



August 2016 – SUPPORT Summary of a systematic review

Does use of local opinion leaders improve professional practice and patient outcomes?

Opinion leaders are a small number of individuals within a community who have an influence on what the rest of the community does. They are active media users, who interpret the meaning of media messages or content for lower-end media users. Because of their influence, it is thought that opinion leaders may be able to persuade healthcare providers to use the best available evidence when treating and managing patients.

Key messages

- Opinion leaders probably influence the behaviour of healthcare professionals.
- Patient outcome data were not reported by studies included in the review.
- Most of the studies included in this review were conducted in high-income countries.
- Rigorous studies from low-income countries are needed to fully understand the applicability of these findings to low-income country healthcare settings.



Who is this summary for?

People making decisions concerning interventions to improve healthcare worker performance.

! This summary includes:

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

X Not included:

- Recommendations
- Additional evidence not included in the systematic review
- Detailed descriptions of interventions or their implementation

This summary is based on the following systematic review:

Flodgren G, Parmelli E, Doumit G, et al. Local opinion leaders: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 8. Art. No.: CD000125.

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

SUPPORT was an international project to support the use of policy relevant reviews and trials to inform decisions about maternal and child health in low- and middle-income countries, funded by the European Commission (FP6) and the Canadian Institutes of Health Research.

Glossary of terms used in this report:
www.supportsummaries.org/glossary-of-terms

Background references on this topic:
See back page

Background

In order to reduce inappropriate patient management and improve patient outcomes, it is important to speed up and optimise the process of translating research evidence into policy and practice. One way of doing this may be through the use of local opinion leaders. Opinion leaders are active voices in their community, who speak out and often get asked for advice. Such individuals are held in high esteem by those who accept their opinions.

How this summary was prepared

After searching widely for systematic reviews that can help inform decisions about health systems, we have selected ones that provide information that is relevant to low-income countries. The methods used to assess the reliability of the review and to make judgements about its relevance are described here:

www.supportsummaries.org/how-support-summaries-are-prepared/

Knowing what's not known is important

A reliable review might not find any studies from low-income countries or might not find any well-designed studies. Although that is disappointing, it is important to know what is not known as well as what is known.

A lack of evidence does not mean a lack of effects. It means the effects are uncertain. When there is a lack of evidence, consideration should be given to monitoring and evaluating the effects of the intervention, if it is used.

About the systematic review underlying this summary

Review objective: To assess the effectiveness of local opinion leaders in improving the behaviour of healthcare professionals and patient outcomes

Types of	What the review authors searched for	What the review authors found
Study designs & Interventions	Randomised trials	18 randomised trials in which opinion leaders delivered educational initiatives to members of their own healthcare profession
Participants	Healthcare professionals in charge of patient care	Physicians (14); nurses (2); physicians, nurses and midwives (2)
Settings	Any healthcare setting	Hospitals (14), primary care practice (1), both primary and secondary care (1), and undefined healthcare settings (2); in the United States of America (10), Canada (6), China (1), and Argentina and Uruguay (1)
Outcomes	Objective measures of professional performance and/or patient outcomes	General management of a clinical problem (all 18 randomized trials)

Date of most recent search: May 2009

Limitations: This is a well-conducted systematic review with only minor limitations.

Flodgren G, Parmelli E, Doumit G, Gattellari M, O'Brien MA, Grimshaw J, Eccles MP. Local opinion leaders: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 8. Art. No.: CD000125.

Summary of findings

The review identified 18 randomized trials involving more than 296 hospitals and 318 primary care physicians, mostly in high-income countries. Targeted behaviours involved the general management of a clinical problem in obstetrics (5), cardiology (4), oncology (3), and other medical conditions (6). Opinion leaders were used alone in five trials, and supplemented by other strategies (such as audit and feedback, reminders, faxed evidence summaries, printed educational materials, educational meetings, and workshops) in 13 trials. The duration of follow-up varied widely, ranging from one week to 18 months.

Combining evidence from the 18 studies show that:

- **Use of local opinion leaders probably improves the behaviour of healthcare professionals. The certainty of this evidence is moderate.**
- **Patient outcome data were not reported by studies included in the review.**

About the certainty of the evidence (GRADE) *

⊕⊕⊕⊕

High: This research provides a very good indication of the likely effect. The likelihood that the effect will be substantially different[†] is low.

⊕⊕⊕○

Moderate: This research provides a good indication of the likely effect. The likelihood that the effect will be substantially different[†] is moderate.

⊕⊕○○

Low: This research provides some indication of the likely effect. However, the likelihood that it will be substantially different[†] is high.

⊕○○○

Very low: This research does not provide a reliable indication of the likely effect. The likelihood that the effect will be substantially different[†] is very high.

* This is sometimes referred to as 'quality of evidence' or 'confidence in the estimate'.

† Substantially different = a large enough difference that it might affect a decision

See last page for more information.

Local opinion leaders alone or together with other intervention(s) compared with no intervention, the same other intervention or other interventions for improving compliance with desired practice

People	Physicians (14 studies); nurses (2); physicians, nurses and midwives (2)
Settings	Hospitals (14), primary care practice (1), both primary and secondary care (1), and undefined healthcare settings (2); in USA (10), Canada (6), China (1), and Argentina and Uruguay (1)
Intervention	Local opinion leaders with or without other interventions
Comparison	No intervention or other intervention(s)

Outcomes	Adjusted absolute improvement (risk difference)* Median (Interquartile range)	Number of studies	Certainty of the evidence (GRADE)	Comments
----------	--	-------------------	-----------------------------------	----------

Compliance with desired practice	Median +12% (+6% to +14.5%)	18 studies	⊕⊕⊕○ Moderate [§]	<p>The effects of opinion leader interventions varied across the 63 outcomes reported, from 15% decrease in compliance to 72% increase in compliance with desired practice.</p> <p>The median adjusted absolute increase for the main comparisons were: i) Opinion leaders versus no intervention, +9%; ii) Opinion leaders alone vs a single intervention, +14%; iii) Opinion leaders with one or more additional intervention(s) vs the one or more additional intervention(s), +10%; and iv) Opinion leaders as part of multiple interventions compared to no intervention, +10%.</p>
---	-----------------------------	------------	-------------------------------	--

GRADE: GRADE Working Group grades of evidence (see above and last page)

*The post-intervention risk differences are adjusted for pre-intervention differences between the comparison groups.

[§]We rated down the evidence for heterogeneity of effects. The effects of interventions across the 63 outcomes reported varied from a 15% decrease in compliance to a 72% increase in compliance with desired practice.

Relevance of the review for low-income countries

→ Findings	▷ Interpretation*
APPLICABILITY	
→ The findings of the review are based on studies using a variety of different interventions, performed in a variety of different settings, targeting a number of different clinical conditions, and aimed at changing a number of different outcomes.	<p>▷ <i>The consistency of median effects across different outcomes suggests that the intervention effects are likely to be transferable to low-income countries.</i></p> <p>▷ <i>However, we need rigorous studies from low-income countries to fully understand the applicability of the findings of this review to low-income country settings.</i></p>
EQUITY	
→ The included trials did not provide data regarding differential effects of local opinion leader interventions between gender and across various levels of advantage in society.	<p>▷ <i>Where used appropriately, local opinion leaders have the potential to improve the delivery of effective care in under-resourced settings.</i></p>
ECONOMIC CONSIDERATIONS	
→ No data on the costs of interventions or cost savings were reported in the included studies	<p>▷ <i>Although cost data were not provided, employing a dedicated opinion leader does not necessarily have to be costly.</i></p>
MONITORING & EVALUATION	
→ No evidence from low-income countries was reported in this review.	<p>▷ <i>The effectiveness of using opinion leaders to improve the practice of health workers in low-income countries should be evaluated.</i></p> <p>▷ <i>The interests of pharmaceutical companies in the introduction of new drugs or technologies may also be facilitated by opinion leaders. A robust monitoring framework, transparency, and strong academic support could prevent this and other negative consequences of using local opinion leaders.</i></p>

*Judgements made by the authors of this summary, not necessarily those of the review authors, based on the findings of the review and consultation with researchers and policymakers in low-income countries. For additional details about how these judgements were made see: www.supportsummaries.org/methods

Additional information

Related literature

Althabe F, Buekens P, Bergel E, Belizán JM, Campbell KM, Moss N, Hartwell T, Wright LL. A Behavioural Intervention to Improve Obstetrical Care. *N Engl J Med* 2008;358:1929–40.

Berner ES, Baker CS, Funkhouser E, Heudebert GR, Allison JJ, Fargason CA, et al. Do local opinion leaders augment hospital quality improvement efforts? A randomized trial to promote adherence to unstable angina guidelines. *Medical Care* 2003;41:420–31.

Cabana KK, Evans SD, Mellins RB, Brown RW, Lin X, Kacirotiand N, Clark NM. Impact of Physician Asthma Care Education on Patient Outcomes. *Pediatrics* 2006;117:2149–2157.

Guadagnoli E, Soumerai SB, Gurwitz JH, Borbas C, Shapiro CL, Weeks JC, et al. Improving discussion of surgical treatment options for patients with breast cancer: local medical opinion leaders versus audit and performance feedback. *Breast Cancer Research and Treatment* 2000;61:171–75.

Majumdar SR, Tsuyuki RT, McAlister FA. Impact of opinion leader-endorsed evidence summaries on the quality of prescribing for patients with cardiovascular disease: A randomized controlled trial. *Am Heart J* 2007;153:22.e1222.e8.

This summary was prepared by

Charles Shey Wiysonge, Centre for Evidence-based Health Care, Stellenbosch University, & Cochrane South Africa, South African Medical Research Council, Cape Town, South Africa

Conflict of interest

None declared. For details, see: www.supportsummaries.org/coi

Acknowledgements

This summary has been peer reviewed by: Gerd Flodgren and Edgardo Abalos

This review should be cited as

Flodgren G, Parmelli E, Doumit G, Gattellari M, O'Brien MA, Grimshaw J, Eccles MP. Local opinion leaders: effects on professional practice and health care outcomes. *Cochrane Database of Systematic Reviews* 2011, Issue 8. Art. No.: CD000125. DOI:10.1002/14651858.CD000125.pub4.

The summary should be cited as

Wiysonge CS. Does use of local opinion leaders improve professional practice and patient outcomes? A SUPPORT Summary of a systematic review. August 2016. www.supportsummaries.org

This summary was prepared with additional support from:



Cochrane South Africa, the only centre of the global, independent Cochrane network in Africa, aims to ensure that health care decision making within Africa is informed by high-quality, timely and relevant research evidence. www.mrc.ac.za/cochrane/cochrane.htm

About certainty of the evidence (GRADE)

The “certainty of the evidence” is an assessment of how good an indication the research provides of the likely effect; i.e. the likelihood that the effect will be substantially different from what the research found. By “substantially different” we mean a large enough difference that it might affect a decision. These judgements are made using the GRADE system, and are provided for each outcome. The judgements are based on the study design (randomised trials versus observational studies), factors that reduce the certainty (risk of bias, inconsistency, indirectness, imprecision, and publication bias) and factors that increase the certainty (a large effect, a dose response relationship, and plausible confounding). For each outcome, the certainty of the evidence is rated as high, moderate, low or very low using the definitions on page 3.

For more information about GRADE:
www.supportsummaries.org/grade

SUPPORT collaborators:

The Cochrane Effective Practice and Organisation of Care Group (EPOC) is part of the [Cochrane Collaboration](http://www.cochrane.org). The Norwegian EPOC satellite supports the production of Cochrane reviews relevant to health systems in low- and middle-income countries. www.epocoslo.cochrane.org

The Evidence-Informed Policy Network (EVIPONet) is an initiative to promote the use of health research in policymaking in low- and middle-income countries. www.evipnet.org

The Alliance for Health Policy and Systems Research (HPSR) is an international collaboration that promotes the generation and use of health policy and systems research in low- and middle-income countries. www.who.int/alliance-hpsr

Norad, the Norwegian Agency for Development Cooperation, supports the Norwegian EPOC satellite and the production of SUPPORT Summaries. www.norad.no

The Effective Health Care Research Consortium is an international partnership that prepares Cochrane reviews relevant to low-income countries. www.evidence4health.org

To receive e-mail notices of new SUPPORT summaries or provide feedback on this summary, go to:
www.supportsummaries.org/contact