



National Collaborating Centre  
for Methods and Tools

Centre de collaboration nationale  
des méthodes et outils

# Rapid Reviews 101: Workshop

Olivia Marquez  
**Kristin Read**

Public Health 2018  
May 30, 2018

# Disclosure Statement

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



# Objectives

By participating in this workshop, participants will:

- describe, apply and identify resources to support the steps of conducting a rapid review;
- define a focused research question and identify sources of evidence to answer that question;
- appraise and synthesize evidence.



# The NCCMT

## Mission

- Enhance *evidence-informed public health* in practice, programs and policy in Canada
- Provide leadership and expertise in supporting the uptake of *what works* in public health



# A Model for Evidence-Informed Decision-Making



# What is a systematic review?

How does that differ from a rapid review?

Rapid reviews are a form of knowledge synthesis that follow the systematic review process, but components of the process are simplified or omitted to produce information in a timely manner (Khangura, 2012).



# The Rapid Review Guidebook

Step 1: Define a Practice Question

Step 2: Search for Research Evidence

Step 3: Critically Appraise the Information Sources

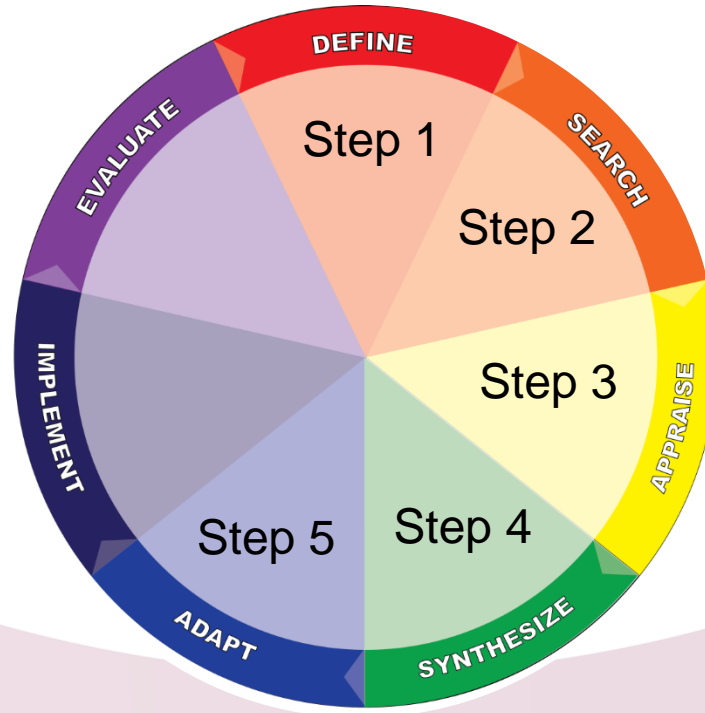
Step 4: Synthesize the Evidence

Step 5: Identifying Applicability and Transferability Issues for Further Consideration



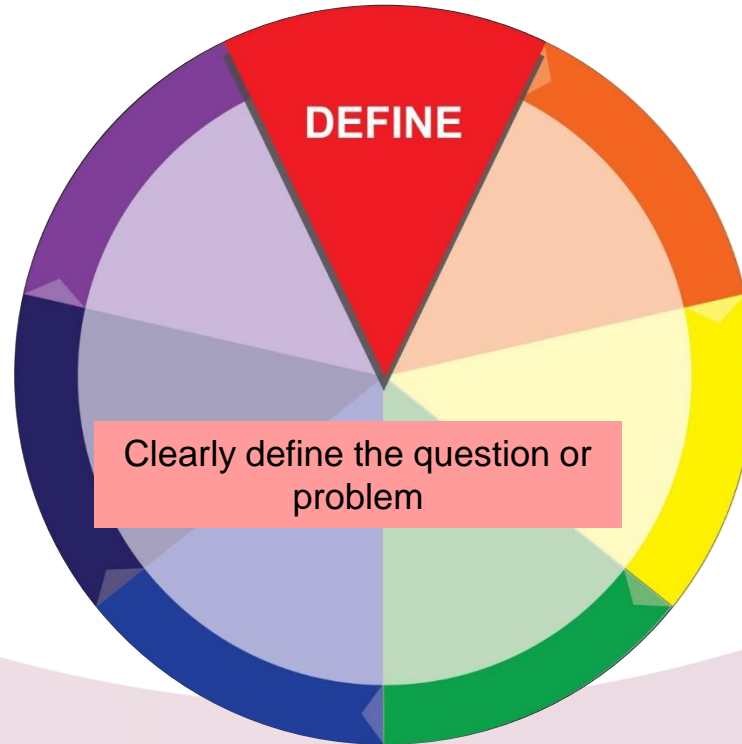
Stages in the process of

# Evidence-Informed Decision Making





# Step 1: Define a Practice Question



# Step 1: Define a Practice Question

<b>PICO</b>	<b>PECO</b>	<b>PS</b>
<b>P</b> opulation	<b>P</b> opulation	<b>P</b> opulation
<b>I</b> ntervention	<b>E</b> xposure	<b>S</b> ituation
<b>C</b> omparison	<b>C</b> omparison	
<b>O</b> utcome	<b>O</b> utcome	



# Define the question

How do we increase the proportion of the population who get a flu shot this fall?

## PICO

- P** general population
- I** social media (twitter, facebook, snapchat)
- C** usual media campaign
- O** proportion of people in community who get flu vaccine
- (T)** *Dec 2017*



# GROUP ACTIVITY # 1:

## Define a Practice Question

Create a PICO statement for the following research objective:

- **Prevent obesity among children and youth**
- What does research say about obesity prevention



# GROUP ACTIVITY # 1: Discussion

## What would PICO be?

- P** school aged children (4-17 y/o)
- I** school-based interventions
- C** usual/nothing
- O** weight, BMI, weight gain trajectory, rates of obesity, physical activity
- (T)** *time*

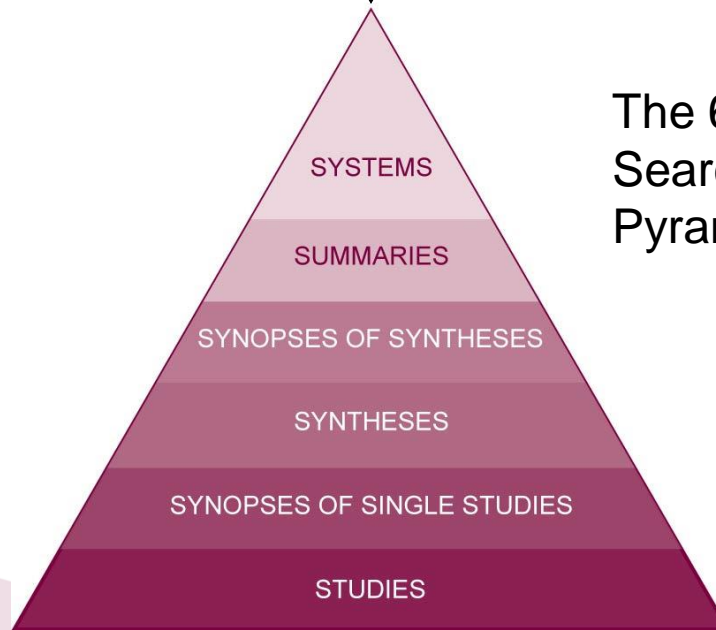


# Step 2: Search for Research Evidence



# Searching

Start here with a question



The 6S  
Search  
Pyramid

(DiCenso et al., 2009; Haynes et al. 2005; Robeson et al., 2010)



Health departments are welcome to adapt this tool. Requirements for adapting this tool include: Health Evidence™ and Peel Public Health are acknowledged for tool development; and adapted tool cannot be used for profit (not to be sold).

The Health Evidence™ team has reviewed the update for the evidence-based health care (EBHC) 5.0 pyramid for accessing pre-appraised evidence and guidance and concluded the 6S pyramid continues to be the most applicable model for a public health audience. Health Evidence™ acknowledges the value of differentiating between evidence-based online texts and guidelines as in the 5.0 pyramid. These differences are noted in the 'summaries' section below

Question Searched: \_\_\_\_\_ →

- Insert the question that you are conducting this search to answer.
- Remember **PICO**: Population, Intervention, Comparison, Outcome(s)  
 → See [Developing an Efficient Search Strategy Using PICO](#)

Date Search Conducted:

<b>P:</b>
<b>I:</b>
<b>C:</b>
<b>O:</b>

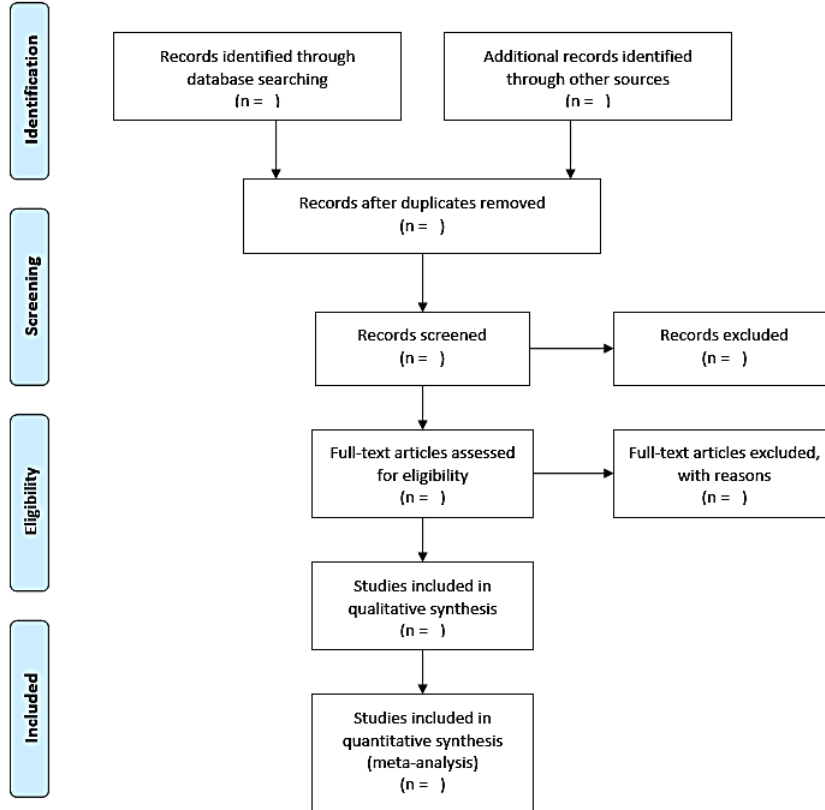
Level of the Pyramid	Publicly Available YES / NO	Critically Appraised Resources YES / NO	<i>Note: Access to full text limited</i>	Total No. Results (through search)	Links to Saved Search Strategy & to Results (insert here)
<b>SUMMARIES Evidence-Based Online Texts</b>	NO	YES	<b>Clinical Evidence</b> <a href="http://www.clinicalevidence.com">http://www.clinicalevidence.com</a>		
			<b>Dynamed</b> <a href="http://www.ebscohost.com/dynamed">http://www.ebscohost.com/dynamed</a>		
			<b>StatRef Pier</b> <a href="http://pier.acponline.org/index.html">http://pier.acponline.org/index.html</a>		
			<b>UpToDate</b> <a href="http://www.uptodate.com">http://www.uptodate.com</a>		
<b>SUMMARIES Guidelines</b>	YES	YES	<b>National Guidelines Clearinghouse (NGC)</b> <a href="http://guideline.gov">http://guideline.gov</a> <i>Note: for appraised guidelines only, check box in search tool on left side "Includes NEATS assessment"; may include guidelines from the following organizations, but not all will be captured</i> <ul style="list-style-type: none"> <li>• <b>Registered Nurses Association of Ontario (RNAO)</b> <a href="http://rmao.ca/bpg">http://rmao.ca/bpg</a></li> <li>• <b>Canadian Medical Association (CMA Infobase)</b> <a href="https://www.cma.ca/En/Pages/clinical-practice-guidelines.aspx">https://www.cma.ca/En/Pages/clinical-practice-guidelines.aspx</a></li> <li>• <b>Canadian Task Force on Preventive Health Care</b> <a href="https://canadiantaskforce.ca/guidelines/published-guidelines/">https://canadiantaskforce.ca/guidelines/published-guidelines/</a></li> <li>• <b>Centers for Disease Control and Prevention (CDC)</b> <a href="https://www.cdc.gov/">https://www.cdc.gov/</a></li> </ul>		
			<b>National Institute for Health and Clinical Excellence (NICE) Public Health Guidance</b> <a href="https://www.nice.org.uk/guidance">https://www.nice.org.uk/guidance</a>		
			<b>Turning Research into Practice (TRIP) Database</b> <a href="http://www.tripdatabase.com">http://www.tripdatabase.com</a> <i>Note: filter search by "Guidelines"</i>		
			<b>Canadian Best Practices Portal</b> <a href="http://cbpp-pcpe.phac-aspc.gc.ca/">http://cbpp-pcpe.phac-aspc.gc.ca/</a>		
			<b>Public Health Resources on NHS Evidence</b> <a href="https://www.evidence.nhs.uk/">https://www.evidence.nhs.uk/</a>		
	YES	NO			



# Documenting Your Process



## PRISMA 2009 Flow Diagram



# Study Selection

Inclusion/exclusion for title and abstract

Inclusion/exclusion for full text

**Software: Endnote, Reference Manager**

Piloting forms with team: ~10 articles

Keeping track for PRISMA flow diagram

Process - # of people, independent or checking?



# Inclusion/Exclusion

## Participants

- Age, gender, stage of disease, comorbidities, etc.

## Types of interventions

- Specifics, co-interventions?

## Acceptable comparisons

## Outcomes

- Actual measured strategy
- Time periods measured

## Types of studies



# GROUP ACTIVITY # 2:

## Search for Research Evidence

- Use the example inclusion and exclusion criteria to screen the sample titles provided in the worksheet
- Identify if article is **relevant**, **not relevant**, or **need more information** and provide rationale



# GROUP ACTIVITY # 2: Discussion Relevance Screening

In?

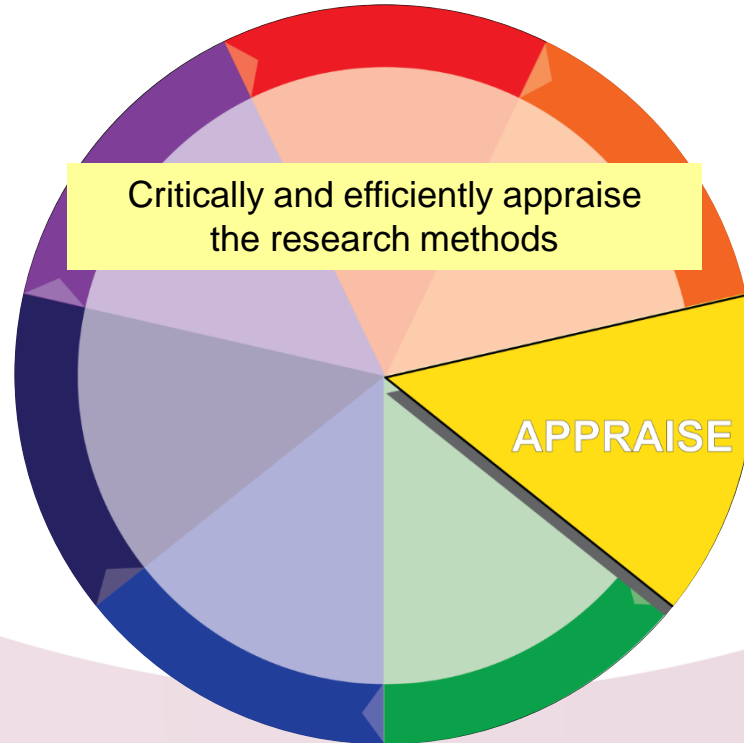
Out?

WHY?

Need Full-text?



# Step 3: Critically Appraise the Information Sources



# Recommended Tools

Guidelines: **AGREE II**

<http://www.agreetrust.org/resource-centre/agree-ii/>

Systematic reviews: **AMSTAR** [http://amstar.ca/Amstar\\_Checklist.php](http://amstar.ca/Amstar_Checklist.php)

Or **Health Evidence™** - [http://thevidence.org/documents/our-appraisal-tools/QA\\_Tool&Dictionary\\_10Nov16.pdf](http://thevidence.org/documents/our-appraisal-tools/QA_Tool&Dictionary_10Nov16.pdf)

**Critical Appraisal Skills Programme: Checklists**

<http://www.casp-uk.net/>

CASP offers free, downloadable checklists for:

- Randomised Controlled Trials
- Systematic Reviews
- Cohort Studies
- Case-Control Studies
- Qualitative Studies
- Economic Evaluations
- Diagnostic Studies
- Clinical Prediction Rules



# GROUP ACTIVITY # 3:

## Critically Appraise the Information Sources

- Using the table in the worksheet, record the sections of a systematic review where you would find the answers to the questions from the **Health Evidence™ Quality Assessment Tool**





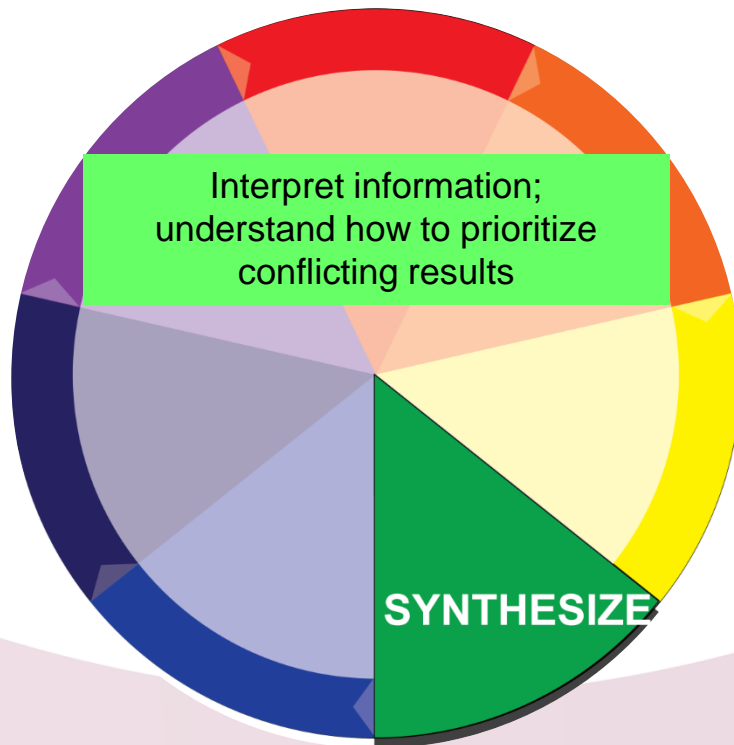
# GROUP ACTIVITY # 3: Discussion

National Collaborating Centre for Methods and Tools. (2017). Anatomy of a Systematic Review [fact sheet]. Retrieved from [http://www.nccmt.ca/pubs/FactSheet\\_AnatomySR\\_EN\\_WEB.pdf](http://www.nccmt.ca/pubs/FactSheet_AnatomySR_EN_WEB.pdf)

Element	Where to find it in the publication
Clearly defined question (in PICO format: Population, Intervention, Comparison, Outcome)	<ul style="list-style-type: none"> <li>Title</li> <li>Abstract (also called Purpose)</li> <li>Introduction (usually the last sentence in this section)</li> </ul>
Clear and appropriate inclusion/exclusion criteria	<ul style="list-style-type: none"> <li>Methods (first or second paragraph)</li> </ul>
Comprehensive search strategy	<ul style="list-style-type: none"> <li>Methods (first or second paragraph)</li> </ul>
Appropriate search time frame	<ul style="list-style-type: none"> <li>Methods (first or second paragraph)</li> </ul>
Level of evidence	<ul style="list-style-type: none"> <li>Methods (usually included with the inclusion/exclusion criteria)</li> <li>Table of Results</li> </ul>
Quality of included evidence	<ul style="list-style-type: none"> <li>Results (table may be in the Results section or at end of the publication)</li> </ul>
Transparency of methods for data extraction	<ul style="list-style-type: none"> <li>Methods</li> </ul>
Assessment of heterogeneity	<ul style="list-style-type: none"> <li>Methods (included in Data Analysis)</li> <li>Results</li> <li>Forest Plots (if review is a meta-analysis)</li> </ul>
Appropriately weighted results	<ul style="list-style-type: none"> <li>Methods (usually included in Data Analysis)</li> <li>Results</li> <li>Forest Plots (if review is a meta-analysis)</li> </ul>
Consistency of conclusion	<ul style="list-style-type: none"> <li>Comparison of Results, Discussion and Conclusions</li> <li>Comparison of Forest Plots, Discussion and Conclusions (if review is a meta-analysis)</li> </ul>



# Step 4: Synthesize the Evidence



# Data extraction

What data do you need to extract?

Characteristics of Included Studies																				
		Methods						Participants					Interventions					Outcomes	Notes	
RefID	Author (Year)	Reviewer	Design	Theoretical Framework	No. of intervention groups	No. of control groups	Follow up schedule / timeline	N (intervention)	N (control)	Age	Sex	Ethnicity	Country	Setting	Provider	Duration	Interventions			
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		
	Author (Year) - 1st study	1st Reviewer																		
	Author (Year) - 2nd study	2nd Reviewer																		



# Which studies do you believe?

## **Best quality**

Most recent (especially if it is review)

Most applicable to your population/patients

Intervention for which you have resources

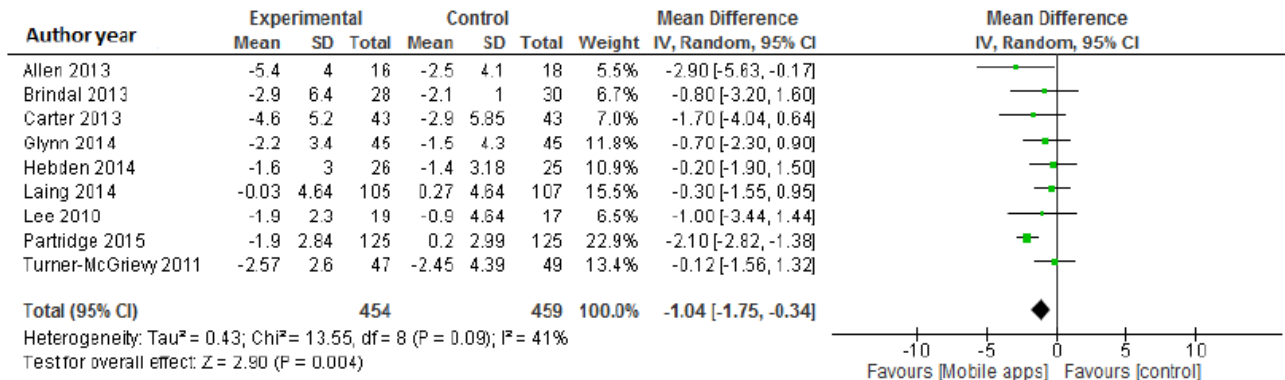


# Understanding Research Evidence



# Results

**Figure 2.** Meta-analysis of the net change in body weight (kg) associated with mobile phone app intervention, expressed as the change during the mobile phone app intervention minus the change during the control diet. The area of each square is proportional to the inverse of the variance of the weighted mean difference. Horizontal lines represent 95% CIs. Diamonds represent pooled estimates from inverse variance (IV) weighted random-effects models.



# GROUP ACTIVITY # 4:

## Synthesize the Evidence

- Review the 3 forest plots in the worksheet and create a clear and concise 1-2 sentence summary of the findings



Study or Subgroup	Mean Difference	SE	Cocoa Control		Weight	Mean Difference IV, Random, 95% CI	Mean Difference IV, Random, 95% CI
			Total	Total			
<b>2.1.1 Hypertensive (&gt; 140 mmHg)</b>							
Taubert 2003	-5.1	0.73	13	13	3.2%	-5.10 [-6.53, -3.67]	
Grassi 2005b	-11.3	0.95	20	20	3.1%	-11.30 [-13.16, -9.44]	
Taubert 2007	-2.8	2.28	22	22	2.4%	-2.80 [-7.27, 1.67]	
Grassi 2008	-3.7	0.7	19	19	3.2%	-3.70 [-5.07, -2.33]	
Muniyappa 2008	-1	1.6	20	20	2.8%	-1.00 [-4.14, 2.14]	
Bogaard 2010	0.25	1.54	41	41	2.8%	0.25 [-2.77, 3.27]	
Davison 2010	-2	5.22	13	14	1.1%	-2.00 [-12.23, 8.23]	
Desideri 2012	-8.7	1.15	30	30	3.0%	-8.70 [-10.95, -6.45]	
Koli 2015	1	1.69	22	22	2.7%	1.00 [-2.31, 4.31]	
<b>Subtotal (95% CI)</b>			<b>200</b>	<b>201</b>	<b>24.3%</b>	<b>-4.00 [-6.71, -1.30]</b>	

Heterogeneity:  $\tau^2 = 14.08$ ;  $\chi^2 = 89.42$ ,  $df = 8$  ( $P < 0.00001$ );  $I^2 = 91\%$

Test for overall effect:  $Z = 2.90$  ( $P = 0.004$ )



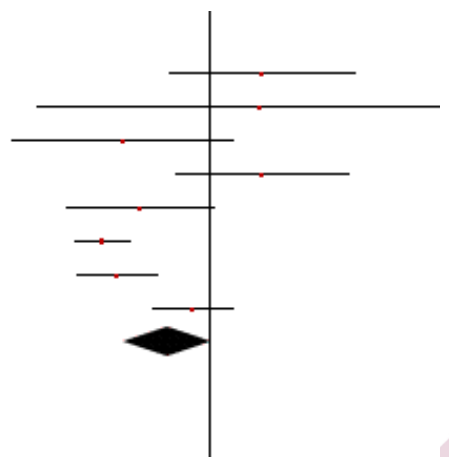


### 2.1.2 Prehypertensive (> 130 mmHg)

Monagas 2009	3	2.72	11	10	2.2%	3.00 [-2.33, 8.33]
Ried 2009	2.9	6.55	11	10	0.8%	2.90 [-9.94, 15.74]
Heiss 2010	-5	3.23	16	16	1.9%	-5.00 [-11.33, 1.33]
Khan 2012	3	2.54	42	42	2.3%	3.00 [-1.98, 7.98]
Heiss 2015b	-4	2.17	10	10	2.5%	-4.00 [-8.25, 0.25]
Mastroiacovo 2015	-6.2	0.81	30	30	3.1%	-6.20 [-7.79, -4.61]
Rostami 2015	-5.34	1.15	32	28	3.0%	-5.34 [-7.59, -3.09]
Rull 2015	-1	1.16	21	21	3.0%	-1.00 [-3.27, 1.27]
<b>Subtotal (95% CI)</b>			<b>173</b>	<b>167</b>	<b>18.7%</b>	<b>-2.43 [-5.02, 0.17]</b>

Heterogeneity:  $\tau^2 = 8.92$ ;  $\chi^2 = 30.85$ ,  $df = 7$  ( $P < 0.0001$ );  $I^2 = 77\%$

Test for overall effect:  $Z = 1.83$  ( $P = 0.07$ )



### 2.1.3 Normotensive

Murphy 2003	-1	4	13	15	1.5%	-1.00 [-8.84, 6.84]
Engler 2004	1.8	4.43	11	10	1.4%	1.80 [-6.88, 10.48]
Fraga 2005	-4	1.6	14	14	2.8%	-4.00 [-7.14, -0.86]
Grassi 2005a	-6.5	1.49	15	15	2.8%	-6.50 [-9.42, -3.58]
Al-Faris 2008	-7.1	2.19	30	29	2.5%	-7.10 [-11.39, -2.81]
Crews 2008	-0.53	2.64	45	45	2.2%	-0.53 [-5.70, 4.64]
Davison 2008a	-6.1	3.46	12	11	1.8%	-6.10 [-12.88, 0.68]
Davison 2008b	1.6	4.5	13	13	1.3%	1.60 [-7.22, 10.42]
Shiina 2009	0.6	3.82	20	19	1.6%	0.60 [-6.89, 8.09]
Njike 2011	3.2	1.72	39	39	2.7%	3.20 [-0.17, 6.57]
Almoosawi 2012a	-4.98	1.54	21	21	2.8%	-4.98 [-8.00, -1.96]
Almoosawi 2012b	-2.45	1.4	21	21	2.9%	-2.45 [-5.19, 0.29]
Mogollon 2013	-0.79	1.23	22	20	3.0%	-0.79 [-3.20, 1.62]
Neufingerl 2013	0	3.42	10	10	1.8%	0.00 [-6.70, 6.70]
Sorond 2013	6	1.91	29	29	2.6%	6.00 [2.26, 9.74]
Esser 2014	-1	1.07	41	41	3.0%	-1.00 [-3.10, 1.10]
Ibero-Baraibar 2014	1	1.8	24	23	2.7%	1.00 [-2.53, 4.53]
Nickols-Richardson 2014	0.7	0.9	30	30	3.1%	0.70 [-1.06, 2.46]
Sarria 2014a	2.29	1.52	24	24	2.8%	2.29 [-0.69, 5.27]
Sarria 2014b	1.22	1.64	20	20	2.8%	1.22 [-1.99, 4.43]
Heiss 2015a	0	1.25	11	11	3.0%	0.00 [-2.45, 2.45]
Massee 2015	6.29	1.54	19	19	2.8%	6.29 [3.27, 9.31]
Sansone 2015	-4	1.28	50	50	3.0%	-4.00 [-6.51, -1.49]
<b>Subtotal (95% CI)</b>			<b>534</b>	<b>529</b>	<b>56.9%</b>	<b>-0.65 [-2.13, 0.84]</b>

Heterogeneity:  $\tau^2 = 8.90$ ;  $\chi^2 = 94.03$ ,  $df = 22$  ( $P < 0.00001$ );  $I^2 = 77\%$

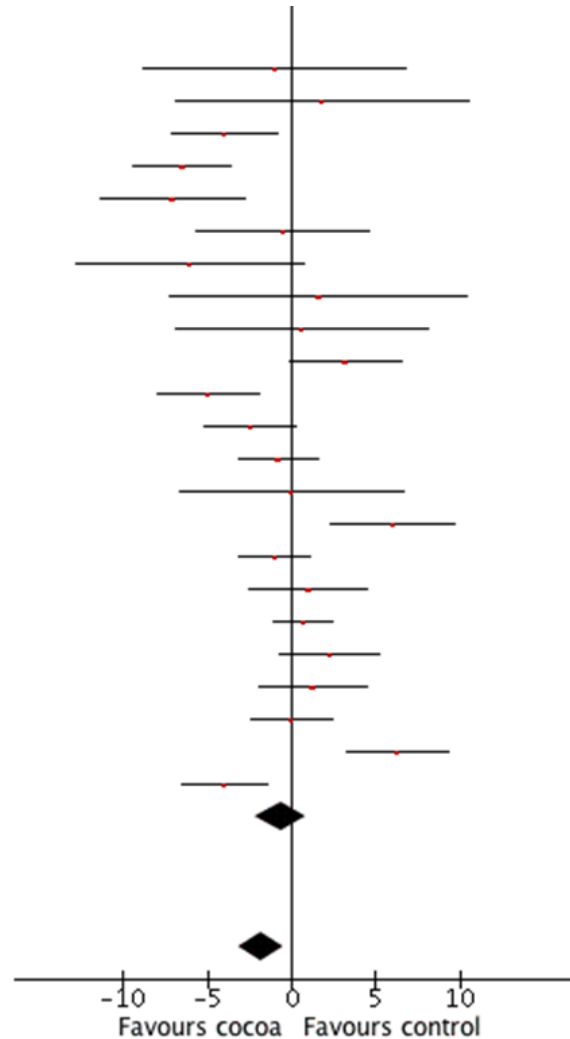
Test for overall effect:  $Z = 0.85$  ( $P = 0.39$ )

**Total (95% CI)** **907** **897** **100.0%** **-1.76 [-3.09, -0.43]**

Heterogeneity:  $\tau^2 = 13.99$ ;  $\chi^2 = 298.57$ ,  $df = 39$  ( $P < 0.00001$ );  $I^2 = 87\%$

Test for overall effect:  $Z = 2.60$  ( $P = 0.009$ )

Test for subgroup differences:  $\chi^2 = 5.01$ ,  $df = 2$  ( $P = 0.08$ ),  $I^2 = 60.0\%$



# GROUP ACTIVITY #4: Discussion

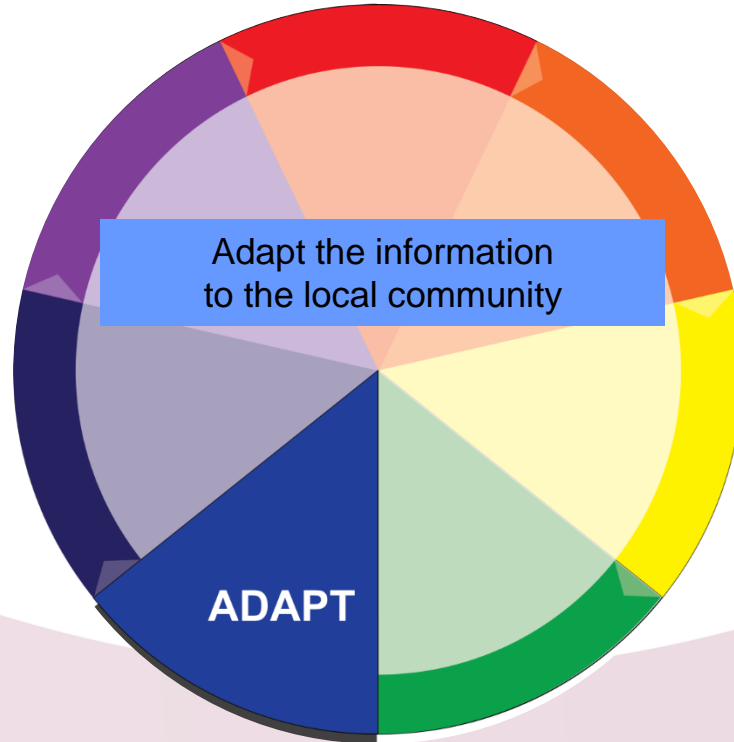
## What is the actionable message?

What are you recommending based on the Ried, et al. (2017) paper?

- Intake of flavanol-rich cocoa products is effective in lowering blood pressure among healthy adults with hypertension, but is not effective in lowering blood pressure among adults with prehypertension and normal blood pressure, compared to controls.



# Step 5: Identifying Applicability and Transferability Issues for Further Consideration



# A Model for Evidence-Informed Decision-Making



**It worked there. Will it work here?**  
a tool for assessing Applicability and Transferability of Evidence

**A: When considering starting a new program**

Purpose and target audience

To help public health managers and planners use evidence to choose appropriate programs for their community.

Where does this fit?

This tool helps you with the fifth step in the evidence-informed public health process: **Adapt** the information to a local context.

**You may have found evidence about an intervention that worked, but can you apply that evidence to your situation? Do you need to adapt the intervention for your population? ... your community? ... your team?**

This tool gives you a process and criteria to assess the applicability (feasibility) and transferability (generalizability) of evidence to public health practice and policy.

How to use this tool

At this stage, you will have already completed the first four steps in the evidence-informed public health process. You have defined your question (step 1), found (step 2) and appraised (step 3) the research evidence relevant to your question. You have also formed some recommendations based on the evidence that you found (step 4). (See [www.nccmt.ca/eiph](http://www.nccmt.ca/eiph) for more information.) These are all necessary steps, but you are not yet ready to decide whether to introduce, continue, or end a program or intervention in your local community.

1. Decide who will be involved in the decision. Consider including partners from other sectors, disciplines and client groups. (*The remaining steps are done in collaboration with this entire group.*)
2. Orient group members to the process; establish time lines.
3. From the following list of criteria, choose the most important applicability and transferability assessment questions for the intervention of interest and the local context. Are these criteria equally important or should they be weighted differently? If so, choose what weights to assign. Not all criteria are relevant all the time. The group may decide that some criteria are more important than others at a particular time period and in a particular community.
4. Decide how final scoring will be done: Will you discuss each criterion to achieve consensus or add ratings from all group members? In that case, you would individually rate the importance/relevance of each question on a scale of 1 to 5, where 1 is low and 5 is high. Priority would then go to the highest scoring program.
5. Be sure to document the scoring process used.

How to cite this resource

Buffet, C., Ciliska, D., & Thomas, H. (2011). It worked there. Will it work here? Tool for Assessing Applicability and Transferability of Evidence (A: When considering starting a new program). Hamilton, ON: National Collaborating Centre for Methods and Tools.

Contact:  
Donna Ciliska (ciliska@mcmaster.ca)  
National Collaborating Centre for Methods and Tools (NCCMT)  
School of Nursing, McMaster University  
Suite 302, 1885 Main Street West  
Hamilton, ON L8S 1G5  
Phone: (905) 525-9140, ext. 20450 Facsimile: (905) 529-4184



National Collaborating Centre  
for Methods and Tools  
Centre de collaboration nationale  
des méthodes et outils

Follow us @nccmt

[www.nccmt.ca/registry/view/eng/24.html](http://www.nccmt.ca/registry/view/eng/24.html)

**Assessment of Applicability & Transferability**

Construct	Things to consider	Questions to Ask
<b>Applicability</b> (feasibility)  <i>Can the intervention we found work for us?</i>	Political acceptability or influence	<ul style="list-style-type: none"> <li>• Will the intervention be allowed or supported in the current political climate?</li> <li>• Is there a potential public relations benefit for local government?</li> <li>• Will the public and target groups accept and support the intervention in its current format?</li> <li>• Is this intervention allowed/expected or required by local or provincial legislation /bylaws?</li> </ul>
	Social acceptability	<ul style="list-style-type: none"> <li>• Will my target population be interested in the intervention?</li> <li>• Is the intervention ethical?</li> </ul>
	Available essential resources (human and financial)	<ul style="list-style-type: none"> <li>• Who / what is essential for the local implementation?</li> <li>• Who will do the work? Are these people available (or are they too busy with other projects)? Do they know how? If not, is training available (and affordable)?</li> <li>• How much will the intervention cost? Can we afford to deliver the program (or is our budget already committed to other projects)?</li> <li>• How do we need to change the intervention to suit our local situation?</li> <li>• What are the full costs (include supplies, systems, space requirements for staff, training, technology/administrative supports, etc.)? How much will this intervention cost per unit of expected outcome? (total cost divided by number of people we expect to help)</li> <li>• Are there any other incremental health benefits to consider that could offset the costs of the intervention?</li> </ul>
	Organizational expertise and capacity	<ul style="list-style-type: none"> <li>• Does the intervention fit into the organization's current strategic and operational plans?</li> <li>• Does the intervention fit with the organization's mission and local priorities?</li> <li>• Does the intervention overlap, or will it complement, existing programs?</li> <li>• Will this program enhance the reputation of the organization?</li> <li>• What barriers/structural issues or approval processes within the organization need to be addressed?</li> <li>• Is the organization motivated and open to new ideas? Is it a learning organization?</li> </ul>
<b>Transferability</b> (generalizability)  <i>Can we expect similar results?</i>	Magnitude of health issue in local setting	<ul style="list-style-type: none"> <li>• Does the need exist?</li> <li>• How many people in my local population does this issue affect now? (i.e., what is our baseline prevalence?) How does this compare to the prevalence of the issue (risk status) described in the intervention we are considering?</li> </ul>
	Magnitude of the "reach" and cost-effectiveness of the intervention	<ul style="list-style-type: none"> <li>• Will the intervention effectively reach a large proportion of the target population?</li> </ul>
	Characteristics of target population	<ul style="list-style-type: none"> <li>• Is the local population comparable to the study population?</li> <li>• Will any differences in characteristics (ethnically, socio-demographic variables, number of persons affected) influence the effectiveness of the intervention locally?</li> </ul>

The National Collaborating Centre for Methods and Tools is affiliated with McMaster University and funded by the Public Health Agency of Canada



# Moving a Rapid Review into Decision-Making

- What reporting format will increase the likelihood of results being read?
- Spotlight on Methods and Tools – Rapid Review Guidebook (webinar recording)

<https://www.youtube.com/watch?v=Do9eQPumUmw&t=20s>



# We want to hear from you!

## Have you used the Rapid Review Guidebook?

Please share your opinions with us in a brief survey.

<https://surveys.mcmaster.ca/limesurvey/index.php/799495?lang=en>





# Questions?

For more information about the  
National Collaborating Centre  
for Methods and Tools

NCCMT website: [www.nccmt.ca](http://www.nccmt.ca)

Contact: [nccmt@mcmaster.ca](mailto:nccmt@mcmaster.ca)

Follow us on Twitter: [@nccmt](https://twitter.com/nccmt)