

Cochrane Health Equity Field: contribution to an evidence-based approach to equity

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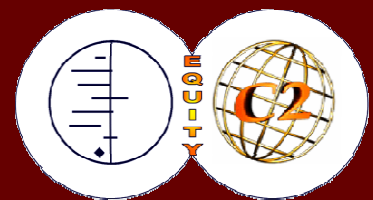
Qué harías si encontraras un oso?

A) correr; B) simular que estás muerto;
C) bailar salsa

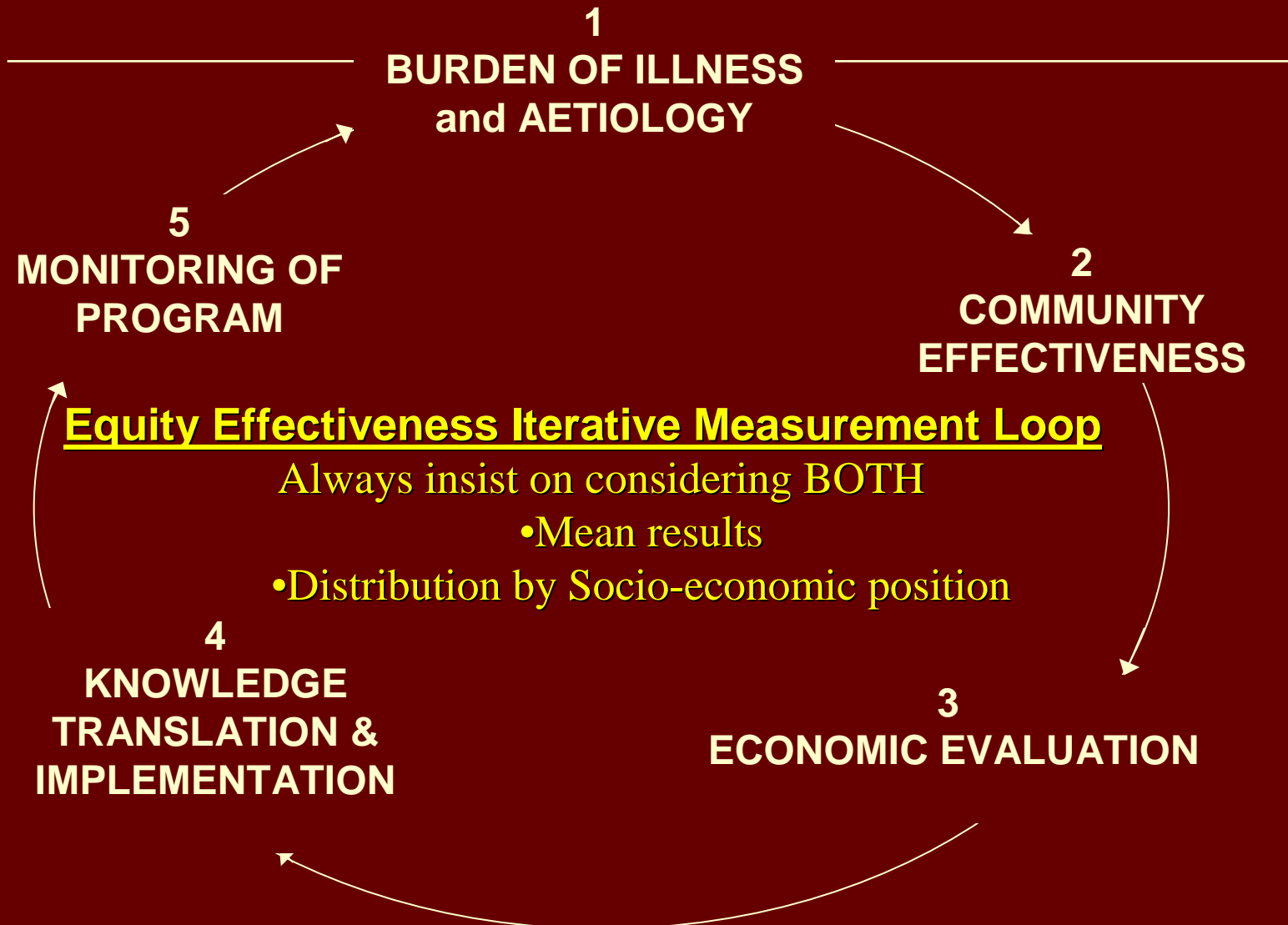


Objectives

- To illustrate an evidence-based framework for developing policies and programs to reduce inequity in health and health services
- To describe the activities of the Cochrane Health Equity Field
- To invite you to join the Cochrane and Campbell Equity Field in developing the equity evidence base

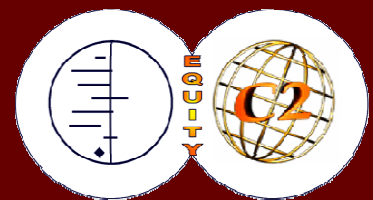


Framework for an evidence base for policy on interventions in health care and public health systems



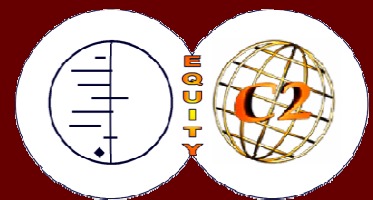
"The term 'inequity' has a moral and ethical dimension. It refers to differences which are unnecessary and avoidable but, in addition, are also considered unfair and unjust."

- Whitehead, 1991

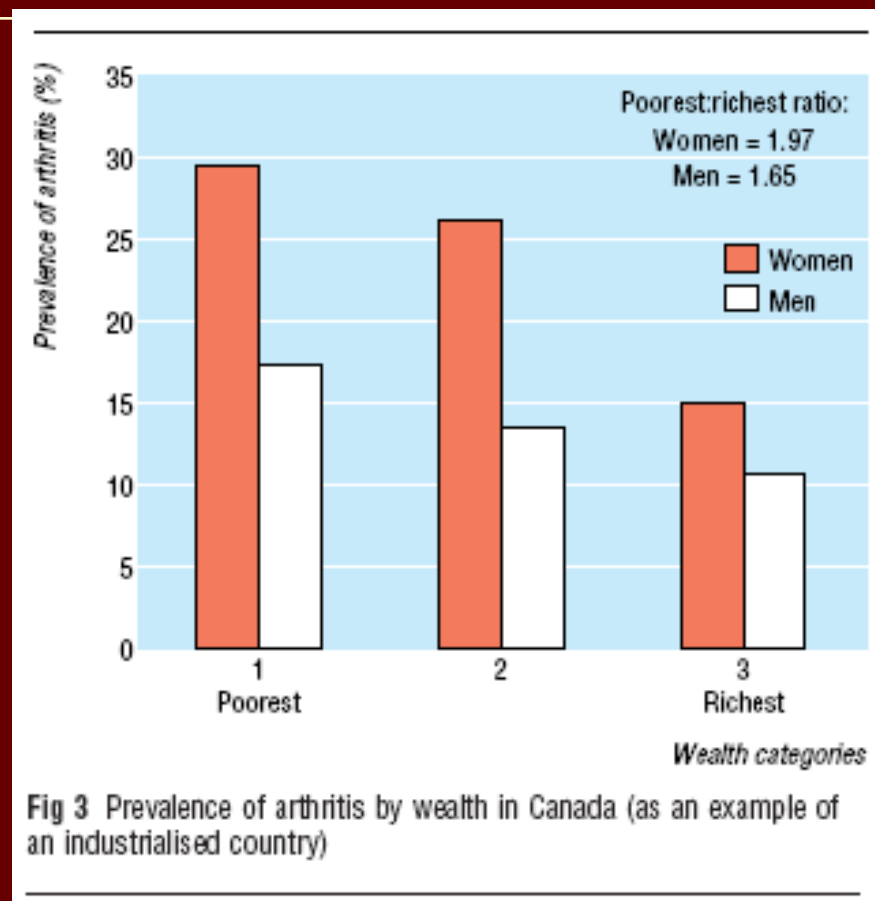


Equity Gradients - Not just Socio-economic Status!

- 'PROGRESS' [Evans and Brown].
 - Place of Residence
 - Race/ethnicity/culture
 - Occupation
 - Gender
 - Religion
 - Education
 - Socioeconomic status
 - Social networks/resources



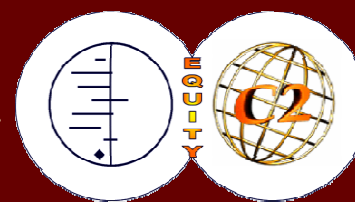
Distribution of arthritis by Socio-economic position in Canada



Wealth categories are 1) <\$20,000; 2) \$20,000- \$49,000 and 3) ≥\$50,000

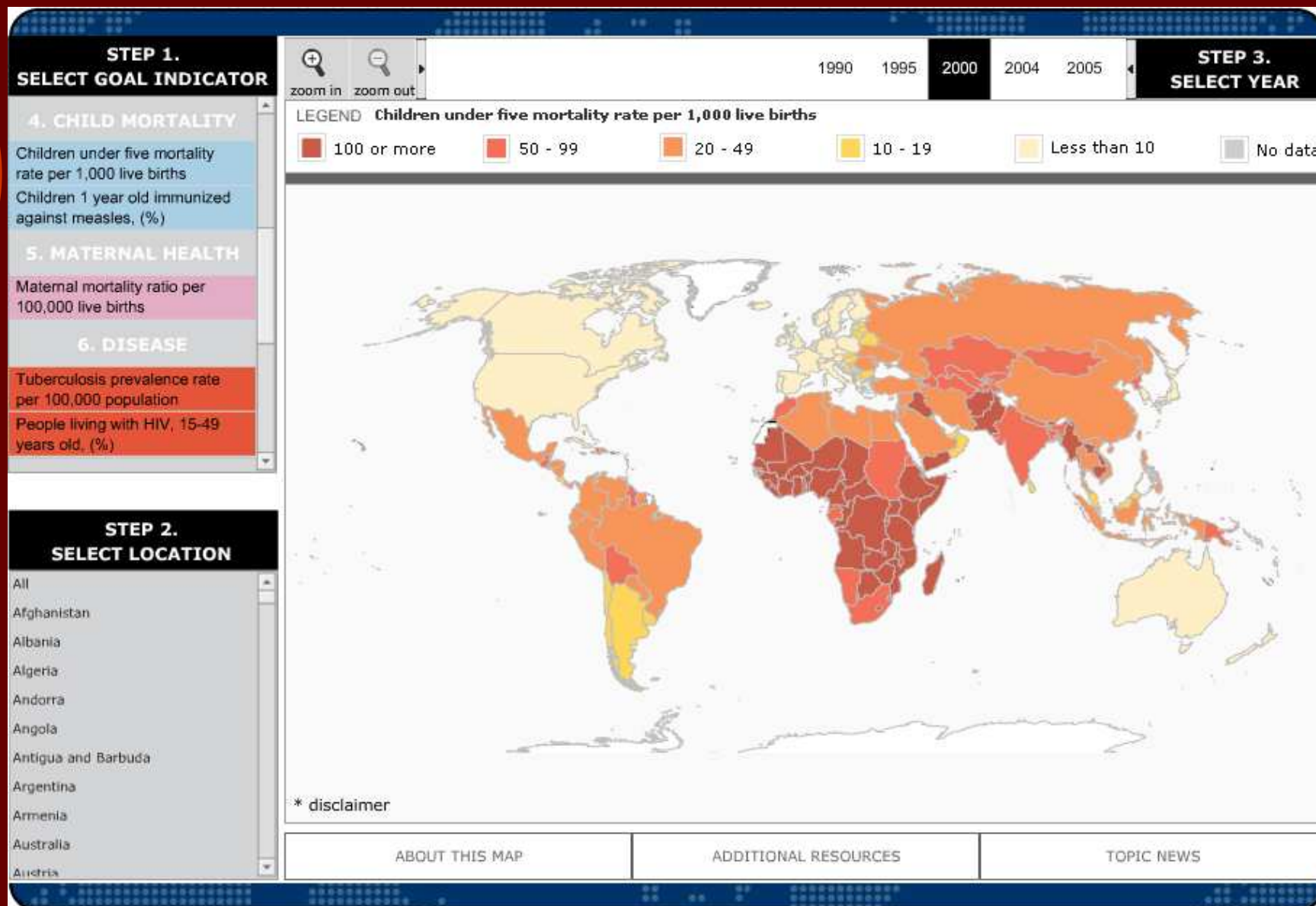
Reference: NM Kasman and EM Badley. The impact of arthritis on the Women of Canada., 2003.

www.equity.cochrane.org

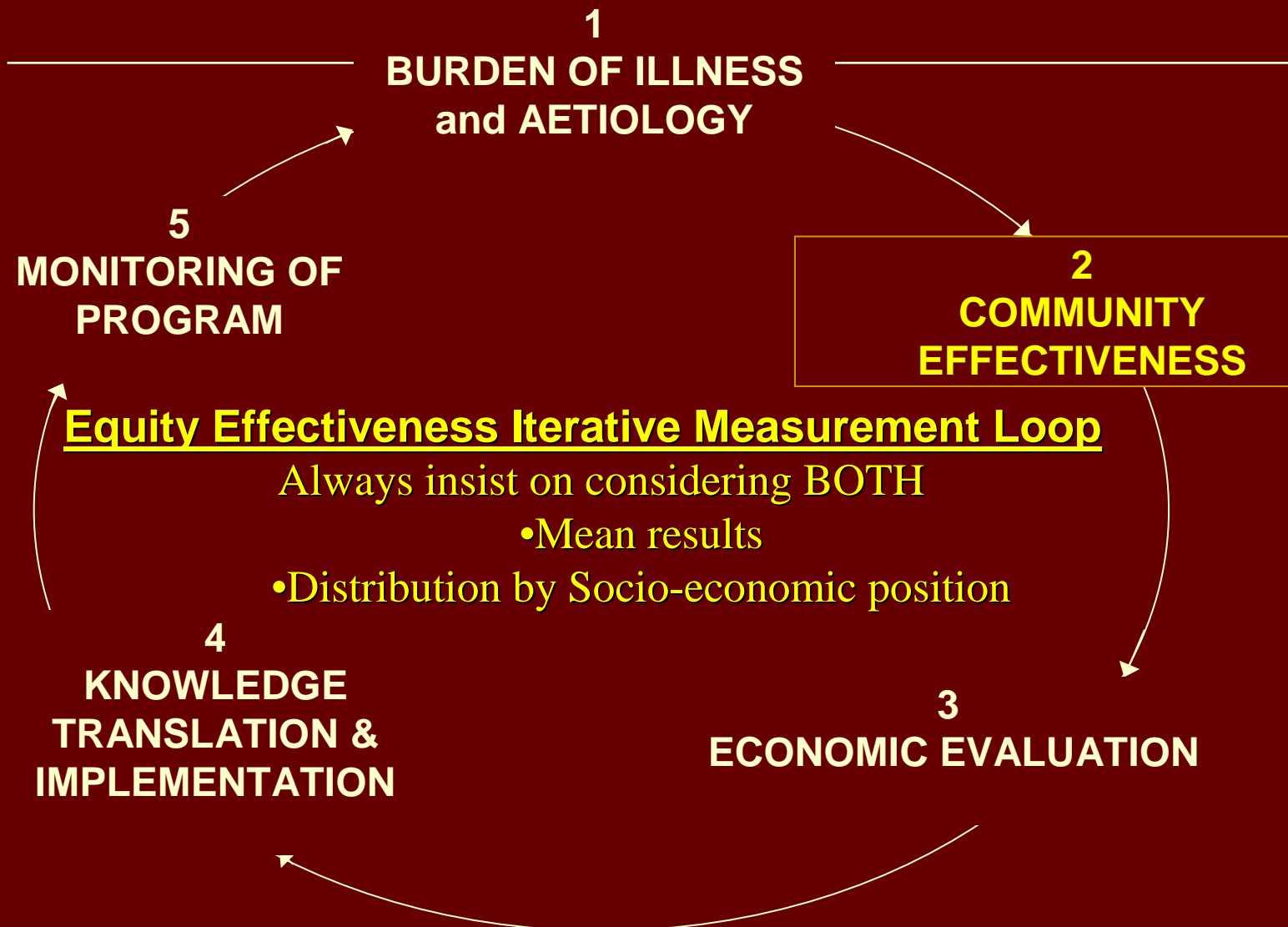


Color Coded Mapping- MDG Monitoring eg Child Mortality

2000



Framework for an evidence base for policy on interventions in health care and public health systems



Community-Effectiveness

$$\text{Community Effectiveness} = \text{Screening/Diagnostic Accuracy} \times \text{Efficacy} \times \text{Health Provider Systems Compliance} \times \text{Patient Subject Adherence} \times \text{Access}$$

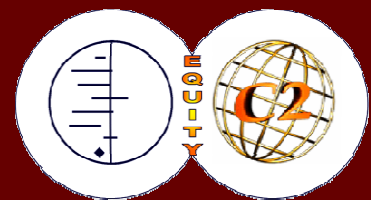


Does it work in Reality?



Can it Work in Ideal Circumstances?

www.mequale.com/commeneff.htm

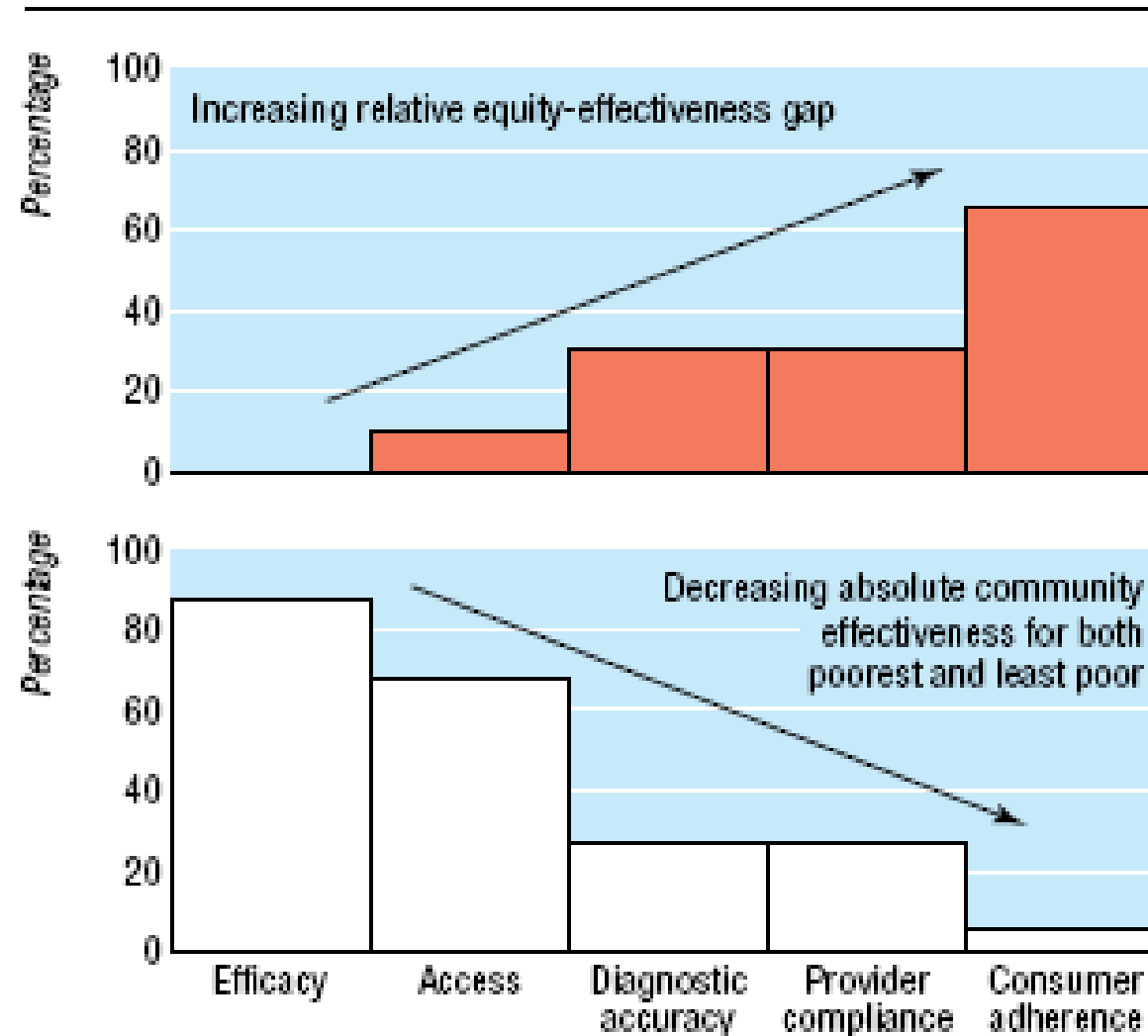


Tuberculosis Treatment Disparities, Kenya

DOTS for Rx of Smear +ve TB	Expected Efficacy	Access	Diagnostic accuracy	Consumer adherence	Provider compliance	Community Effectiveness	Least Poor: Poorest Ratio
Least poor (richest)	98%	80%	70%	80%	100%	44%	6
Poorest	98%	40%	40%	53%	90%	7%	

Greater loss of efficacy in the poorest

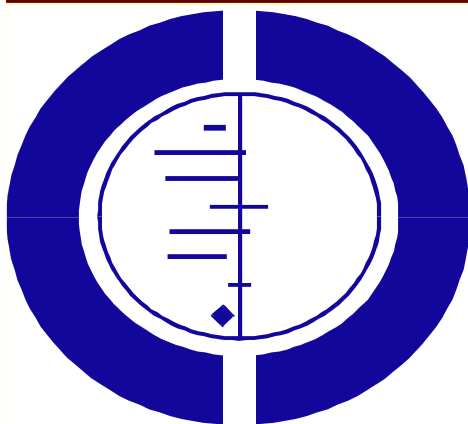
Staircase effect : Efficacy loss is greatest for the disadvantaged



Community effectiveness = efficacy x access x diagnostic accuracy x provider compliance x consumer adherence

Cochrane Health Equity Field and Campbell Equity Methods Group

- Aims to identify interventions that improve the health status of the poor and reduce health inequities
 - Priority-setting for Cochrane reviews
 - Methods to apply an equity lens
 - Series of systematic reviews on effective interventions
 - Equity evidence aid



Please join us!
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ptugwell@uottawa.ca
emorris@uottawa.ca

www.equity.cochrane.org



Oslo Equity meeting, August 2005



Ottawa Equity Meeting, Feb 2007



www.equity.cochrane.org

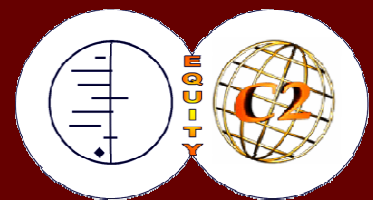
www.equity.cochrane.org



Priority-setting for Cochrane reviews relevant to health equity in low and middle income countries- Cochrane Health Equity field and Cochrane Developing Countries Network

- Survey of Cochrane entities (>70% response rate)
- Assessing using Accountability for Reasonableness Framework
- Develop, implement and improve on priority-setting

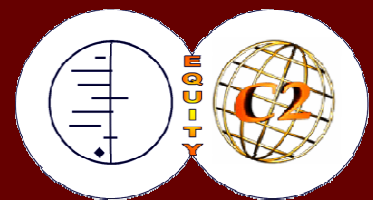
Tugwell, Nasser, Welch, Kristjansson, Doyle,
Waters, Petticrew, Oxman www.equity.cochrane.org



Methods: External validity 1

Equity plausibility algorithm

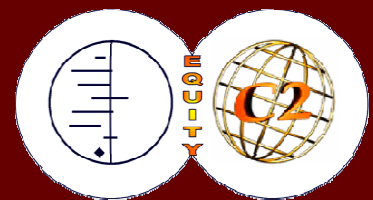
- When is it likely that an intervention will have different relative effects due to biology, context, genetics, culture, etc...
 - Methodology review of equity assessment
 - When are equity subgroup analyses believable?
 - Developing an algorithm to assess plausibility of differential equity effects



Methods: External validity 2

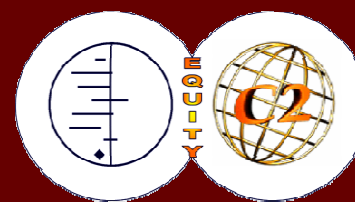
Extrapolation

- When is there no good reason to expect that an intervention will not work in vulnerable populations?
 - Tamoxifen for early breast cancer
 - Antibiotics for otitis media



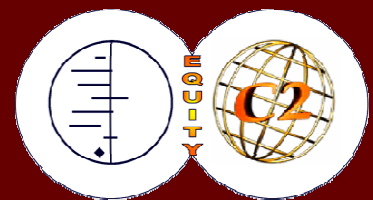
Methods 3: Searching and databases

- Developing registry of equity-relevant trials in collaboration with the EPPI-Centre (UK)
- Collaborating on registry of databases and sources relevant to developing countries, led by Alison Weightman, Information Retrieval Methods Group



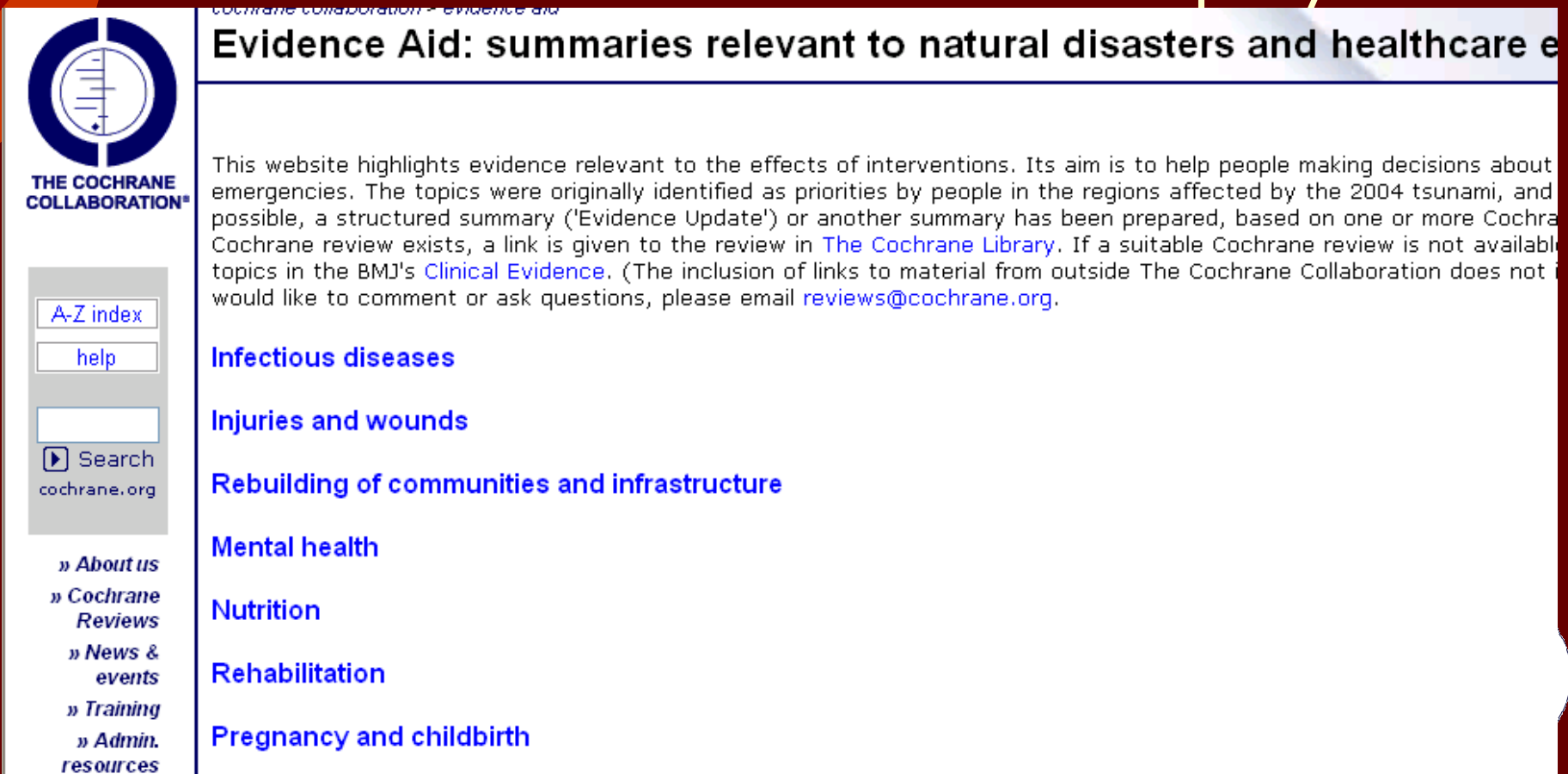
Series of systematic reviews

- Schoolfeeding (Kristjansson et al)
- Food security (Runnels et al)
- Malaria prevention (Attaran et al)
- Peer support for chronic disease (Doull et al)
- Access to tuberculosis treatment (Heidebrecht et al)



Cochrane Equity “Evidence Aid”

- One-stop shop for all systematic reviews related to health equity



The screenshot shows the Cochrane Evidence Aid website. On the left is a sidebar with the Cochrane Collaboration logo, navigation links (A-Z index, help, search), and a list of links (About us, Cochrane Reviews, News & events, Training, Admin. resources). The main content area has a header 'Evidence Aid: summaries relevant to natural disasters and healthcare e' and a paragraph describing the website's purpose. Below this are several topic links: Infectious diseases, Injuries and wounds, Rebuilding of communities and infrastructure, Mental health, Nutrition, Rehabilitation, and Pregnancy and childbirth.

THE COCHRANE COLLABORATION

[A-Z index](#)

[help](#)

[Search](#)
cochrane.org

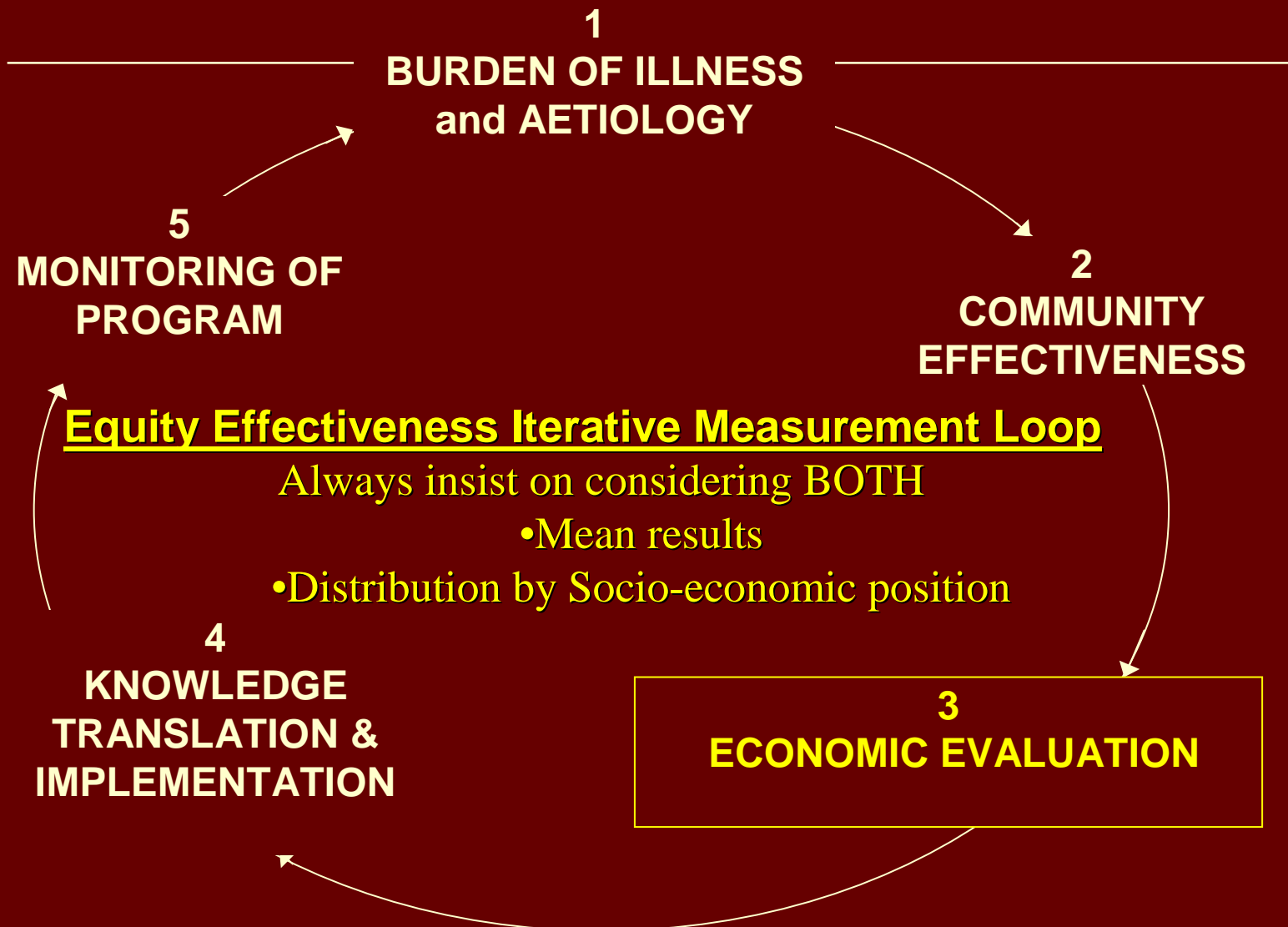
- » [About us](#)
- » [Cochrane Reviews](#)
- » [News & events](#)
- » [Training](#)
- » [Admin. resources](#)

Evidence Aid: summaries relevant to natural disasters and healthcare e

This website highlights evidence relevant to the effects of interventions. Its aim is to help people making decisions about emergencies. The topics were originally identified as priorities by people in the regions affected by the 2004 tsunami, and possible, a structured summary ('Evidence Update') or another summary has been prepared, based on one or more Cochrane review exists, a link is given to the review in [The Cochrane Library](#). If a suitable Cochrane review is not available topics in the BMJ's [Clinical Evidence](#). (The inclusion of links to material from outside The Cochrane Collaboration does not i would like to comment or ask questions, please email reviews@cochrane.org.

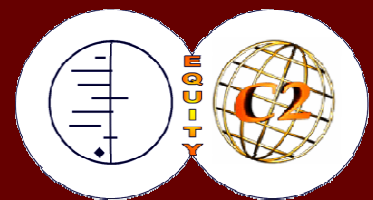
- [Infectious diseases](#)
- [Injuries and wounds](#)
- [Rebuilding of communities and infrastructure](#)
- [Mental health](#)
- [Nutrition](#)
- [Rehabilitation](#)
- [Pregnancy and childbirth](#)

Framework for an evidence base for policy on interventions in health care and public health systems



Economic evaluation

- Maximizing health across the whole population does not consider distribution
- Greater intensity and higher cost interventions may be needed to reach the poor (Arblaster 1996)
- Both policymakers and the public are willing to trade health for health equity (Wagstaff 1991)



Testing 4 methods to consider equity in economic evaluation

1. Review of background information on equity
2. Health inequality impact assessment
3. Opportunity cost analysis of equity
4. Equity weighting of health outcomes

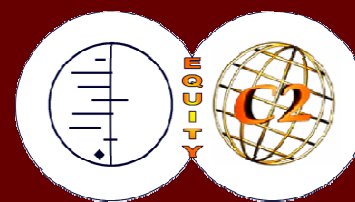
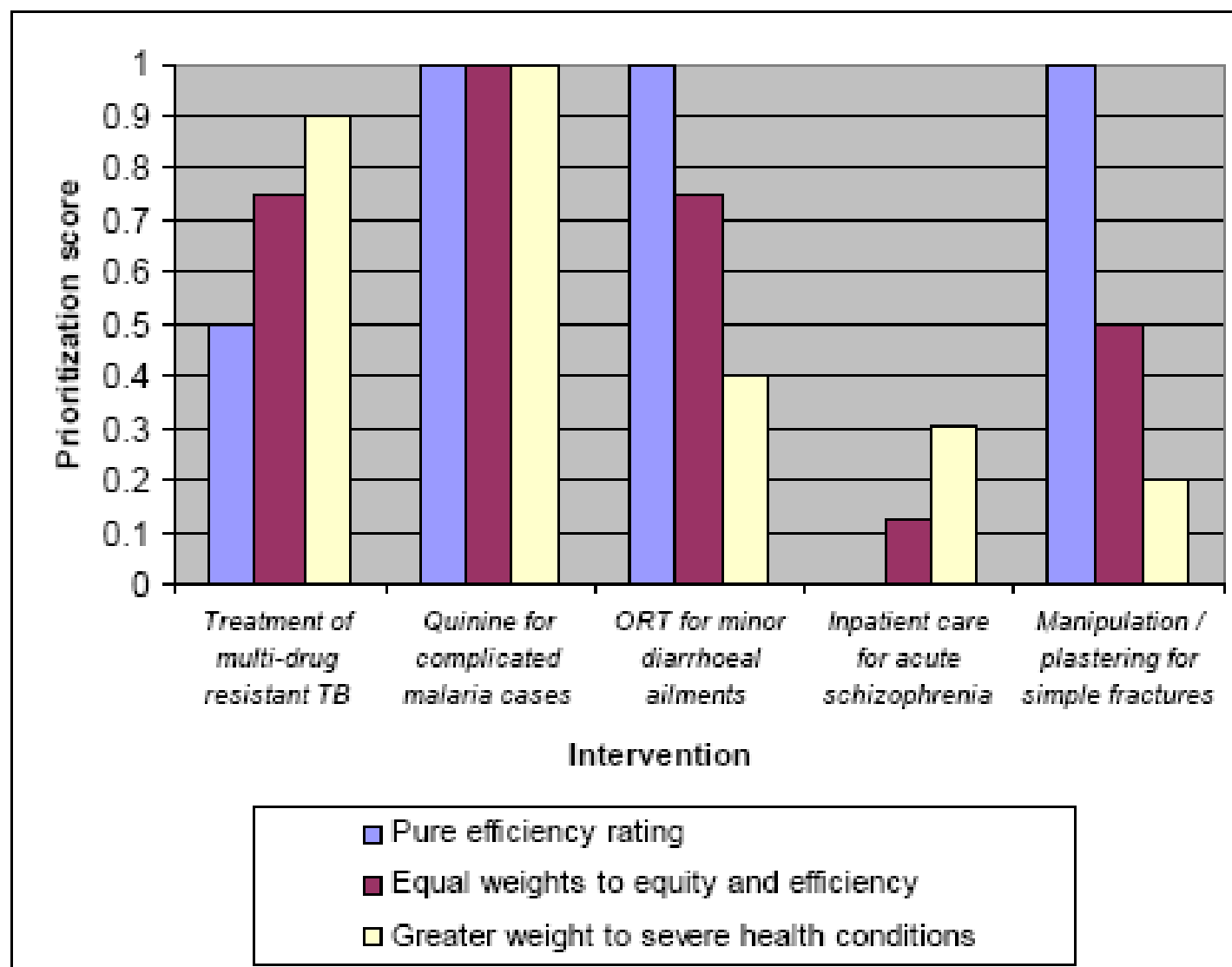
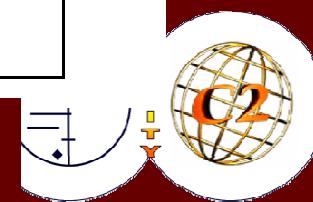


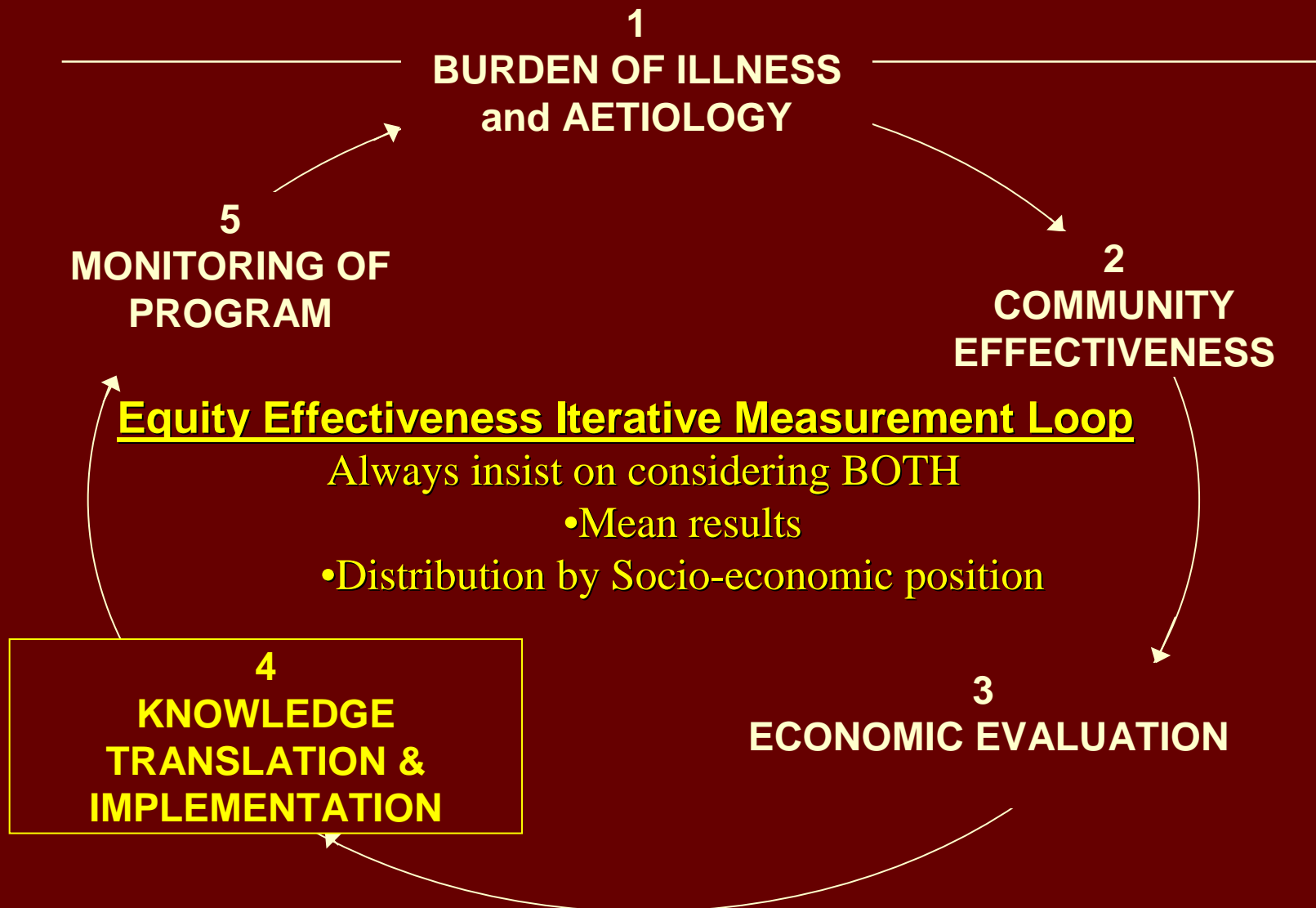
Figure 1: Impact of different weights for equity and efficiency criteria on prioritization decisions



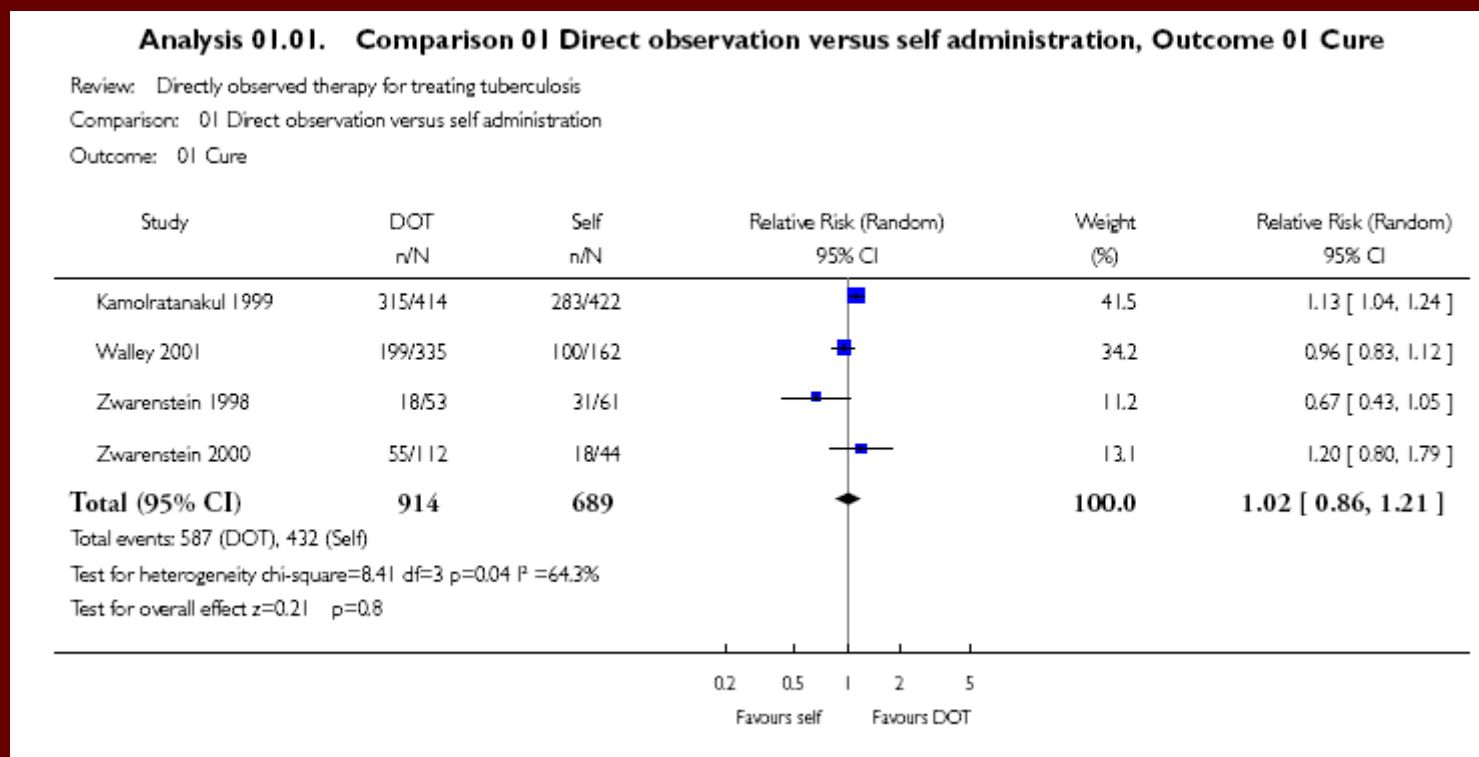
James C et al, Clarifying efficiency-equity tradeoffs through explicit criteria, with a focus on developing countries , WHO, 2004



Framework for an evidence base for policy on interventions in health care and public health systems



Research needs a friendly front end (FFE): EBAM= Evidence-based actionable message



Volmink J, Garner P. Directly observed therapy for treating tuberculosis. *Cochrane Database of Systematic Reviews* 2007, Issue 4. Art. No.: CD003343. DOI: 10.1002/14651858.CD003343.pub3.

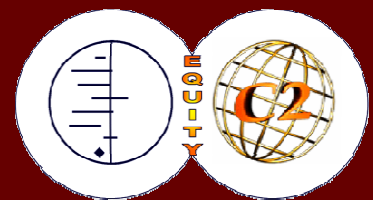
www.equity.cochrane.org





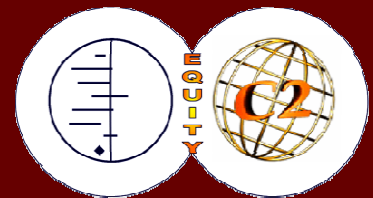
WHO Collaborating Center for Knowledge Translation and Health Technology Assessment in Health Equity

- Improve access to health information
- Moves knowledge to action,
- Supports experiential knowledge
- Support evidence-based decision making
 - Research
 - Knowledge Translation
 - Institutional strengthening
 - Collaboration and partnership
 - Trans-disciplinarity
 - Mentoring and training



Mutually beneficial partnerships between academia and NGOs

- Imagine if we could bring together the strengths of academia and NGOs...
 - Ottawa Inner City Health Initiative
 - Afriafya
 - Pontifica Universidad Catolica de Santiago de Chile- decision support
 - Mexico evidence-based nursing curriculum- INSP- Gladys Faba, Carlos Jimenez, et al



Testing knowledge translation methods



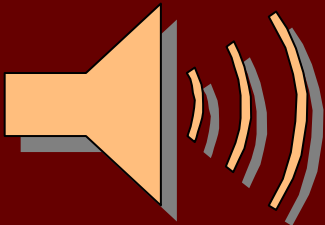
- Decision Aids



- Clinical practice guidelines



- Stories/Narratives



- Media, ipod, youtube



Apoyos decisionales: Evidencia de la Eficacia: Cochrane review, O'Connor et al

Efecto	Positivo	Negativo	Sin Efecto
Conocimientos	+++++++		
Expectativas Realistas	++++		—
Conflicto Decisional	++++		—
Participación	++++		
Ansiedad	+		0000
Satisfacción	+		000
Adherencia a la alternativa	?	?	?
Calidad de vida	+		000

Decision aids for patient and clinician dyads

Benefits and harms

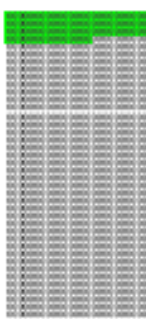
Step 1: Find out about the benefits and side effects of each option.

What does the research show? Blocks of 1000 circles show a 'best estimate' of what happens to 1000 women 65 years and older with osteoarthritis of the knee who try an option for one year. Each circle (o) stands for one person. The shaded areas show the number of people affected. There is no way of knowing in advance if you will be the one who is affected.

More people improve if they take drugs. Slightly more people who take NSAIDS and Coxibs improve

No Treatment

90 improve ★



910 don't improve

Tylenol

720 improve ★



280 don't improve

NSAIDS

824 improve ★



176 don't improve

Coxibs

829 improve ★



171 don't improve

Number with improved pain

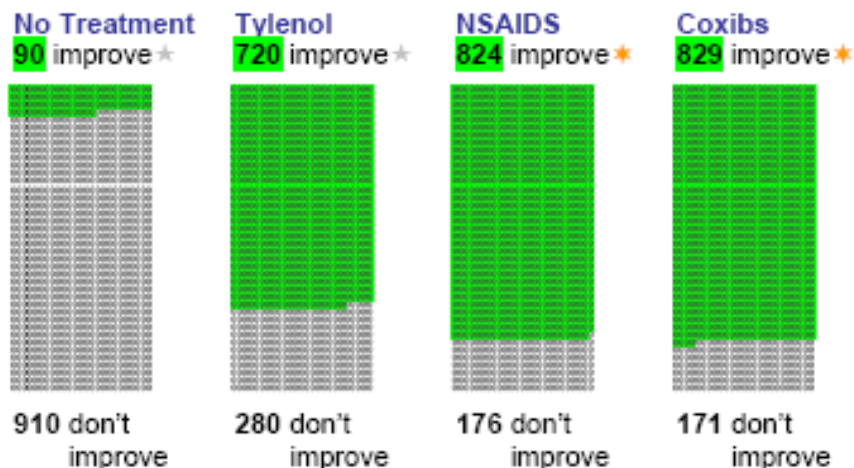
Decision aids for patient and clinician dyads

Harms of heart attacks

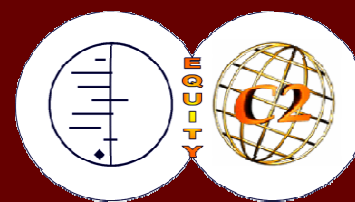
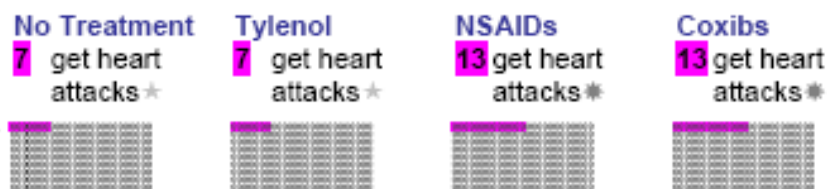
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More people improve if they take drugs. Slightly more people who take NSAIDs and Coxibs **improve** →



More people who take NSAIDs and Coxibs have **heart attacks** →



Decision aids for patient and clinician dyads

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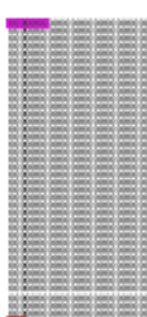
Coxibs
829 improve ★



171 don't improve

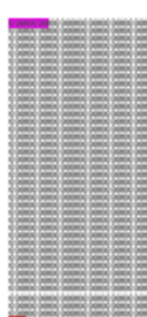
More people who take NSAIDs and Coxibs have **heart attacks** →

No Treatment
7 get heart attacks ★



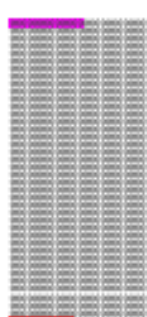
3 bleed ★
990 avoid these

Tylenol
7 get heart attacks ★



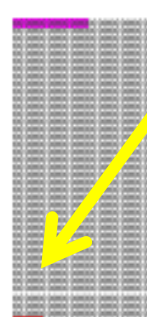
3 bleed ★
990 avoid these

NSAIDs
13 get heart attacks ★



11 bleed ★
976 avoid these

Coxibs
13 get heart attacks ★



5 bleed
982 avoid these

More people who take NSAIDs and Coxibs go to the hospital with major bleeding ulcers. NSAIDs cause more **bleeding ulcers** →

3 bleed ★
990 avoid these

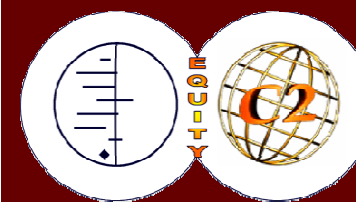
3 bleed ★
990 avoid these

11 bleed ★
976 avoid these

5 bleed
982 avoid these

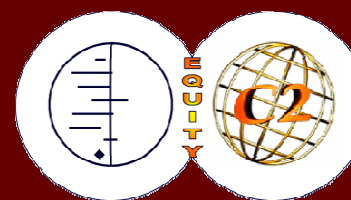
★ Platinum or ★ Gold symbols mean stronger study results. ★ Silver or ★ Bronze symbols mean weaker results.

Bleeding ulcers





www.equity.cochrane.org



Testing knowledge translation methods



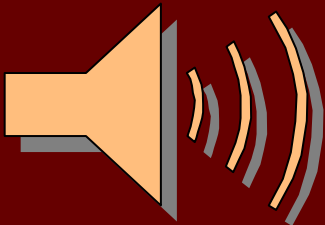
- Decision Aids



- Clinical practice guidelines



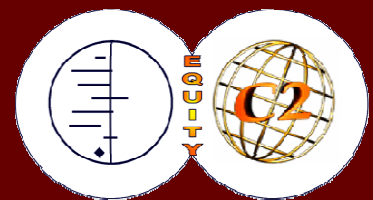
- Stories/Narratives



- Media- ipod, youtube

Clinical preventive guidelines for Immigrants and Refugees in Canada

- Priority-setting
- GRADE approach
 - Benefits and harms
 - Directness (applicability)
 - Values and preferences
- Implementation



Testing knowledge translation methods



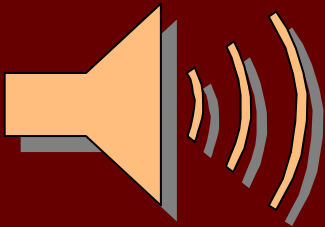
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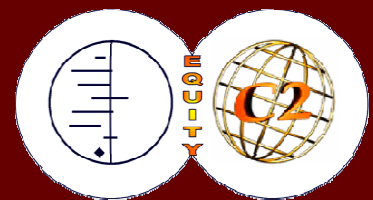
- Stories/Narratives



- Media- ipod, youtube

Springboard Story, Steve Denning

- **In June 1995, a health worker in Kamana, Zambia logged on to the CDC web-site in Atlanta and got the answer to a question on how to treat malaria**





The ITALIAN COCHRANE CENTRE

presents

a 10 clinical vignettes CME series

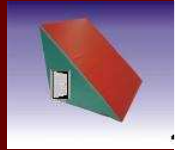
« Dr. COCHRANE »

Original idea LORENZO MOJA and the ITALIAN COCHRANE CENTRE

Direction LORENZO MOJA and IVAN MOSCHETTI

Producer ALESSANDRO LIBERATI

RAMPA: Red Ayuda Médico Paciente de Argentina:



Promover la calidad de atención en salud, mediante acciones de interés común a pacientes y médicos y demás profesionales de la salud

Lucas Figueroa
2º VOCAL
(Médico)

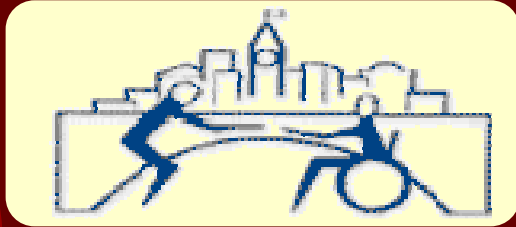
Claudia Cattivera
PRESIDENTE
(Paciente)

Agustín Ciapponi
SECRETARIO
(Médico)

Adriana Feldman
TESORERA
(Paciente)

Nieves Bustos Cavilla
1º VOCAL
(Paciente)





Ottawa Inner City Health (OICHI)



Physician Tina Podymow with Inner City project participant Harland Fraser. (Photo by [unintelligible])

Can stories promote adherence to therapy in vulnerable populations?



Jean Marc Gingras (left) and Gilles St Jacques, participants in the Inner City Health Project, play cribbage as Wendy Muckle looks on. (Photo by Jana Chytil.)

Testing knowledge translation methods



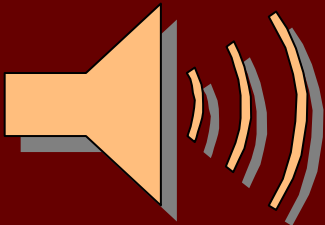
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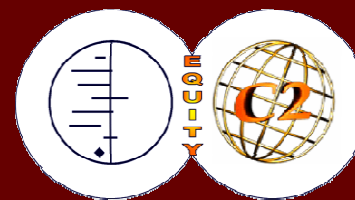
- Stories/Narratives



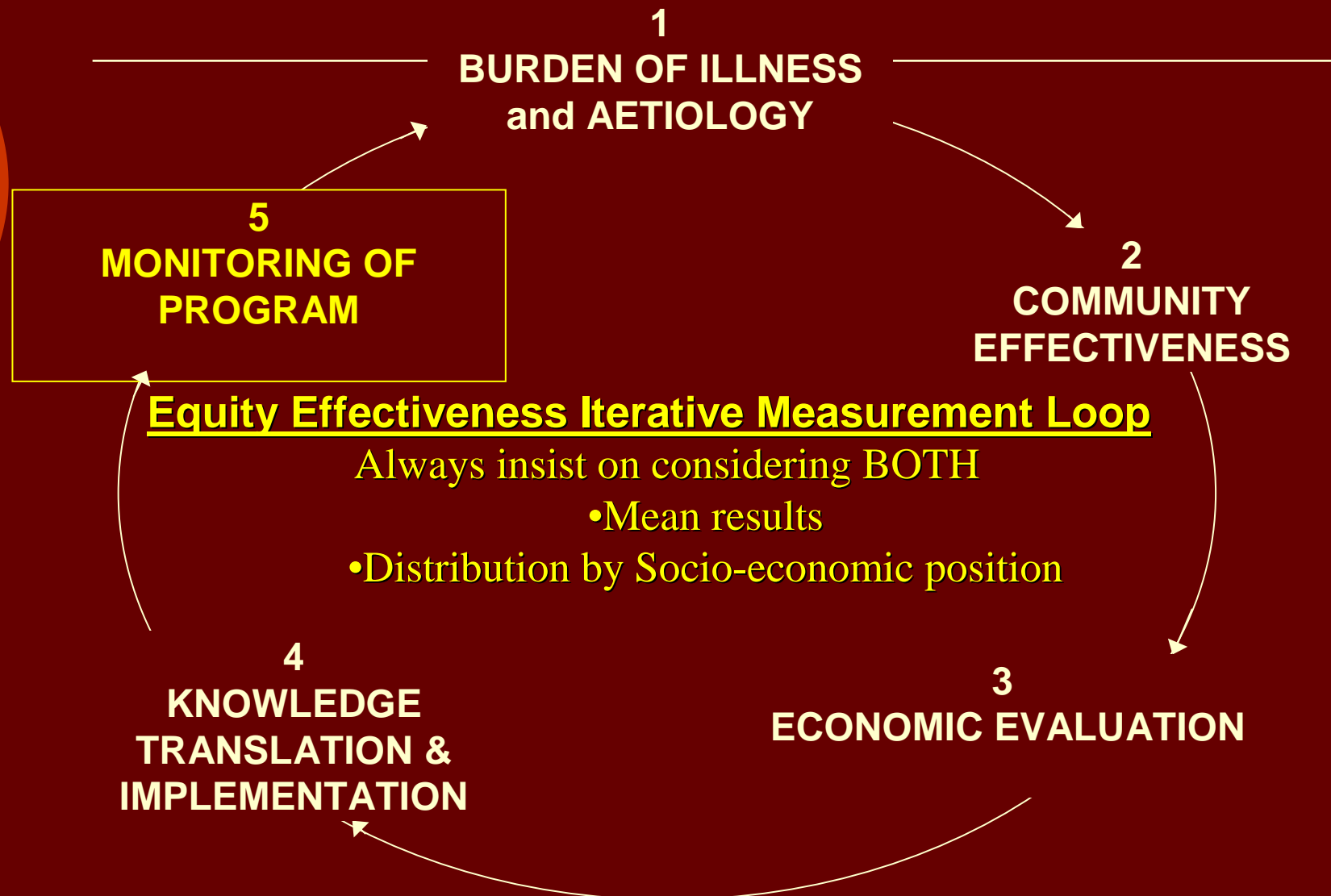
- Media- ipod, youtube...

Online, searchable inventories of evidence, tailored for practitioners and policy-makers

- www.rxforchange.ca
 - Cochrane Effective Practice and Organization of Care (EPOC)
 - What works to change professional behaviour?
- www.rxforpolicy.ca
 - Lavis et al searchable database of Cochrane reviews relevant to health systems, financial and governance interventions

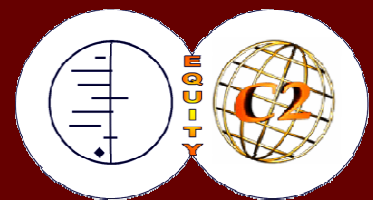


Framework for an evidence base for policy on interventions in health care and public health systems



Conclusions and Challenges

- Always insist on assessing distribution of health effects!
- When can we extrapolate evidence to vulnerable populations?
- Priority-setting
- Testing knowledge translation and communication strategies



Muchas Gracias

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www.equity.cochrane.org

