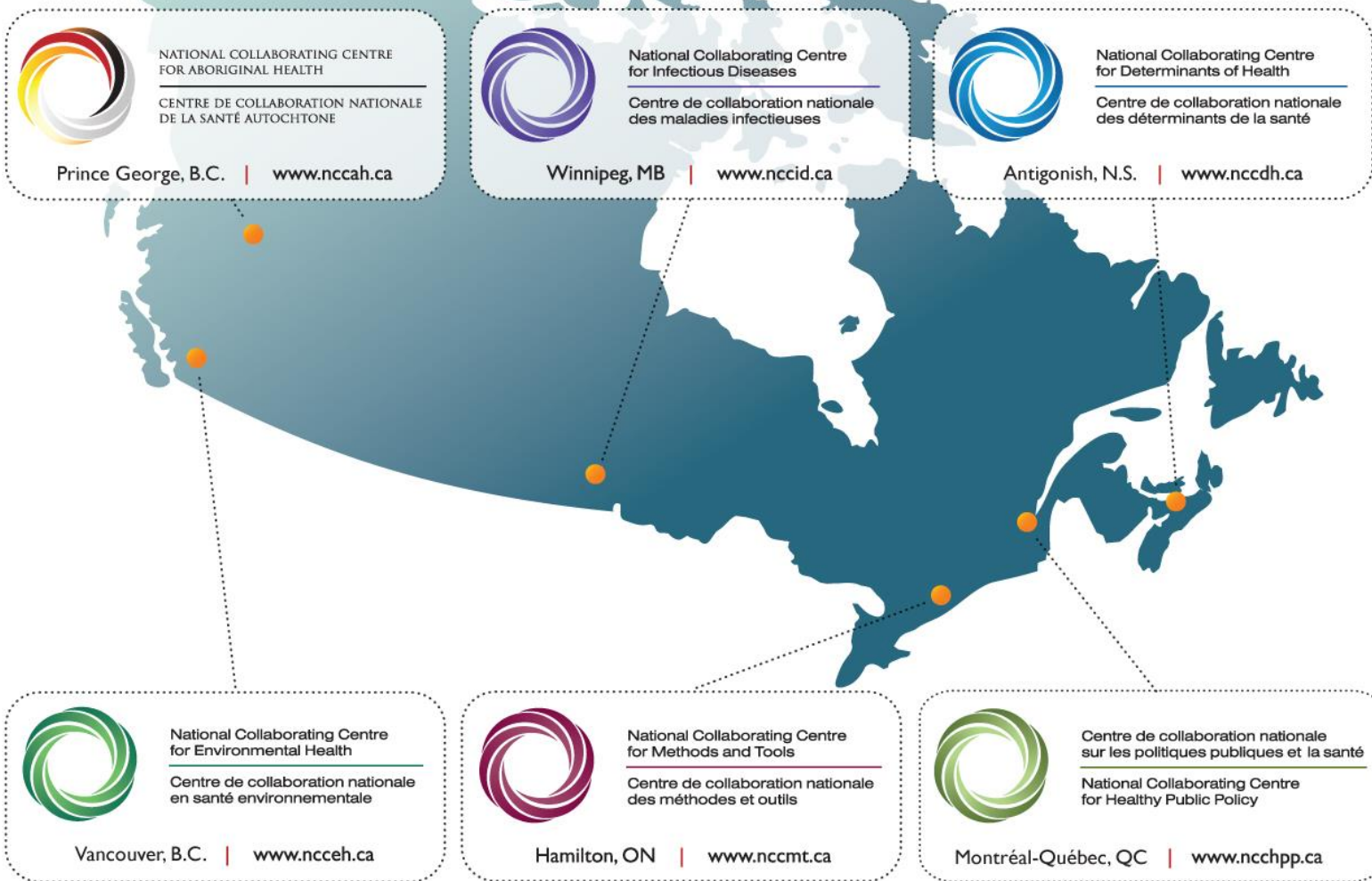Ottawa, ON
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Disclosure Statement

- I have no affiliation (financial or otherwise) with a pharmaceutical, medical device or communications organization.

National Collaborating Centres for Public Health
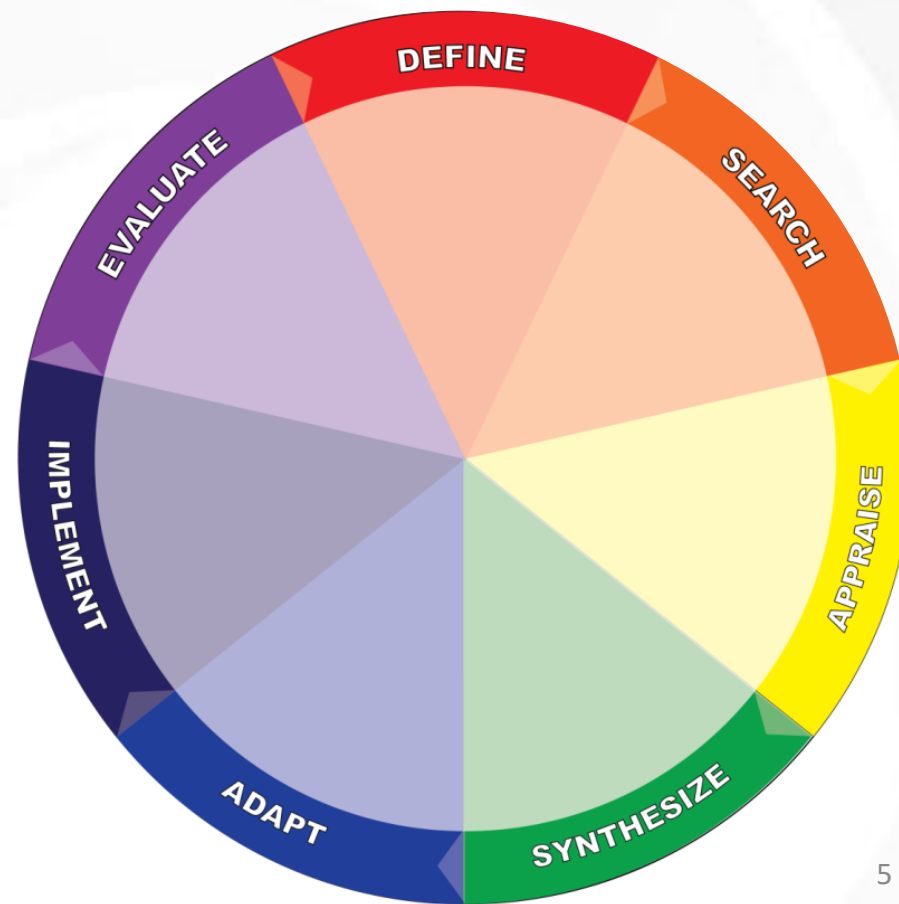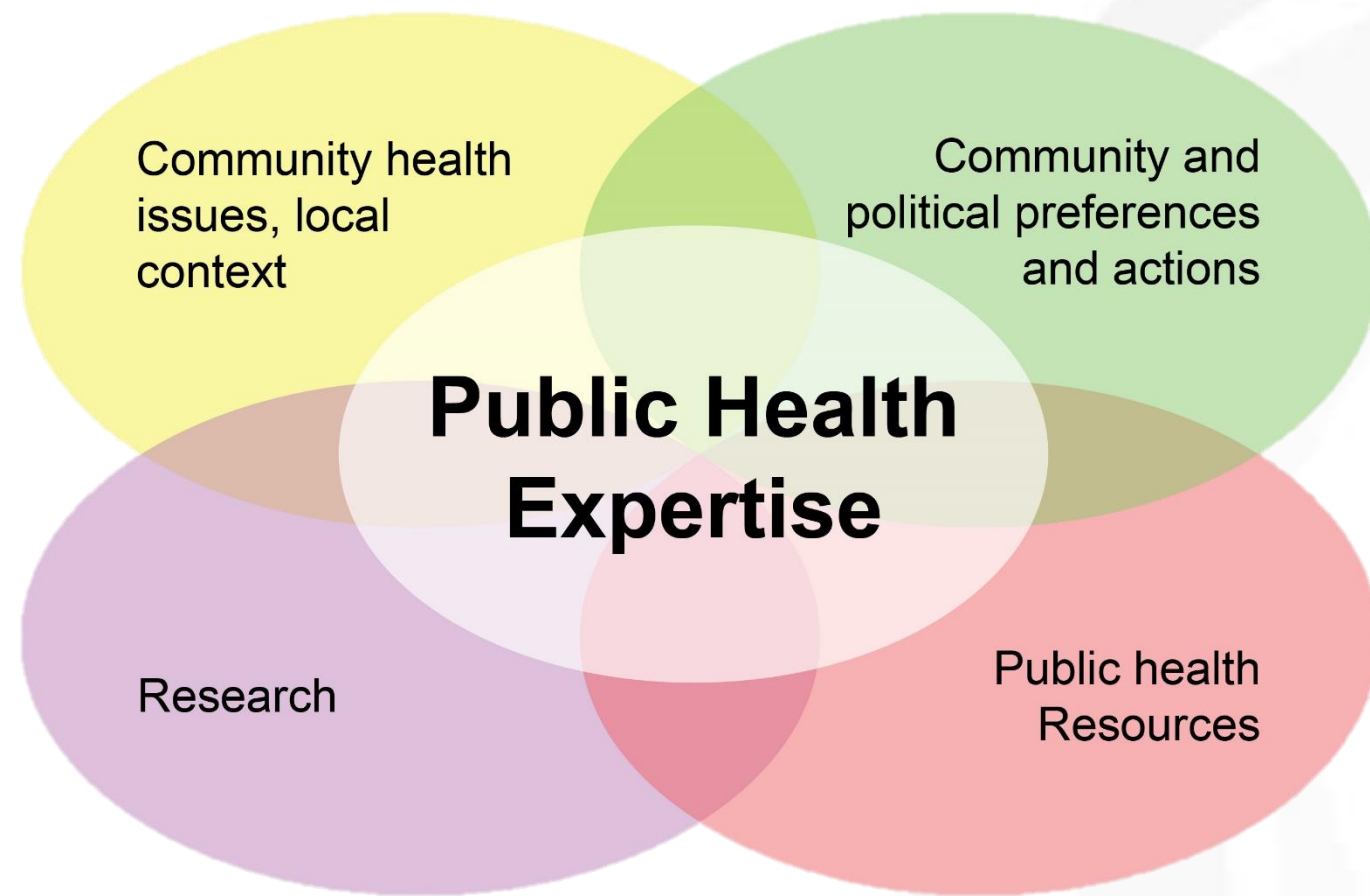Centres de collaboration nationale en santé publique

NATIONAL COLLABORATING CENTRE FOR ABORIGINAL HEALTH
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Prince George, B.C. | www.nccah.ca

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National Collaborating Centre for Determinants of Health
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National Collaborating Centre for Healthy Public Policy
Montréal-Québec, QC | www.ncchpp.ca

What is Evidence-Informed Public Health?

The process of distilling and disseminating the best available evidence from research, context and experience, and using that evidence to inform and improve public health practice, programs and policy.

Evidence-informed decision making (EIDM)

Community health issues, local context

Community and political preferences and actions

Public Health Expertise

Research

Public health Resources

DEFINE
SEARCH
APPRAISE
SYNTHESIZE
ADAPT
IMPLEMENT
EVALUATE

The Online EIDM Skills Assessment

- Launched in 2017

- 20 multiple choice questions

- Receive a personalized report with suggested resources to build EIDM capacity

- Expansion to allow teams and / or groups within organizations to customize the assessment to their needs

Online EIDM Skills Assessment

QUESTION 6 OF 20

6. What can a confidence interval tell you?

- ☐ a) heterogeneity
- ☐ b) sample size
- ☐ c) publication bias
- ☐ d) statistical significance
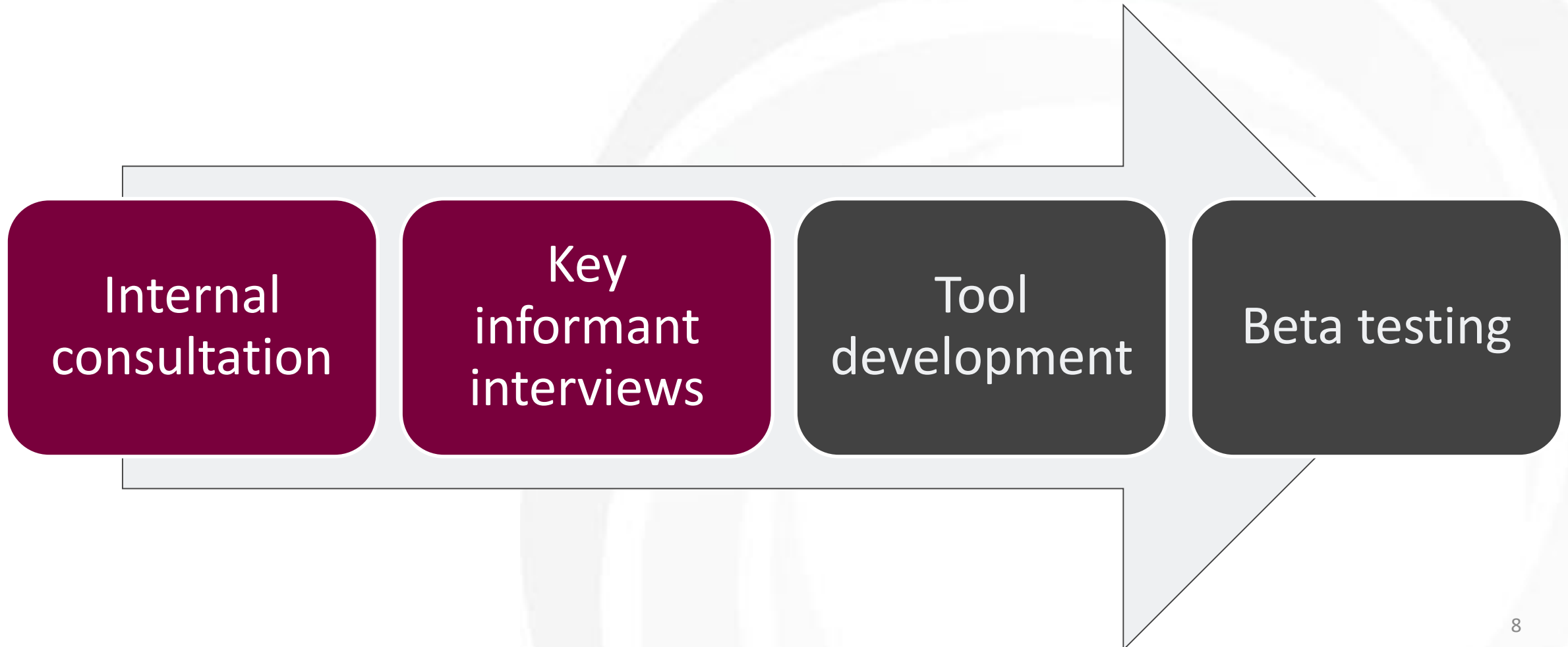- ☐ e) I don't know

Development Process

Internal consultation → Key informant interviews → Tool development → Beta testing

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Thank you for completing the Online EIDM Skills Assessment. Your final score was X/20.

The preceding multiple choice questions were designed to assess your knowledge and skills in finding and using research evidence in decision making. The following report summarizes free, online learning opportunities available to improve your score.

We also recommend starting with the online learning module *Introduction to EIDM*, or the abbreviated module, *EIDM Essentials*, to establish a solid foundation on which to build your capacity.

1. Defining the Research Question Using PICO

To learn more about defining a research question using PICO, we suggest you complete the *Searching for Research Evidence in Public Health* online learning module.

2. Searching for Research Evidence

To learn more about efficiently and effectively searching for research evidence, we suggest you complete the *Searching for Research Evidence in Public Health* online learning module. You can also watch the *Step 2 – Searching* video part of the *Evidence-informed Public Health* video series.

3. Critical Appraisal of Intervention Studies

To learn more about how to assess the quality of study methods, we suggest you complete the *Critical Appraisal of Intervention Studies* online learning module.

4. Applying the Results of a Study

To learn more about the factors to consider when adapting research evidence to local contexts, we suggest you complete the *Assessing the Applicability and Transferability of Evidence* online learning module.

5. Critical Appraisal of Systematic Reviews

To learn more about how to assess the quality of systematic reviews, we suggest you complete the *Critical Appraisal of Systematic Reviews* online learning module. For an introduction to different types of reviews, watch the *Types of Reviews What kind of review do we need?* video in the Understanding Research Evidence video series.

6-10. Interpreting Research Results

To learn more about how to interpret statistics, we suggest you view the *Understanding a Confidence Interval*, *How to Calculate an Odds Ratio* and *Relative Risk: it's easy to calculate and interpet* videos in the *Understanding Research Evidence* video series.

Sample Report

National Collaborating Centre for Methods and Tools

Centre de collaboration nationale des méthodes et outils

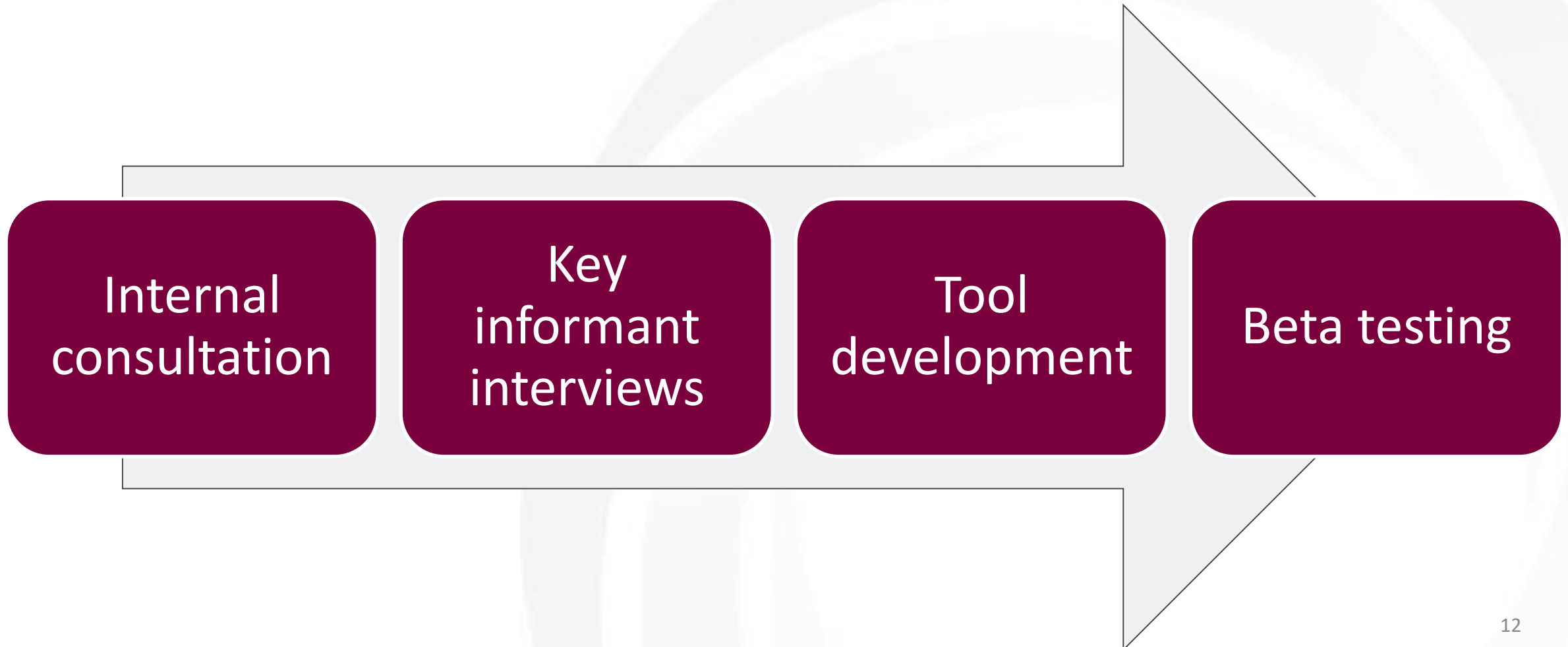### Skills Assessment Group Assessment Report

This report shows the performance of your group on the Evidence-Informed Decision Making Skills Assessment tool. The group average is included at the bottom of this report for each question, and the individual totals are included at the end of each row. A score of 1 indicates the question was answered correctly, and a 0 indicates it was answered incorrectly. A list of suggested resources to build EIDM capacity is provided below the report. These are prioritized in terms of your team's performance on questions relating to that skill as shown by the percentages in the score column. As result, the lowest scoring skill areas are listed first in this list. The percentage in the score column relates to the group average for the question.

Please contact us at nccmt@mcmaster.ca if you have any questions.

	Question 1 Defining a Research Question using PICO	Question 2 Searching for Research Evidence	Question 3 Critical Appraisal of Intervention Studies	Question 4 Applying the Results of a Study	Question 5 Critical Appraisal of Systematic Reviews	Question 6 Interpreting Research Results	Question 7 Interpreting Research Results	Question 8 Interpreting Research Results	Question 9 Interpreting Research Results	Question 10 Interpreting Research Results	Question 11 Applying the Results of a Study	Question 12 Choosing the Best Qualitative Study Design	Question 13 Searching for Research Evidence	Question 14 Choosing the Best Qualitative Study Design	Question 15 Understanding Qualitative Study Designs	Question 16 Planning for Change	Question 17 Knowledge Translation Strategies	Question 18 Planning for Evaluation	Question 19 Outcome Measures	Question 20 Choosing the Right Critical Appraisal Tool	Total Score
Group Average	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

NCCMT Resource	Resource Type	ills Assessment Questions	Score
Critical Appraisal of Guideline	Online Learning Module	20	0.00%
Critical Appraisal of Qualitative Studies	Online Learning Module	14, 15	0.00%
Quantitative Research Designs 101	Online Learning Module	12	0.00%
Critical Appraisal of Systematic Reviews	Online Learning Module	5, 20	0.00%
How to Calculate an Odds Ratio	Video	6, 7, 8, 9, 10	0.00%
Relative Risk: it's easy to calculate and interpret	Video	6, 7, 8, 9, 10	0.00%
Understanding a Confidence Interval	Video	6, 7, 8, 9, 10	0.00%
Critical Appraisal of Intervention Studies	Online Learning Module	3, 20	0.00%
Evaluating Knowledge Translation Strategies in Public Health	Online Learning Module	18, 19	0.00%
Types of Reviews: What kind of review do we need?	Video	5	0.00%
Assessing the Applicability and Transferability of Evidence	Online Learning Module	4, 11	0.00%
Implementing Knowledge Translation Strategies in Public Health	Online Learning Module	16, 17	0.00%
Step 2 - Searching	Video	2, 13	0.00%
Searching for Research Evidence in Public Health	Online Learning Module	1, 2, 13	0.00%

Why use this tool?

- Developed by public health practitioners for public health practitioners
- Increasing emphasis on EIDM in public health practice
- The EIDM Skills Assessment can be used:
  - To identify EIDM capacity building and professional development needs of staff
  - To take action on identified professional development needs with suggested resources
  - During orientation for new staff to a public health organization

Next Steps

- Formally launch the group functionality in 2019
- Explore developing sets of questions to assess different levels of EIDM competence

If you are interested in creating your own EIDM Skills Assessment for a group, please contact Claire Howarth.

Claire Howarth

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(905) 525-9140 ext. 20460

Questions?