
Challenges in systematic reviews of health policy & systems research

**“Mexico to Mali: Taking Stock of Achievements in
Health Policy and Systems Research”**

Gaps, priorities & challenges in Knowledge Translation

Nyon, May 27th 2008

Tomás Pantoja Calderón

Family Medicine Department, School of Medicine

Pontificia Universidad Católica de Chile

Who am I?

- Family physician trained in Chile
 - Postgraduate training in the UK (management and EBHC)
 - Working at a Chilean academic institution
 - Sharing teaching/research with clinical responsibilities (primary care)
 - Research interests focused on the use of evidence in:
 - Clinical practice environments (e.g. guidelines implementation)
 - Policy-making environments (knowledge-translation platforms: EVIPNet Americas)
-

Outline

- Background: systematic reviews
 - Methodological challenges
 - Challenges in using systematic reviews in HPSR
 - The way ahead: some ideas
-

Task Force in Health Systems Research

Suggested topics

- Community-based financing
- HRH at different levels
- Community involvement
- Equitable, effective & efficient health care
- Organisation of health services
- Drug & diagnostic policies
- Governance & accountability
- Health information systems
- Priority setting and evidence-informed policy making
- Intersectoral engagement
- Effects of global initiatives on health systems

Broader issues

- Equity
 - Systematic reviews
 - Methodology
 - Networking
 - Funding
 - Evaluation
-

Because professionals s
good when they interve

Research Education News Comm

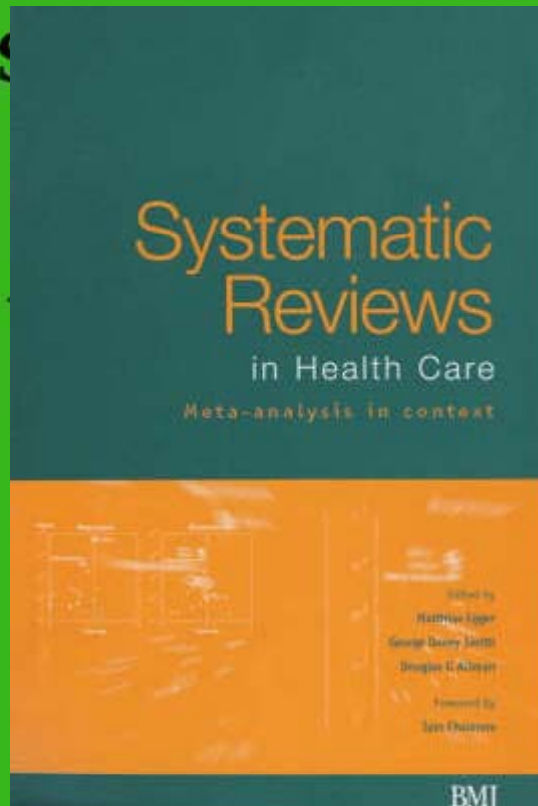
> Education > BMJ 1994;309(6954):597 (3 Sep

BMJ 1994;309:597-599 (3 Sept

Education and de

Systematic Reviews
reviews

CR Met



ers and made 30 phone
ing to obtain from the
a copy of the data tapes
man study only to learn
that they had been irred
ed in unmarked tape

findings.
ternative
discussion
typify ou
the rapid
ature.

The Cochrane Collaboration

The reliable source of evidence in health care



Latest: [The Cochrane Collaboration welcomes a new Methods Group](#)

[<more ...>](#)

Versions : [printable](#)



english

The Cochrane Collaboration

Improving healthcare decision-making

Independent, reliable

The Cochrane Collaboration is a [global](#)

[Cochrane entities >](#)

Cochrane Effective Practice and Organisation of Care Group



uOttawa

A REVIEW GROUP OF



THE COCHRANE COLLABORATION*

Welcome

The Cochrane Effective Practice and Organisation of Care Group (EPOC) is a Collaborative Review Group of the Cochrane Collaboration: an international organisation that aims to help people make well informed decisions about health care by preparing, maintaining and ensuring the accessibility of systematic reviews of the effects of health care interventions.

EPOC produces systematic reviews of educational, behavioural, financial, regulatory and organisational interventions designed to improve health professional practice and the organisation of health care services, potentially spanning any clinical area.

Core funding for EPOC is generously provided by:

- [Canadian Institutes of Health Research](#)
- [Canadian Agency for Drugs and Technologies in Health](#)



Cochrane Colloquium

[Freiburg, Germany, 3-7 Oct. 2008](#)

[Past and future colloquia here](#)

Search

This website

[Advanced](#)

[Tips](#)

Current news at The Cochrane Collaboration

[NIH grant awarded for complimentary therapies](#)

[Wiley-Blackwell Sunrise Seminar at MLA 2008](#)

[Slidecasts from the German Cochrane Centre's 10th Anniversary Symposium now online!](#)

[Cochrane News - latest issue available](#)

[Welcome](#)

[EPOC team](#)

[Scope of our work](#)

[Contact us](#)

[Our reviews](#)

[Cochrane resources for review authors](#)

[EPOC-specific resources for review authors](#)

[Directory of related resources](#)

[Workshops and events](#)

[News and RSS feeds](#)

[Get involved](#)

[Job announcements](#)

[Specialised register](#)

[Home](#)

[Our
guidance](#)

[Using
guidance](#)

[Get
involved](#)

[News &
Events](#)

[About
NICE](#)

Search
Advanced search



*Providing national guidance on promoting
good health and preventing and treating ill health*

Welcome to the National Institute for Health and Clinical Excellence

NICE is an independent organisation responsible for providing national guidance on promoting good health and preventing and treating ill health.

[Read more about NICE](#)

Using guidance

NICE helps health professionals implement our guidance by providing tools such as cost templates, audit criteria and slide sets.

- ▶ [Implementation tools](#)
- ▶ [Commissioning guides - supporting clinical service redesign](#)
- ▶ [Optimal practice review: recommendation reminders](#)

Latest guidance

- ▶ [Colitis \(ulcerative\) - infliximab](#)
- ▶ [Perioperative hypothermia \(inadvertent\)](#)
- ▶ [Rheumatoid arthritis \(refractory\) - abatacept](#)
- ▶ [Interstitial photodynamic therapy for malignant parotid tumours](#)

[See all latest guidance](#)

In focus

[Subsidised places available at NICE 2008](#)

[Read complete article](#)



Search NICE guidance

Want to know what NICE recommends?

[Advanced guidance search](#)

Subscribe

[Subscribe to our alerts & e-newsletter](#)

[Change your preferences](#)

[RSS](#)

May 22, 2008

Search | Login |   

EPPI-Centre

EPPI-CENTRE

EVIDENCE LIBRARY

PARTNERS

METHODS & DATABASES

TEACHING AND LEARNING

SITE MAP

C2 HOME

Crime & Justice

Education

Methods

Social Welfare

THE CAMPBELL COLLABORATION

what helps? what harms? based on what evidence?

Meetings and Events

The Steering Group
Connection

2007 Colloquium
Presentations

The Campbell Library

About Campbell Reviews

Randomized Field Trials

Policies and Information

Author Guidelines

Papers and Presentations

Related Organizations

About Campbell

Coordinating Groups

The Campbell Users Group

Steering Group Members

Partnerships and Affiliations

The Collaboration is a voluntary organization that welcomes newcomers from around the world in all professional and disciplinary backgrounds. [Click here to get involved!](#)

New Developments at Campbell

Successful Annual Colloquium in Vancouver attracted 270 researchers, practitioners and policy makers from around the world. Read more about the event [here](#).

On 10 May 2008 the Steering Group adopted a new Governance Plan for the Campbell Collaboration ([click here to access](#)). For more details about the Governance Plan, click [here](#).

Eamonn Noonan has been appointed CEO of the Campbell Collaboration. Camilla Chausse has been appointed as Information Officer. More details [here](#).

Consultation requested on draft Strategic Plan ([click here to access](#)). For more details about the Strategic

Spotlight Event



The Ninth Annual
Campbell
Collaboration
Colloquium:
Oslo, Norway
19-21st May
in 2009

Systematic reviews in HPSR. Possible advantages

- Reduction of bias in the estimation of effectiveness
 - More precise estimates of effects
 - More efficient use of time
 - More transparent appraisal
-

Some definitions

- *Research synthesis*: the process through which two or more research studies are assessed with the objective of summarising the evidence relating to a particular question
 - *Systematic review*: a review that has been prepared using a systematic approach to minimising biases and random errors which is documented in a materials and methods section
 - *Meta-analysis*: the statistical analysis of the results from independent studies, which generally aims to produce a single estimate of a treatment/intervention effect
-

Stages in a systematic review

- Formulating reviews questions
 - Identifying relevant literature
 - Including/excluding studies
 - Assessing quality (risk of bias) of the included studies
 - Summarising the evidence
 - Interpreting the findings
-

Antioxidant supplements for prevention of mortality in healthy participants and patients with various diseases (Review)

Bjelakovic G, Nikolova D, Gluud LL, Simonetti RG, Gluud C



Current stock of SR in HPSR. A taxonomy

Governance arrangements	Financial arrangements	Delivery arrangements
<p>Policy authority</p> <ul style="list-style-type: none"> ▪ Centralization / decentralization of policy authority ▪ Stewardship of the non-state sector's role in financing & delivering ▪ Coverage/reimbursement decision-making authority about what or who is covered ▪ Corruption protections <p>Organizational authority</p> <ul style="list-style-type: none"> ▪ Ownership ▪ Accreditation ▪ Networks / multi-institutional arrangements <p>Commercial authority</p> <ul style="list-style-type: none"> ▪ Licensure / registration ▪ Patents & profits ▪ Pricing & purchasing ▪ Marketing ▪ Sales & dispensing ▪ Commercial liability <p>Professional authority</p> <ul style="list-style-type: none"> ▪ Training / licensure / registration ▪ Scope of practice ▪ Location of practice ▪ Single or dual-system practice ▪ Content of practice ▪ Quality of practice/clinical governance ▪ Professional competence ▪ Professional liability <p>Consumer & stakeholder involvement</p> <ul style="list-style-type: none"> ▪ Consumer participation in policy & organizational decisions ▪ Consumer participation in service delivery ▪ Consumer complaints management ▪ Stakeholder participation in policy & organizational decisions 	<p>Financing</p> <ul style="list-style-type: none"> ▪ Taxation ▪ Social insurance ▪ Community-based insurance ▪ Private insurance ▪ User fees ▪ Conditional cash transfers <p>Funding</p> <ul style="list-style-type: none"> ▪ Fee-for-service ▪ Capitation ▪ Global budget ▪ Prospective payment (for a particular diagnosis, product, etc.) ▪ Indicative budgets ▪ Targeted payments / penalties <p>Remuneration</p> <ul style="list-style-type: none"> ▪ Fee-for-service ▪ Capitation ▪ Salary ▪ Prospective payment ▪ Indicative budgets ▪ Annual caps on provider income ▪ Targeted payments / penalties <p>Financial incentives for patients</p> <p>Resource allocation</p> <ul style="list-style-type: none"> ▪ Changes in scope & nature of benefits & services ▪ Lists of covered / reimbursed products & services (e.g., "positive" lists such as formularies & "negative" lists such as restrictions) ▪ Lists of substitutable products & services ▪ Restrictions in coverage / reimbursement rates for covered products & services ▪ Caps on coverage / reimbursement for covered products & services ▪ Prior approval requirements 	<p>To whom care is provided & with what efforts to reach them</p> <ul style="list-style-type: none"> ▪ Timely access ▪ Culturally appropriate care ▪ Case management ▪ Package of care / care pathways / decision management <p>By whom care is provided</p> <ul style="list-style-type: none"> ▪ System - Need, demand & supply ▪ System - Recruitment, retention & transitions ▪ System - Performance management ▪ Workplace conditions – Provider satisfaction ▪ Workplace conditions – Health & safety ▪ Skill mix – Role performance ▪ Skill mix – Role expansion or extension ▪ Skill mix - Substitution ▪ Skill mix - Multidisciplinary teams ▪ Skill mix – Communication & case discussion between distant health professionals ▪ Staff – Support ▪ Staff - Workload / workflow / intensity ▪ Staff - Continuity of care ▪ Staff/self – Shared decision-making ▪ Self – Management <p>Where care is provided</p> <ul style="list-style-type: none"> ▪ Site of service delivery ▪ Physical structure, facilities & equipment ▪ Organizational scale ▪ Integration of services ▪ Continuity of care <p>With what information & communication technology is care provided</p> <ul style="list-style-type: none"> ▪ Health record systems ▪ Electronic health record ▪ Other ICT that support individuals who provide care ▪ ICT that support individuals who receive care <p>With what level of quality & safety is care provided</p> <ul style="list-style-type: none"> ▪ Quality monitoring systems ▪ Safety monitoring systems



Program in Policy Decision-Making
A research program affiliated with McMaster University's Centre for Health Economics and Policy Analysis

Canadian Cochrane Network and Centre
A national centre affiliated with the Cochrane Collaboration



www.researchtopolicy.ca >> Search >> Reviews

Email Print

- Home
- What's new
- Who we are
- What we've done
- What others have done
- Links



Through a partnership between McMaster University's Program in Policy Decision-Making and the **Canadian Cochrane Network and Centre**, we have created an inventory of systematic reviews of governance, financial and delivery arrangements within health systems from two sources: 1) a manual search of the Cochrane Library (Issue 3, 2007); and 2) an overview of reviews being led by members of the Cochrane Collaboration's **Effective Practice and Organization of Care (EPOC)** review group (with the search completed up to February 2004 and an updated search currently in progress). A paper describing our methods and findings, including scope notes for our taxonomy, is currently under review. This work was funded by a grant from the Cochrane Collaboration's Opportunities Fund (RFP20061101) and by a grant to the Canadian Cochrane Network and Centre from the Canadian Institutes of Health Research (MSP 13278).

To view a complete listing of the systematic reviews that we have identified, please click on "Search". To view a listing of publications produced by a particular author, published in a particular periodical, published in a particular year, having a specific word or phrase in the title, assigned a particular key word (from a three-level taxonomy that can be progressively accessed by clicking on each category of interest) or designated a specific type of review, please enter the details or select an option from the menu and then click on "Search". To conduct an open search or to connect any of the aforementioned search options, please enter the details of the search in the Open search box and then click on "Search". For example, to search for Cochrane reviews authored by Jeremy Grimshaw, enter the following search: Grimshaw "Cochrane review of effects". The search function does not currently accept Boolean operators (and,or). Publications are listed in chronological order.

Basic Search

Author

Periodical

Year of publication

Title - Exact word(s)



Or

Keyword Search

Assigned keywords

<http://www.researchtopolicy.ca/search/reviews.aspx>

Methodological challenges

- Defining the question and scoping the review
 - Systematic mapping
 - Searching strategies when much of the literature is “grey” or in non-English languages
 - Synthesising evidence from many different sources
 - Bayesian meta-analysis
 - Meta-ethnography
 - Narrative synthesis
-

Challenges in the use of SR in HPSR

- Providing information about
 - Harms (or risks)
 - Costs (not just benefits)
 - Providing information about contextual factors
 - Development of user-friendly front ends for reviews
 - One-page of “take-home” messages
 - Three-pages executive summary
 - 25-pages report
-



SUPPORT

SUPporting POlicy relevant Reviews and Trials

Full Category Lists

Home

About the SUPPORT project

Objectives

Tools

For Policy makers

For Researchers

Courses and Workshops

Policy makers

Researchers

Publications

Partners

African

European

Latin American

Contact us

Links

News items

Making it easier to implement effective health policies

Highly focused, quality assessed and policy relevant summaries of research evidence in the field of maternal and child health. [Read more](#)

Facilitating the conduct of pragmatic randomized controlled trials

Tools and training for researchers in low and middle-income countries. [Read more](#)

SUPPORT will develop a range of tools and workshops to improve the production and use of policy-relevant research in low and middle-income countries. The project builds on two existing networks with experience in research and linkage to policy-making, one in Latin America and one in sub-Saharan Africa.



February 2008 – SUPPORT Summary of a systematic review

Do conditional cash transfers improve the uptake of health interventions in low- and middle-income countries?

Over the past several years some Latin American countries have introduced programs that provide monetary transfers to households on the condition that they comply with certain health behaviours. The rationale is that the transfers can potentially increase the use of health services by low-income individuals by providing funds to help overcome some financial barriers to access.

Key messages

- 6 studies carried out in low and middle-income countries found an increase use of health services and mixed effects on immunisation coverage and health status.
- Although the evidence comes from low and middle-income settings, the capacity of each health system to deal with the increased demand should be considered, particularly in low-income countries where the capacity of health systems may not be sufficient.



Who is this summary for?

People making decisions concerning the use of conditional cash transfers to improve the uptake of health interventions.

This summary is based on the following systematic review:

Lagarde M, Haines A, Palmer N. Conditional cash transfers for improving uptake of health interventions in low and middle-income countries: a systematic review. JAMA 2007; 298:1900-10.

What is a systematic review?

A summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise the relevant research, and to collect and analyse data from the included studies.

! This summary includes:

- Key findings from research based on a systematic review
- Considerations about the relevance of this research for low and middle income countries

Summary of findings

Conditional monetary transfers compared with no transfers

Ten articles that reported the results from 6 studies (4 randomised trials, 1 quasi-randomised evaluation, and 1 controlled before-after study) were included. Five out of 6 studies evaluated large-scale conditional cash transfer programs in Latin America (Mexico, Nicaragua, Colombia, Honduras and Brazil), targeted at disadvantaged households in low-income areas in order to increase school and preventive health examinations attendance. The other one was a pilot program in Malawi that tested whether financial incentives would increase the collection of human immunodeficiency virus test results.

The mean monetary transfer per household ranged between US \$17 and 50 for Latin American studies and was US \$1 per individual in the Malawi study. In the case of Mexico, Nicaragua and Brazil households received additional nutrition supplements for children.

→ **Overall, the evidence suggests that conditional cash transfer programs can be effective in increasing the use of preventive services and can sometimes improve immunisation coverage and health status.**

About quality of evidence (GRADE)

⊕⊕⊕⊕

High: Further research is very unlikely to change our confidence in the estimate of effect.

⊕⊕⊕○

Moderate: Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

⊕⊕○○

Low: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

⊕○○○

Very low: We are very uncertain about the estimate.

For more information, see last page.

Relevance of the review for lower and middle income countries

→ Findings

▷ Interpretation*

Applicability

→ All of the studies were undertaken in low and middle-income countries, predominantly in Latin America.

▷ *Most of the evidence is likely applicable in Latin American health systems, although differences in health systems that could impact on the effects of conditional cash transfers still need to be considered. In particular, the capacity of the health system to deal with an increased demand needs to be considered. In resource-poor settings where public spending on healthcare is low and access to effective interventions limited, expanding the capacity of health services would be necessary for cash transfers to result in improved use of health services.*

→ Components of the evaluated programs other than cash transfers may have impacted on the results. For instance, health status and anthropometric measures could be influenced by nutritional supplements provided to children, better diet resulting from the increased available revenue of households, or the benefits of mothers attending health education meetings.

▷ *It is difficult to disentangle the relative importance of different components of the programs that included more than cash transfers.*

Equity

→ In Nicaragua, increases in household expenditures were the greatest for the poorest group as was the uptake of preventive services for infants. On the other hand, nutritional benefits in Mexico were greater for children whose mother had more than 5 years of schooling, which could suggest that these programs do not perfectly achieve their ambition to “levelling the playing field”.

▷ *Children from a disadvantaged environment, at household and community levels, seem to gain greater benefits from the programs than those from more advantaged environments. However, it may be more difficult and costly for people living in rural and other underserved areas to have access to specific health services targeted by cash transfers. Therefore, if an adjustment is not incorporated in the transfers, those people would benefit less than people with better access to health services.*

Some priorities for action

- Collaborative work with Cochrane
 - Role of the funders
 - Use of reviews in evidence-to-policy networks
-

Policy Brief – Terms of Reference
(Last updated by John Lavis on 13 February 2008)

Title	<ul style="list-style-type: none"> ○ Working title <ul style="list-style-type: none"> ○ (Longer version) How to support the widespread use of artemisinin-based combination therapies (ACT) to treat uncomplicated falciparum malaria ○ (Shorter version) How to support the widespread use of effective treatment for malaria
Authors	<ul style="list-style-type: none"> ○ List the proposed authors and their affiliations ○ TBA
Audience	<ul style="list-style-type: none"> ○ Government officials and key stakeholders (including civil society groups) who will participate in a deliberative dialogue to discuss who to support the widespread use of artemisinin-based combination therapies (ACT) to treat uncomplicated falciparum malaria ○ Writing should therefore be targeted at an audience that is familiar with many of the issues but not scientific experts ○ Presentation should ideally follow a 1:3:25 format, with one-page of take-home messages outlining: 1) the policy issue; 2) the magnitude of the problems or challenges linked to the policy issue; 3) three options for addressing the policy issue; and 4) ways to bring about change, as well as a three-page executive summary and a 25-page report ○ Dissemination will initially be limited to those participating in the deliberative dialogue but will eventually include both traditional dissemination routes like the EVIPNet website and more proactive dissemination through national mechanisms that should be identified and planned for early on
Framing the policy issue(s)	<ul style="list-style-type: none"> ○ State whether and how the policy issue relates to program / service / drug coverage, provision or reimbursement, delivery arrangements, financial arrangements and/or governance arrangements ○ Drug coverage, provision or reimbursement <ul style="list-style-type: none"> ▪ Should ACT be the first-line drug therapy recommended for uncomplicated falciparum malaria in national treatment guidelines and/or the national malaria control policy and, if so, in what dosage regimes / packaging, for which populations, and for areas with which characteristics? ○ Delivery arrangements <ul style="list-style-type: none"> ▪ Who should dispense ACT, when, where and how? ▪ Who should be involved in surveillance, pharmacovigilance, and in the diagnosis and treatment of atypical cases? ○ Financial arrangements <ul style="list-style-type: none"> ▪ Should ACT be subsidized or should conditional cash transfers be offered to encourage its use and, if so, at what level and for which populations (e.g., children under five, pregnant women)? ▪ Should financial incentives be offered to prescribers, physician-remuneration arrangements changed or contracts with the for-profit sector changed to encourage providers to dispense ACT? ○ Governance arrangements <ul style="list-style-type: none"> ▪ Which ACT and other anti-malarial drugs (i.e., drugs, dosage regimes, and packaging) should be registered/licensed for sale, how

Thank you!
