



August 2016 – SUPPORT Summary of a systematic review

Which outreach strategies increase health insurance coverage for vulnerable populations?

Health insurance refers to a health financing mechanism that involves the pooling of eligible, individual contributions in order to cover all or part of the cost of certain health services for all those who are insured. Health insurance scheme coverage in low-income countries is low, especially among vulnerable populations such as children, the elderly, women, low-income individuals, rural population, racial or ethnic minorities, immigrants, informal sector workers, and people with disability or chronic diseases. Consequently, thousands of vulnerable people suffer and die from preventable and treatable diseases in these settings.

Key messages

- **Health insurance information and application support probably:**
 - Increases the enrolment of children in health insurance schemes,
 - Leads to continuous enrolment of children in insurance schemes,
 - Decreases the mean time taken to obtain insurance for children, and
 - Leads to parental satisfaction with the process of enrolment.
- **Handing out application forms in the emergency department of hospitals probably increases the enrolment of children in health insurance schemes.**
- **Only two studies conducted in high-income countries were included in the review.**
 - Rigorous studies are needed that evaluate the effects and costs of different outreach strategies in different countries for expanding the health insurance coverage of vulnerable populations.
 - The use of the outreach strategies for increasing health insurance coverage in low-income countries should be accompanied by monitoring and evaluation.

Who is this summary for?

People making decisions concerning strategies for expanding health insurance coverage in vulnerable populations

! 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:

Jia L, Yuan B, Lu Y, et al. Strategies for expanding health insurance coverage in vulnerable populations. Cochrane Database of Systematic Reviews 2014, Issue 1. Art. No.: CD008194.

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

Health insurance can improve access to healthcare for insured populations and protect them from the burden of unexpected healthcare costs. However, coverage is often low amongst those people most in need of protection, especially in low-income countries. Strategies for increasing insurance coverage can be adopted during the design of the insurance scheme or added during implementation. Strategies for improving scheme designs include modifying eligibility criteria, making premiums affordable, and improving healthcare delivery. Outreach strategies for improving programme implementation include increasing awareness of schemes and benefits, modifying enrolment criteria, and improving the management and organisation of insurance schemes.

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 effects of outreach strategies for expanding insurance coverage of vulnerable populations

Types of	What the review authors searched for	What the review authors found
Study designs & Interventions	Randomised trials, non-randomised trials, controlled before-after studies, and interrupted time series studies	1 randomised trial and 1 non-randomised trial
Participants	Children, the elderly, women, low-income individuals, rural population, racial or ethnic minorities, immigrants, informal sector workers, and population with disability or chronic diseases	674 children aged 18 years or younger recruited from 2 minority communities (1 study) or the emergency departments of 4 inner-city hospitals (1 study)
Settings	Not pre-specified	USA (2 studies)
Outcomes	Primary outcomes: Enrolment into health insurance programmes Secondary outcomes: Health service utilisation, health status, satisfaction, costs, adverse effects	Enrolment of children into health insurance (2 studies), maintaining enrolment of children in insurance schemes (1 study), mean time to obtain insurance (1 study), parental satisfaction with process of enrolment (1 study)

Date of most recent search: November 2012

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

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Summary of findings

The review included 2 trials, both from the USA. One enrolled 275 children in an urban Latino American community. The other recruited 399 children visiting the Emergency Department of 4 inner-city hospitals in 4 American cities.

1) Health insurance information and application support

One trial assessed the effect of using community-based trained case managers to provide information on programme eligibility, assist families with completing insurance applications, act as family liaisons with insurance schemes, and assist in maintaining insurance coverage. The trial showed that this strategy probably:

- ➔ **Increases the enrolment of children in health insurance schemes. The certainty of this evidence is moderate.**
- ➔ **Leads to the maintenance of enrolment in health insurance schemes. The certainty of this evidence is moderate.**
- ➔ **Decreases the mean time taken to obtain insurance for children. The certainty of this evidence is moderate.**
- ➔ **Leads to parental satisfaction with the process of enrolment. The certainty of this evidence is moderate.**

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.

Awareness and application support compared with no intervention

Patients or population: Children with no health insurance

Settings: USA (urban Latino American community in Boston)

Intervention: Health insurance information and application support, for 11 months

Comparison: No intervention

Outcomes	Absolute risks*		Relative effect (95% CI)	Number of participants (Studies)	Certainty of the Evidence (GRADE)
	Without intervention	With intervention			
Enrolment into insurance	574 per 1,000	964 per 1,000 (827 to 1,000)	RR 1.68 (1.44 to 1.96)	257 (1 study)	⊕⊕⊕○ Moderate
Continue enrolment	303 per 1,000	785 per 1,000 (591 to 1,000)	RR 2.59 (1.95 to 3.44)	257 (1 study)	⊕⊕⊕○ Moderate
Mean time to obtain insurance	134.8 Days	47.30 lower (73.98 to 20.62 lower)	MD -47.30 (-73.98 to -20.62)	200 (1 study)	⊕⊕⊕○ Moderate
Parental satisfaction	2.40	1.07 lower (1.42 to 0.72 lower) ¹	MD -1.07 (-1.42 to -0.72)	173 (1 study)	⊕⊕⊕○ Moderate

CI: Confidence interval; RR: Risk ratio; MD: Mean difference; GRADE: GRADE Working Group grades of evidence (see above and last page)

¹ Parental satisfaction score was examined with Likert scale scores where 1 = Very satisfied, 2 = Satisfied, 3 = Uncertain, 4 = Dissatisfied, 5 = Very dissatisfied

* The assumed risk WITHOUT the intervention is based on the control group risk in the included study. The corresponding risk WITH the intervention (and its 95% confidence interval) is based on the overall relative effect (and its 95% confidence interval)

2) Handing out applications in the emergency departments of hospitals

A trial with an unclear risk of bias assessed the effects of handing out health insurance application materials in hospital emergency departments, and showed that this outreach strategy:

→ **Probably increases the enrolment of children in health insurance schemes. The certainty of this evidence is moderate.**

Handing out applications in emergency department of hospitals compared to no intervention					
Patients or population: Children with no health insurance					
Settings: USA: 4 inner-city hospitals in New York City, New York; Baton Rouge, Louisiana; Chicago, Illinois; and Miami, Florida					
Intervention: Handing out applications in emergency departments of hospitals					
Comparison: No intervention					
Outcomes	Absolute risks *		Relative effect (95% CI)	Number of participants (Studies)	Certainty of the Evidence (GRADE)
	Without intervention	With intervention			
Enrolment into insurance (Follow-up duration: Approximately 90 days)	278 per 1,000	417 per 1,000 (286 to 606)	RR 1.50 (1.03 to 2.18)	223 (1 study)	⊕⊕⊕○ Moderate
CI: Confidence interval; RR: Risk ratio; GRADE: GRADE Working Group grades of evidence (see above and last page)					
* The assumed risk WITHOUT the intervention is based on the control group risk in the included study. The corresponding risk WITH the intervention (and its 95% confidence interval) is based on the overall relative effect (and its 95% confidence interval)					

Relevance of the review for low-income countries

→ Findings	▷ Interpretation*
APPLICABILITY	
→ The two studies, which assessed only one type of outreach strategy (increasing awareness with or without additional support), were conducted among vulnerable groups in a high-income country.	<i>▷ It is unclear if other outreach strategies would be equally effective, or how applicable the results (from low-income settings in a high-income country) are to low-income countries, given marked differences in health systems. ▷ Rigorous studies from low-income countries are needed.</i>
EQUITY	
→ In both studies, multivariate analyses controlling for various advantage variables (such as income, employment, race, and public assistance), did not have a significant effect on the effects of the intervention.	<i>▷ The outreach strategies assessed in this review have the potential to improve the health insurance coverage among vulnerable population in under-resourced settings.</i>
ECONOMIC CONSIDERATIONS	
→ None of the studies reported an economic analysis. The levels of organisation and support in one of the included studies (during which case managers were recruited and trained to provide awareness and application support) are potentially greater than those typically available outside research settings.	<i>▷ The use of well-trained people to provide one-to-one enrolment support might be more effective than using people with less training, but the increased cost of doing this should be considered when comparing this intervention to less resource-intensive ones.</i>
MONITORING & EVALUATION	
→ No evidence from low-income countries was identified in this review.	<i>▷ Randomised trials evaluating the effects and costs of different outreach strategies for expanding the health insurance coverage of children in different countries are needed. ▷ The use of the outreach strategies for increasing health insurance coverage in low-income countries should be accompanied by monitoring and evaluation.</i>

*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

Meng Q, Yuan B, Jia L, et al. Expanding health insurance coverage in vulnerable groups: a systematic review of options. *Health Policy Plan* 2011; **26**:93–104.

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Conflict of interest

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

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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

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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

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