December 2010 – SUPPORT Summary of a systematic review

# Which outreach strategies increase health insurance coverage for children?

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- and middle-income countries (LMICs) is low, especially among vulnerable populations such as children. Consequently, thousands of children suffer and die from preventable and treatable diseases in these settings. Outreach strategies for increasing health insurance coverage for eligible children may include increasing awareness of schemes and benefits, modifying enrolment, and improving insurance schemes management and organisation.

## Key messages

➔ **Awareness and application support, probably**
- Increases the enrolment of children in health insurance schemes
- Leads to the continuous enrolment of children in health insurance schemes
- Decreases the mean time taken to obtain health insurance for children, and
- Leads to parental satisfaction with the process of enrolment

➔ **Handing out application forms in 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 children**

➔ **In the interim, the use of the outreach strategies assessed in this review (or any other strategy) for increasing health insurance coverage in LMICs should be accompanied by a rigorous monitoring and evaluation framework**

### Who is this summary for?

People making decisions conserning strategies for expanding health insurance coverage in children

### ! 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

### 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:

Meng Q, Yuan B, Jia L,Wang J, Garner P. Outreach strategies for expanding health insurance coverage in children. *Cochrane Database of Systematic Reviews 2010, Issue 8. Art. No.:CD008194. DOI:10.1002/14651858.CD008194.pub2.*

### 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** – an international collaboration funded by the EU 6th Framework Programme to support the use of policy relevant reviews and trials to inform decisions about maternal and child health in low- and middle-income countries. www.support-collaboration.org

**Glossary of terms used in this report:** www.support-collaboration.org/summaries/explanations.htm

**Background references on this topic:** See back page.

# Background

Health insurance can improve access to health care for the insured population and protect it from the burden of unexpected healthcare costs. However, coverage is often low amongst those people most in need of protection, especially in low- and middle-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 [more?] affordable, and improving healthcare delivery. Strategies for improving programme implementation (also known as 'outreach strategies') include increasing awareness of schemes and benefits, modifying enrolment criteria, and improving the management and organisation of insurance schemes.

This summary is based on a Cochrane Review by Meng and colleagues, which assessed the effectiveness of outreach strategies for expanding insurance coverage for children. Meng and colleagues did not review how the design of health insurance schemes could influence coverage.

## 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- and middle-income countries. The methods used to assess the quality of the review and to make judgements about its relevance are described here: www.support-collaboration.org/summaries/methods.htm

## Knowing what's not known is important

A good quality review might not find any studies from low- and middle-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.

## About the systematic review underlying this summary

**Review objective:** To assess the effectiveness of outreach strategies for expanding insurance coverage of children who are eligible for health insurance schemes

| | What the review authors searched for | What the review authors found |
|---|---|---|
| **Interventions** | Randomised controlled trials, controlled clinical trials, controlled before-and-after studies and interrupted time series | 1 randomised controlled trial and 1 controlled clinical trial |
| **Participants** | Children and young people eligible for any kind of health insurance scheme but not enrolled | 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); both in the United States of America (USA) |
| **Settings** | Not pre-specified | USA (2 studies) |
| **Outcomes** | Primary outcomes: Enrolment of eligible children into health insurance programmes<br><br>Secondary outcomes: Health service utilisation, health status, satisfaction of children and their parents, 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:** January 2010 | | |
| **Limitations:** A good quality systematic review with only minor limitations | | |

Meng Q, Yuan B, Jia L,Wang J, Garner P. Outreach strategies for expanding health insurance coverage in children. *Cochrane Database of Systematic Reviews* 2010, Issue 8. Art. No.:CD008194. DOI:10.1002/14651858.CD008194.pub2.

# Summary of findings

The review included 2 controlled 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) Awareness and application support

One RCT 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 RCT showed that this strategy probably:

- ➔ **Increases the enrolment of children in health insurance schemes**
- ➔ **Leads to the maintenance of enrolment in health insurance schemes**
- ➔ **Decreases the mean time taken to obtain insurance for children, and**
- ➔ **Leads to parental satisfaction with the process of enrolment**

### About the 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

**Awarenesss and application support compared with no intervention**

**Patients or population:** Children with no health insurance
**Settings:** USA (urban Latino American community in Boston)
**Intervention:** Awareness and application support, for 11 months
**Comparison:** No intervention

| Outcomes | Comparative risks* | | Relative effect (95% CI) | Number of participants (studies) | Quality of the evidence (GRADE) | Comments |
|---|---|---|---|---|---|---|
| | **Without intervention** | **With awareness and application support** | | | | |
| **Enrolment into insurance** | **574 per 1,000** | **964 per 1,000** (827 to 1,000) | RR **1.68** (1.44to 1.96) | 257 (1 study) | ⊕⊕⊕◯ Moderate[1] | RR calculation based on number of events imputed from percentage and number of participants measured |
| **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[1] | Same comment as above |
| **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[1] | Outcome only measured based on children who obtained insurance |
| **Parental satisfaction** | **2.40** | **1.07 lower** (1.42 to 0.72 lower)[2] | **MD -1.07** (-1.42 to -0.72) | 173 (1 study) | ⊕⊕⊕◯ Moderate[1] | Outcome measured in respondents at final follow-up only |

CI: Confidence interval RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page)
[1] Only one RCT found that evaluated this intervention; possibility of reporting bias as other studies may have been conducted but not published
[2] Parental satisfaction score was examined with Likert scale scores where 1 = Very satisfied, 2 = Satisfied, 3 = Uncertain, 4 = Dissatisfied, 5 = Very dissatisfied
*Illustrative comparative risks. The assumed risk WITHOUT the intervention is based on control group risk in the included study. The corresponding risk WITH the intervention (and it's 95% confidence interval) are 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**

### 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 4 cities: 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 | Comparative risks* | | Relative effect (95% CI) | Number of participants (studies) | Quality of the evidence (GRADE) | Comments |
|---|---|---|---|---|---|---|
| | **Without intervention** | **With intervention** | | | | |
| **Enrolment into insurance**<br><br>(Follow-up duration: Approximately 90 days) | **278 per 1,000** | **417 per 1,000**<br><br>(286 to 606) | RR **1.50**<br>(1.03 to 2.18) | 223<br>(1 study) | ⊕⊕⊕◯<br>Moderate[1] | RR calculation based on number of events imputed from percentage and number of participants measured |

CI: Confidence interval RR: Risk ratio GRADE: GRADE Working Group grades of evidence (see above and last page)
[1] Only 1 RCT found that evaluated this intervention; possibility of reporting bias as other studies may have been conducted but not published
*Illustrative comparative risks. The assumed risk WITHOUT the intervention is based on control group risk in the included study. The corresponding risk WITH the intervention (and it's 95% confidence interval) are based on the overall relative effect (and its 95% confidence interval).

# Relevance of the review for low- and middle-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 and the results may be applicable to low-income countries | ▷ *It is unclear if other outreach strategies would be equally effective, or how applicable the results (from low-income settings in high-income countries) are to low-income countries, given marked differences in health systems*<br>▷ *Therefore, rigorous studies from low-income countries are needed to assess fully the applicability of these findings to all healthcare settings* |
| *EQUITY* | |
| ➔ In both studies, multivaraiate analyses controlling for various advantage variables (such as income, employment, race, and public assistance), did not have a signficant effect on the effects of the intervention | ▷ *The outreach strategies assessed in this review have the potential to improve the health insurance coverage among children in under-resourced settings* |
| *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 | ▷ *The use of trained persons to provide one-to-one enrolment support may be potentially more effective but the increased cost of doing this should be considered when comparing this intervention to less resource-intensive ones* |
| *MONITORING & EVALUATION* | |
| ➔ No evidence from low-income countries was identified in this review | ▷ *RCTs evaluating the effects and costs of different outreach strategies for expanding the health insurance coverage of children in different countries are needed*<br>▷ *In the interim, the use of the outreach strategies assessed in this review (or other strategies) for increasing health insurance coverage in low-income countries should be accompanied by a rigorous monitoring and evaluation framework* |

*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- and middle-income countries. For additional details about how these judgements were made see: http://www.support-collaboration.org/summaries/methods.htm

# Additional information

## Related literature

Meng Q, Yuan B, Jia L, Wang J, Yu B, Gao J, et al. Expanding health insurance coverage in vulnerable groups: a systematic review of options. *Health Policy Plan* 2010 Sep 2. [Epub ahead of print].

Flores G, Abreu M, Chaisson CE, Meyers A, Sachdeva RC, et al. A randomized, controlled trial of the effectiveness of community-based case management in insuring uninsured Latino children. *Pediatrics* 2005;**116**:1433-41.

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Ekman B. Community-based health insurance in low-income countries: a systematic review of the evidence. *Health Policy and Planning* 2004; 19: 249–70.

International Labour Organization. *World Social Security Report 2010/11: Providing coverage in times of crisis and beyond.* Geneva, Switzerland; 2010.

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## Conflict of interest

None. For details, see: www.support-collaboration.org/summaries/coi.htm

## Acknowledgements

This summary has been peer reviewed by: Qingyue Meng, China; Pierre Ongolo Zogo, Cameroon

## This summary should be cited as

Wiysonge CS. Which outreach strategies expand health insurance coverage for children? A SUPPORT Summary of a systematic review. December 2010. www.support-collaboration.org/summaries.htm

## Keywords

*All Summaries:* evidence-informed health policy, evidence-based, systematic review, health systems research, health care, low- and middle-income countries, developing countries, primary health care, health insurance, medical aid, vulnerable populations.

## (example text) This summary was prepared with additional support from:

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## About quality of evidence (GRADE)

The quality of the evidence is a judgement about the extent to which we can be confident that the estimates of effect are correct. These judgements are made using the GRADE system, and are provided for each outcome. The judgements are based on the type of study design (randomised trials versus observational studies), the risk of bias, the consistency of the results across studies, and the precision of the overall estimate across studies. For each outcome, the quality of the evidence is rated as high, moderate, low or very low using the definitions on page 3.

**For more information about GRADE:**
www.support-collaboration.org/summaries/grade.htm

## SUPPORT collaborators:

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**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.
www.epocoslo.cochrane.org

**The Evidence-Informed Policy Network (EVIPNet)** is an initiative to promote the use of health research in policymaking. Focusing on low- and middle-income countries, EVIPNet promotes partnerships at the country level between policy-makers, researchers and civil society in order to facilitate both policy development and policy implementation through the use of the best scientific evidence available. www.evipnet.org

**For more information:**
www.support-collaboration.org

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